Honeywell

MI 350 Series

Item Reference Guide

Revision 12

16 December 2022

About this guide:

This guide lists Item numbers and option codes for the following products and firmware versions.

Product Name	Product Type	Firmware Version
EC 350	**PTZ Volume Corrector**	**Up through 1.48**
ERX 350	**P & T Recorder**	**Up through 1.48**
MIWI350	**Volume Corrector & Recorder**	**Up through 1.48**

This guide is intended to give a listing of all Items available in the 350 series of products (EC / ERX/MIWI). The guide also provides a basic description of each Item along with the Firmware Default value and list of possible selectable options. Instruments with older firmware than stated above may not necessarily provide all listed Items or options. Note that Customer Specs defaults can differ from the actual 'Firmware Defaults' values. This Guide refers strictly to Firmware Defaults. Note that many Items return to their Firmware Default values after a Firmware Upgrade and would need to be restored back using a previously saved Item File. Please refer to EC 350 / ERX 350 User Manuals for additional operational information.

Notes:

- In this guide, bullets under the Instrument name indicate this Item code and/or option is available for that product per the firmware listed above. Blank or no bullet means Item is not available.
- For Information about CloudLink Modem Items – please refer to the CloudLink Item Reference Guide. CloudLink Modem Item numbers begin at # 3000.

REVISION CHANGES LIST:

Revision 1 changes:

Firmware Default Value for Item 092 should state **CCF** (not MCF)
Text typo in description should state: **Uncorrected** (not Corrected)
Note that Customer Specs can differ from Firmware Defaults

Revision 2 changes:

ERX 350 – removed reference to Item 059, 060, and 062
Added Items: 1490, 1553, 1554, and 1555 (Serial port reset)
Added 'Priority mode (Item 1230) and related Items 1235 and 1382 for call first numbers
Adjustments to recommended values for Lithium Battery packs for Shutdown and Low Battery Alarm Limits
Added Items 1466, 1471, 1472, 1479, 1497

Revision 3 changes:

Items 60, 527 and 1001 default values corrections

Revision 4 changes:

Items, 496/787, 1032 default values changed

Revision 5 changes:

Items 1001 clarifications
Added Item 1376, 1380, and 1383

Revision 6 changes:

Items 095 clarifications, Corrections to Daily / Monthly values for AT Log 2-5 Intervals Items: 1065,1089, 1113, 1137

Revision 7 changes:

Items 095 clarifications,
Items 1056/1057 default values changed
Added units of Ounces for P1/P2 Pressures – Items 87, 408, 549, 550

Revision 8 changes:

MIWI350 R110.1 Release with Pressure, P3 feature related new item list.

Revision 9 changes:

Changed default values of some items which were incorrect from the previous versions.

Revision 10 changes:

Added two new CloudLink Item numbers and Item 1490 default value updated.

Revision 11 changes:

Added one Item number 449 Volume Switch Filter.

Revision 12 changes:

Added P4 items
Added Digital Switch Inputs items

Added API21.1 compliance items
Added Force call in item
Added i1617 item
Updated i449 item
Added i1694 item
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#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
0	**Corrected Volume** Totalized volume, corrected to base conditions (P–T–Z). Volume pulses weighted by Correction Factor (Item 043). Volume units defined by Item 090. Number of digits defined by Item 096. Abbreviated as: 'CorVol'	**0**	00000000 – 99999999	•		•	
2	**Uncorrected Volume** Totalized meter volume (no correction). Volume units defined by Item 092. Number of digits defined by Item 097. Abbreviated as: 'UncVol'.	**0**	00000000 – 99999999	•		•	
5	**Ch–A Pulses Waiting** Number of volume pulses for Channel A pending transmission. Normally zero.	**0**		•		•	
6	**Ch–B Pulses Waiting** Number of volume pulses for Channel B pending transmission. Normally zero.	**0**		•		•	
7	**Ch–C Pulses Waiting** Number of volume pulses for Channel C pending transmission. Normally zero.	**0**		•		•	
8	**P1 Gas Pressure** Most recently measured pressure of P1 transducer Used in calculating the pressure correction factor (Item 044). The pressure scaled to the unit of measure per Item	**0.0**		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	087. Updated at time of P/T Measurement cycle which is controlled by Item 586. (EC 350 defaults to 30 sec measure rate).						
10	**P1 High Alarm Limit** P1 Pressure High Alarm set point.	**99999.99**		•		•	
11	**P1 Low Alarm Limit** P1 Pressure Low Alarm set point	**–1.0**		•		•	
12	**P1 Cal Atmos Pressure** Atmospheric pressure optionally entered by the instrument technician during the most recent calibration of an absolute pressure transducer.	**0.0**		•		•	
13	**Base Pressure** Base pressure (per the contract) used in calculating Pressure Factor (Item 044).	**14.73**		•		•	
14	**Atmospheric Pressure** Atmospheric pressure per the contract to convert gauge pressure readings (for gauge type transducers) to absolute pressure used in calculating Pressure Factor (Item 044).	**14.73**		•		•	
15	**Press used at P1–Zero** The pressure value used during the most recent P1 Pressure Zero calibration.	**0.0**		•		•	
16	**Press used at P1–Span**	**0.0**		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	The pressure value used during the most recent P1 Pressure Span calibration.						
17	**Calibration P1–Zero** The offset (zero point) for the P1 Pressure transducer during the most recent P1 Pressure Zero calibration.	**0.0**	Limit of change = 2% of Full Scale of Transducer Range.	•		•	
18	**Cal Prev–1 P1–Zero** Previous value of Item 017	**0.0**		•		•	
19	**Cal Prev–2 P1–Zero** Previous value of Item 018	**0.0**		•		•	
20	**Calibration P1–Span** The span (gain factor) for the P1 Pressure transducer during the most recent P1 Pressure Span calibration.	**1.0**		•		•	
21	**Cal Prev–1 P1–Span** Previous value of Item 020	**1.0**		•		•	
22	**Cal Prev–2 P1–Span** Previous value of Item 021	**1.0**		•		•	
23	**Min P Cal Point Diff %** The configurable minimum spread required between Pressure Cal Zero (017) and Pressure Cal Span (020) calibration points.	**50.0**		•	•	•	•
24	**Excess P Cal Change %**	**2.0**		•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	The configurable maximum allowable change to Pressure Cal Zero (017) during Pressure Zero calibration and to Pressure Cal Span (020) during Pressure Span calibration.						
25	**P1 Press Range (PSI)** Range specified in PSI units only Note: Range value comes directly from the P1 PnPPT Transducer and value is not configurable (R-O).	**30.0**		•		•	
26	**Gas Temperature** Most recently measured temperature of Temperature probe. Used in calculating the temperature correction factor (Item 045). Unit of measure per Item 089. Updated at time of P/T Measurement cycle which is controlled by Item 586. (EC 350 defaults to 30 sec measure rate).	**0.0**		•		•	
27	**Gas Temp Lo Alarm Limit** Temp Low Alarm set point	**–35.0**		•		•	
28	**Gas Temp Hi Alarm Limit** Temp High Alarm set point	**165.0**		•		•	
29	**Temp Used at T–Zero** Temperature applied at T– Zero	**0.0**		•		•	
30	**Temp Used at T–Span** Temperature applied at T–Span	**0.0**		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
31	**Case Temperature** Current Temperature inside enclosure	**32.0**		•		•	
32	**Case Temp Max** Max Temperature inside enclosure since last reset.	**–40.0**		•		•	
33	**Case Temp Min** Min Temperature inside enclosure since last reset.	**158.0**		•		•	
34	**Base Temperature** Configurable – used for generating Temperature Factor (Item 045) for Volume correction.	**60.0**		•		•	
35	**Calibration T–Zero** The offset (zero point) for the Temperature probe during the most recent Temperature Zero calibration	**0.0**		•		•	
36	**Cal Prev–1 T–Zero** Previous value of Item 035.	**0.0**		•		•	
37	**Cal Prev–2 T–Zero** Previous value of Item 036.	**0.0**		•		•	
38	**Calibration T–Span** The span (gain factor) for the Temperature probe during the most recent Temperature Span calibration.	**1.0**	Range of change = 0.5 to 2.0	•		•	
39	**Cal Prev–1 Temp–Span** Previous value of T–Span	**1.0**		•		•	
40	**Cal Prev–2 Temp–Span**	**1.0**		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Second most previous value of T–Span						
41	**Min TCal Point Diff %** The configurable minimum spread required between Item 035 and Item 038 calibration points. Used in ERX 350 mode – but per Items 514 and 516.	**10.0**		•	•	•	•
42	**Excess TCal Change %** The configurable maximum allowable change to Item 035 during Temperature Zero calibrations and Item 038 during Temperature Span calibration. Used in ERX 350 mode – but per Items 514 and 516.	**2.0**		•	•	•	•
43	**Total Correction Factor** Equates to: { Item 044 * Item 045 * Item 046 * Item 116 }. Total Factor updates when Pressure and Temperature are measured and Super is calculated. Update rate is controlled by Item 586. (Defaults to 30 sec measurement update rate).	**1.0**		•		•	
44	**Press Correction Factor** Factor updates when Pressure is measured. Updated at time of Measurement cycle which is controlled by Item 586 (default interval rate of 30 seconds). To operate in Fixed Pressure Factor mode – configure Item 109 as 'Fixed' (code 0) and set appropriate Pressure value at Item 1161 (Fixed Pressure Value). Do not try to configure fixed values at Item 008 or 044 as they are Read–Only. See Item 109.	**1.0**		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
45	**Temp Correction Factor** Factor updates when Temperature is measured. Updated at time of Measurement cycle which is controlled by Item 586 (default interval rate of 30 seconds). To operate in Fixed Temperature Factor mode – configure Item 111 as 'Fixed' (code 0) and set appropriate Temperature value at Item 1162 (Fixed Temperature Value). Do not try to configure fixed values at Item 026 or 045 as they are Read–Only. See Item 111.	**1.0**		•		•	
46	**Aux Correction Factor** User configurable parameter to allow for any additional correction factoring not covered by P, T or Super factors. Typically, not used.	**1.0**		•		•	
47	**Unsquared Supercompress** Fpv value computed from P and T measurements. Updated every measurement cycle (per Item 586)	**1.0**		•		•	
48	**Battery Voltage Reading** Measured voltage from the main Battery. Update rate is **10** minutes. Three consecutive low reading will trip a Battery Low Alarm condition (Item 099)	**6.0**	Alkaline Packs are 6 V Lithium Packs are 7.2 V	•		•	
49	**Battery Low Voltage Limit**	**4.6**	Alkaline Pack	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Battery voltage low Alarm limit set point for setting Alarm Item 099. Note: Lithium Battery packs should use a higher value than what FW defaults to (use 6.0 or higher VDC)	**5.0**	**Lithium Battery Pack – should increase value to 6.0**	•		•	
50	**Shutdown Voltage Limit** Low limit for Item 048 at which Instrument may enter dormant mode of operations to help preserve any volatile Instrument data. Note: Lithium Battery packs should use a higher value than what FW defaults to (use 5.7 VDC)	**4.0**	**Alkaline Battery Packs use value: 4.0** **Lithium Battery Packs use value: 4.7**	•		•	
53	**Specific Gravity for Supercompress**	**0.6**	0.554 to 1.0	•		•	
54	**% N2 for Supercompress** Percent Nitrogen	**0.0**	0 to15%	•		•	
55	**% CO2 for Supercompress** Percent Carbon Dioxide	**0.0**	0 to15%	•		•	
56	**Pulse Channel A Output Scaling** Read–Only scaling factor for the value of Channel–A Volume output pulses (typically used in AMR applications). Value is automatically set by selection of Item 1193 and associated Volume units	**2.0**	Auto set by configuring Item 1193	•		•	
57	**Pulse Channel B Output Scaling** Read–Only scaling factor for the value of Channel–B Volume output pulses (typically used in AMR applications).	**2.0**	Auto set by configuring Item 1194	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Value is automatically set by selection of Item 1194 and associated Volume units						
58	**Pulse Channel C Output Scaling** Read–Only scaling factor for the value of Channel–C Volume output pulses (typically used in AMR applications). Value is automatically set by selection of Item 1195 and associated Volume units	**2.0**	Auto set by configuring Item 1195	•		•	
59	**Battery Usage Cycles** Read Only Item generally used for tracking Lithium battery life (usage amount) Note: total Battery Usage cycles total counts is not always available per Item 059 because the maximum count value possible exceeds display ability of 99999999. Item 059 is mainly used for checking battery usage for particular events (not total usage). For total usage – see Item 060.	**8**	Max Alkaline Battery cycles = 43200000000. Max Lithium Battery cycles = 66600000000. Item 059 display resolution limited to: 999999999	•		•	
60	**Battery Remain Months Low Limit** Low limit value of Item 1001 for tripping Battery Usage Cycle Alarm (Item 100). Value is in months. See Item 1001	**8**		•		•	
62	**Unit Serial Number** Programmed at the factory to match the serial number label.	**00000000**	1–20 Alpha–numeric characters	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
75	**Scroll List Item 7** Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	**045**	**Temperature Factor** Any Valid Item Number	•		•	
76	**Scroll List Item 8** Configuration Item for defining which Item is viewable in HMI Display List menu.	**043**	**Total Correction Factor** Any Valid Item Number	•		•	
77	**Scroll List Item 9** Configuration Item for defining which Item is viewable in HMI Display List menu.	**113**	**High Res CorVol** Any Valid Item Number	•		•	
78	**Scroll List Item 10** Configuration Item for defining which Item is viewable in HMI Display List menu.	**892**	**High Res UncVol** Any Valid Item Number	•		•	
79	**Scroll List Item 11** Configuration Item for defining which Item is viewable in HMI Display List menu.	**114**	**Meter Scaling** Any Valid Item Number	•		•	
80	**Scroll List Item 12** Configuration Item for defining which Item is viewable in HMI Display List menu.	**122**	**Firmware Ver** Any Valid Item Number	•		•	
81	**Scroll List Item 13** Configuration Item for defining which Item is viewable in HMI Display List menu.	**255**	*Not Assigned* Any Valid Item Number	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
82	**Scroll List Item 14** Configuration Item for defining which Item is viewable in HMI Display List menu.	**255**	*Not Assigned* Any Valid Item Number	•		•	
83	**Scroll List Item 15** Configuration Item for defining which Item is viewable in HMI Display List menu.	**255**	*Not Assigned* Any Valid Item Number	•		•	
84	**Scroll List Item 16** Configuration Item for defining which Item is viewable in HMI Display List menu.	**255**	*Not Assigned* Any Valid Item Number	•		•	
85	**Scroll List Item 17** Configuration Item for defining which Item is viewable in HMI Display List menu.	**255**	*Not Assigned* Any Valid Item Number	•		•	
86	**Scroll List Item 18** Configuration Item for defining which Item is viewable in HMI Display List menu.	**255**	*Not Assigned* Any Valid Item Number	•		•	
87	**P1 Pressure Units** Units–of–measure for P1 Pressure and all related Pressure Items related directly to pressure correction. This Item does not apply for units of P2.	**0**	**PSI**	•		•	
		1	kPa	•		•	
		2	mPa	•		•	
		3	Bar	•		•	
		4	mBar	•		•	
		5	KGcm2	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		6	in WC	●		●	
		7	in HG	●		●	
		8	mm HG	●		●	
		9	Ounces	●		●	
88	**# of Dec for P1 Press** Number of digits to the right of the decimal point for P1 Pressure readings. Controls display resolution.	0	X X X X X X X	●		●	
		1	X X X X X X . X	●		●	
		2	X X X X X . X X	●		●	
		3	**X X X X . X X X**	●		●	
		4	X X X . X X X X	●		●	
	# of Dec for P3 Press Number of digits to the right of the decimal point for P3 Pressure readings. Controls display resolution	0	X X X X X X X				●
		1	X X X X X X . X				●
		2	X X X X X . X X				●
		3	**X X X X . X X X**				●
		4	X X X . X X X X				●
89	**Temperature Units**	**0**	**Fahrenheit**	●		●	
		1	Celsius	●		●	
		2	Rankine	●		●	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Units–of–measure for T1 Temperature and all related Temperature Items related directly to temperature correction	3	Kelvin	●		●	
90	**Cor Volume Units** Units–of–measure for **Corrected** volume related Items (e.g. Item 000, 113, 208, etc.)	0	CF	●		●	
		1	CF x 10	●		●	
		2	CF x 100	●		●	
		3	CF x 1000	●		●	
		4	CF x 10K	●		●	
		5	CCF	●		●	
		6	**MCF**	●		●	
		7	m3 x 0.1	●		●	
		8	m3	●		●	
		9	m3 x 10	●		●	
		10	m3 x 100	●		●	
		11	m3 x 1K	●		●	
92	**Unc Volume Units** Units–of–measure for **Uncorrected** volume related Items	0	CF	●		●	
		1	CF x 10	●		●	
		2	CF x 100	●		●	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	(e.g. Item 002, 892, 218, etc.)	3	CF x 1000	●		●	
		4	CF x 10K	●		●	
		5	**CCF**	●		●	
		6	MCF	●		●	
		7	m3 x 0.1	●		●	
		8	m3	●		●	
		9	m3 x 10	●		●	
		10	m3 x 100	●		●	
		11	m3 x 1K	●		●	
93	**Ch–A Output Selection** Selects the type of information to be transmitted out on pulse output channel A.	0	Cor Vol Pulses	●		●	
		2	Unc Vol Pulses	●		●	
		3	**Off (Disabled)**	●		●	
94	**Ch–B Output Selection** Selects the type of information to be transmitted out on pulse output channel B.	0	Cor Vol Pulses	●		●	
		2	Unc Vol Pulses	●		●	
		3	**Off (Disabled)**	●		●	
95	**Ch–C Output Selection**	0	Cor Vol Pulses	●	●	●	
		2	Unc Vol Pulses	●	●	●	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Selects the type of information to be transmitted out on pulse output channel C. **Option codes 0** and **2** are selected when interfacing with an AMR device that needs Corrected or Uncorrected volume pulses. **Option code 4** is used if a fixed 100ms Form-A Alarm pulse signal is desired. Note: A Form-B Alarm pulse signal is also available on Ch-D output terminals. See Item 1016 for pulse width configuration **Option code 5** is used with MiWi350 or retro-fitting the '350' instrument with a MI Wireless Comm Box. The Modem can be any series of CloudLink, RV50, or other modem types. MiWi350 installations include the 'PD' Power Distribution Board to route regulated power to the 350 and the modem, and allow for Modem Power Control functionality (same as legacy MPC) For all Modem types: (e.g. CloudLink R100, CloudLink R110, Sierra RV50, or any other modem) – configure **Item 1458 Modem Type** to value: **Other'** to ensure proper modem power control operations. **Option code 6** is used when a **CloudLink R110** modem is installed inside a standard '350' enclosure or a MiWi350 assembly. This option code enables the 350 Instrument to	**3**	**Off (Disabled)**	•	•	•	•
		4	Alarm Pulse (Form-A)	•	•	•	•
		5	Modem Pwr MiWi350 Case (Modem Power Control signals for MiWi350 or MI Wireless Comm Box)	•	•	•	•
		6	Modem Reset CL R110	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	provide an automatic **daily** reset of the CL Modem (via its Reset terminals) just before midnight @ 23:57:00. MiWi350 installations include the 'PD' Power Distribution Board to route regulated power to the 350 and the modem. This option does not perform legacy Modem Power Control functionality – only a daily reset pulse for a CL R110 Modem. Note: CloudLink R100 does not support this reset option. Ensure **Item 1458 Modem Type** is set to **CloudLink**						
96	**Corr Vol # of Digits** Number of Volume digits displayed on LCD for CorVol value (Item 000).	**8**	**8 Digits**	•		•	
		7	7 Digits	•		•	
		6	6 Digits	•		•	
		5	5 Digits	•		•	
		4	4 Digits	•		•	
97	**Unc Vol # of Digits** Number of Volume digits displayed on LCD for UncVol value (Item 002).	**8**	**8 Digits**	•		•	
		7	7 Digits	•		•	
		6	6 Digits	•		•	
		5	5 Digits	•		•	
		4	4 Digits	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
98	**Meter Index Rate** Selection to indicate the amount of uncorrected volume for each rotation of the output shaft from the gas meter.	0	ROTARY	●		●	
		1	1 CF	●		●	
		2	2 CF	●		●	
		3	5 CF	●		●	
		4	**10 CF**	●		●	
		5	50 CF	●		●	
		6	100 CF	●		●	
		7	500 CF	●		●	
		8	1000 CF	●		●	
		9	10000 CF	●		●	
		10	0.1 m3	●		●	
		11	1 m3	●		●	
		12	10 m3	●		●	
		13	100 m3	●		●	
		14	1000 m3	●		●	
99	**Battery Low Alarm** Indicates the Battery pack has exceeded the low limit value set by Item 049 (Battery Low Limit).	**0** / 1	**No** / Yes	●		●	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Note: Battery measurement occurs at 10–minute intervals. Three consecutive low readings are required for Alarm to set. This Alarm does not set if an External Supply voltage is being used.						
100	**Battery Cycles Alarm** Batteries life tracking based on 'usage' counts. Alarm is set when Item 1001 (Battery Months Remaining) drops below configurable value of Item 060 (Battery Remain Low Limit). See Item 1162 to select Battery Pack type (Lithium, Alkaline).	**0** / 1	**No** / Yes	•		•	
102	**Vol Sensor – 1 Alarm** Indicates a faulty Volume Sensor 1. Alarm remains active until manually cleared.	**0** / 1	**No** / Yes	•		•	
103	**Vol Sensor – 2 Alarm** Indicates a faulty Volume Sensor 2. Alarm remains active until manually cleared.	**0** / 1	**No** / Yes	•		•	
104	**System Alarms** Bit coded Alarm. Alarm indicates a hardware fault or system error. **Note:** Multiple, simultaneous alarms are handled by displaying the sum of the decimal values (numbers inside parentheses) for all active alarm.	**0** (Inactive)	**Bit–0** (1): CPU Reset. **Bit–1** (2): Watchdog Reset **Bit–2** (4): Hard Fault Reset **Bit–3** (8): SPI Bus Error **Bit–9** (512): AT Log Sector Erase Failed **Bit–10** (1024): Precious Items Default Failed	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Example: CPU Reset (1), Watchdog Reset (2) and CPU Clock Error (4096) would display error code: 4099.		**Bit–11** (2048): CDM Board Version Detection Failed **Bit–12** (4096): CPU Clock Error **Bit–13** (8192): AT Log Write Failure **Bit–14** (16384): Item 43 Out of Range Error				
107	**Tamper Detected Alarm** Alarm is set when door tamper switch is tripped (Case door is open). User will need to clear this Alarm manually.	**0** / 1	**No** / Yes	•	•	•	•
108	**Master Alarm Status** Indicate if the unit has **any** active Alarms. '0' indicates no active Alarms and '1' indicates one or more active Alarms. Note: Item 108 cannot be cleared directly. Alarm Bell Icon displayed on LCD when Item 108 is set (active). Alarm Call–In is also triggered if Instrument is properly setup for this event. Host systems can **simply check Item 108 to know if the Instrument is in an Alarm condition**. If Yes – then Host system will need to check all Alarm Items to find which is actively set.	**0** / 1	**No** / Yes	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
109	**Pressure Factor Mode** Selects Live or Fixed Factor for Pressure Factor. Live value comes from measurement of Item 008 (P1 Gas Pressure). For Fixed Factor, the Pressure Factor is set from value of Item 1161 (Fixed Pressure Value). Do not directly set value of Item 008 or 044 when using Fixed Factor mode – use Item 1161.	0	Fixed Factor (not measured) –Item 1161 used to compute Item 044.	•		•	
		1	**Live (measured) –** Item 008 used to compute Item 044.	•		•	
111	**Temperature Factor Mode** Selects Live or Fixed Factor for Temperature Factor. Live value comes from measurement of Item 026 (Gas Temperature). For Fixed Factor, the Temperature Factor is set from value of Item 1162 (Fixed Temperature Value). Do not directly set value of Item 026 or 045 when using Fixed Factor mode – use Item 1162.	0	Fixed Factor (not measured) – Item 1162 used to compute Item 045.	•		•	
		1	**Live (measured) –** Item 026 used to compute Item 045	•		•	
112	**P1 Transducer Type** Type of transducer installed. Affects how Pressure factor is calculated. Note: Value comes directly from the P1 PnPPT Transducer and value is not configurable (R-O).	**0**	**Gauge**	•		•	
		1	Absolute	•		•	
		2	None	•		•	
	P3 Transducer Type	**0**	**Gauge**				•
		1	Absolute				•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Type of transducer installed. Note: Value comes directly from the P3 PnPPT Transducer and value is not configurable (R-O).	2	None				•
113	**Hi Res Cor Vol** Display of the fractional portion (to the fourth decimal) of Item 000 (Totalized Corrected Volume) with the last three CorVol integers for reference and displayed in CorVol Unit (Item 90).	**0.0000**		•		•	
114	**Meter Scaling Factor** Scaling factor applied to input pulses from meter and applies to both Uncorrected and Corrected volumes. Item 114 is set **automatically** by selecting a Meter Model using Item 432. This applies to both Index Drive and Rotary meter models. **Note:** Additional meter scaling can be made using Item 805 (mainly in cases of Rotary meters where Item 114 is locked).	**1.0000**	Index Drive / UMB type meter models assume 1.0000. Each Rotary meter model has a specific value for Item 114 that is auto set based on selection at Item 432.	•		•	
116	**Squared Supercompress** Squared value of Item 047 – used to compute Item 043.	**1.000**		•		•	
118	**Reference Number 1** Optional storage of an integer value, and no specific function.	**0**	00000000 – 99999999	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
119	**Reference Number 2** Optional storage of an integer value, and no specific function.	**0**	00000000 – 99999999	•	•	•	•
120	**Calibration Date P1 Press** Calibration dates are auto–inserted after Zero calibration of P1 Pressure by MasterLink.	**01 01 01**		•		•	
121	**Calibration Date Temp** Calibration dates are auto–inserted after Zero calibration of Temperature by MasterLink.	**01 01 01**		•		•	
122	**Firmware Version** Version of currently installed firmware in Flash	**1.xxxx**	1.10 or higher	•		•	
127	**Instrument Type** Numeric code assign to each **type** of instrument as an identifier (mainly used by Host Software). **Value is Locked and requires access code via Item 264 to modify!**	**14**		•	•	•	•
130	**Scroll List Item 1** Configuration Item for defining which Item is viewable in HMI Display List menu.	**002**	**UncVol** Any Valid Item Number	•		•	
131	**Scroll List Item 2** Configuration Item for defining which Item is viewable in HMI Display List menu.	**000**	**CorVol** Any Valid Item Number	•		•	
132	**Scroll List Item 3**	**008**	**P1 Pressure** Any Valid Item Number	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Configuration Item for defining which Item is viewable in HMI Display List menu.						
133	**Scroll List Item 4** Configuration Item for defining which Item is viewable in HMI Display List menu.	**026**	**Gas Temperature** Any Valid Item Number	•		•	
134	**Scroll List Item 5** Configuration Item for defining which Item is viewable in HMI Display List menu.	**1001**	**Battery Remain** Any Valid Item Number	•		•	
135	**Scroll List Item 6** Configuration Item for defining which Item is viewable in HMI Display List menu.	**044**	**Pressure Factor** Any Valid Item Number	•		•	
137	**P1 Press Range User** Pressure range of transducer, scaled to Pressure units per Item 087. Note: Range value comes directly from the P1 PnPPT Transducer and value is not configurable (R-O).	**30.0**	Range value is provided by the installed pressure transducer	•		•	
138	**P1 Transducer S/N** Programmed at the factory to match P1 Transducer S/N label. Note: value comes directly from the P1 PnPPT Transducer and value is not configurable (R-O).	**00000000**	20 Character Alpha–numeric string	•		•	
139	**Metrological Access**	**0**	**Full Read/Write (unrestricted)**	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	User access change protection control with respect to Item changes (Item writes). There are 5 options: (**0**) Full Read/Write – no restrictions (unprotected). (**1**) Full Read–Only – not possible to write to Metrological Items. (**2**) Metrological Event Protection: Metrological Items can be changed if Event Log is not full, meaning Item changes can be logged. (**3**) Metrological Sealed: Metrological Items cannot be changed. (**4**) Metrological Event Locked: Similar to option code (2) Event Protection – but reading of Event Log does not allow more changes as it does with option code (2). Once Event Log is full – no more changes even after reading out Event Log. See EC 350 User Manual for more details.	1	Full Read–Only	●	●	●	●
		2	Metrological Event Protected	●	●	●	●
		3	Metrological Sealed	●	●	●	●
		4	Metrological Event Locked	●	●	●	●
140	**Energy** Totalized gas energy, equivalent to the totalized corrected volume multiplied by the Gas Energy Value (Item 142).	**0**	00000000 – 99999999	●		●	
141	**Energy Units** Unit–of–measure for Energy	**0**	**Therms**	●		●	
		1	DecaTherms	●		●	
		2	MegaJoules	●		●	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		3	GigaJoules	•		•	
		4	KiloCals	•		•	
		5	KiloWattHours	•		•	
142	**Gas Energy Value** User provided value of Energy per unit of CorVol. 1000 BTU / CF per Item 141 Units.	**1000.0**	BTU/cu.ft. KJOULES/m3 KILOCAL/m3 WHR/m3	•		•	
143	**P1 Press Low Alarm** Alarm is set when value of Item 008 drops below configurable limit per Item 011. Manually clear unless in RBX mode.	**0** / 1	**No** / Yes	•		•	
144	**Temperature Low Alarm** Alarm is set when value of Item 026 drops below configurable limit per Item 027. Manually clear unless in RBX mode.	**0** / 1	**No** / Yes	•		•	
145	**P1 Press High Alarm** Alarm is set when value of Item 008 exceeds configurable limit per Item 010. Manually clear unless in RBX mode.	**0** / 1	**No** / Yes	•		•	
146	**Temperature High Alarm** Alarm is set when value of Item 026 exceeds configurable limit per Item 028. Manually clear unless in RBX mode	**0**/ 1	**No** / Yes	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
147	**Supercompress Method** User selectable method of computing the Supercompressibily factor, which becomes part of the Total Correction Factor at Item 043.	0	Fixed	•		•	
		1	**NX–19**	•		•	
		2	AGA8 Gross 1 (Heating Value)	•		•	
		3	AGA8 Gross 2 (Relative Density)	•		•	
		4	AGA8 Detail Method	•		•	
148	**Incremental Energy** Energy (140) per user–selected time interval (Item 1178)	**0**		•		•	
156	**P3 Intrv High P Time** Time for Item 653 – *EC350* Time for Item 422 – *ERX350*	**00 00 00**				•	•
157	**P3 Intrv High P Date** Date for Item 653 – *EC350* Date for Item 422 – *ERX350*	**01 01 01**				•	•
158	**P3 Intrv Low P Time** Time for Item 654 – *EC350* Time for Item 423 – *ERX350*	**00 00 00**				•	•
159	**P3 Intrv Low P Date** Date for Item 654 – *EC350* Date for Item 423 – *ERX350*	**01 01 01**				•	•
163	**Flow Rate High Alarm**	**0** / 1	**No** / Yes	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	High Flow Alarm indicator. Item 208 exceeds limit per Item 164.						
164	**Flow Rate Hi Alarm Limit** High Flow Limit of Item 208 for tripping Alarm at Item 163	**99999.99**		•		•	
165	**RBX Alarm Enable** Enable RBX to auto–clear alarms when conditions return to normal.	**0**	**No (Standard Alarm)**	•		•	
		1	Yes (enable RBX alarm)	•		•	
166	**RBX Dead Band P1 Pressure** Pressure Dead Band in PSI	**5.0**		•		•	
167	**RBX Dead Band Temperature** Temperature Dead Band in degrees F	**10.0**		•		•	
169	**RBX Dead Band Flow Rate** Units in CorVol units (Item 090) per Hour.	**2.0**	2.0 MCF/Hr.	•		•	
170	**Protocol Code A** Enable to transmit the Error Code 21 "Timeout error message".	0	Send Errors	•		•	
		1	**No Errors**	•		•	
		2	Multi–drop Primary				
		3	Multi–drop Secondary				
171	**Wait for ENQ Timeout** Wait period for ENQ before sending timeout error 21 Note: Does not apply when using IrDA	**25**	1 – 60 seconds	•		•	
172	**Wait for SN Timeout**	**25**	1 – 60 seconds	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Wait period for Sign–on before sending timeout err 21						
176	**RBX Event** Status of RBX activity Either manually reset this Item back to zero after it is queried, or have the host computer handle it if on automated calls	**0**	**No (no RBX activity since last interrogation**	•		•	
		1	Yes (RBX activity since last interrogation	•		•	
183	**Previous Day Corvol** Item 000 from the Previous Gas Day	**0**		•		•	
184	**Previous Day Uncvol** Item 002 from the Previous Gas Day	**0**		•		•	
185	**Prev Day Avg P1 Press**	**0.0**		•		•	
186	**Previous Day Avg Temp**	**0.0**		•		•	
187	**Avg Unsquared Super** Interval average of Item 047 (interval per Item 1178)	**0.0**		•		•	
188	**Daily Avg Unsq Super** Gas Day average of Item 047	**0.0**		•		•	
189	**Prev Day Avg Unsq Super** Previous Gas Day average of Item 047	**0.0**		•		•	
190	**Daily Energy** Gas Day average of Item 140	**0.0**		•		•	
191	**Previous Day Energy** Previous Gas Day average of Item 140	**0.0**		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
192	**Daily Pk Flow Rate** Highest value of Item 209 within the Gas Day	**0.0**		•		•	
193	**Daily Pk Flow Time** Ending Hour during the Gas Day for Item 192	**00 00 00**		•		•	
194	**Prev Day Pk Flow Rate** Previous Day value of Item 192	**0.0**		•		•	
195	**Prev Day Pk Flow Time** Ending Hour during previous Gas Day for Item 194	**00 00 00**		•		•	
196	**Obsolete Event Log User ID** User ID number for security access (passcode) and used in Event records for change identification.	**00**	00 – 99	•		•	
200	**Site ID # Part 1** Configurable ID number – used by software as the main search criteria.	**00000000**	8 Digit Numeric value	•		•	
201	**Site ID # Part 2** Configurable ID number – used by software as the main search criteria.	**00000000**	8 Digit Numeric value	•		•	
202	**AT Group–1 Interval** Time period that determines how often TIME records are placed in Audit Trail Log 1 memory.	1	1 Minute	•		•	
		5	5 Minutes	•		•	
		10	10 Minutes	•		•	
		15	15 Minutes	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Note: Statistical Items are not computed per this Item – see Item 1178.	30	30 Minutes	•		•	
		60	**60 Minutes**	•		•	
		24	Daily	•		•	
		31	Monthly	•		•	
203	**Time** Instrument's internal Clock time. 24–hour clock (HH:MM: SS)	**00 00 00**	00:00:000 – 23:59:59	•		•	
204	**Date** Instrument's date. 6–digit Calendar Date. Format selected using Item 262. Note: LCD (HMI) displays Year as 4–digits	**01–01–01**		•		•	
205	**Gas Day Start Time** Configurable Time for Start of the Gas Day (Correctors).	**09 00 00**		•		•	
206	**P1 Interval Avg Press** P1 Pressure (008) average for the time period set by Item 1178	**0.0**		•		•	
207	**Interval Avg Gas Temp** T1 Temperature (026) average for the time period set by Item 1178	**0.0**		•		•	
208	**Avg Flow Rate (Cor Vol)**	**0.0**		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Flow Rate (209) average for the time period set by Item 1178						
209	**Flow Rate (Cor Vol)** Meter Flow Rate (based on Item 000) – updated every second if Instrument has any new volume input. In units per Item 090	**0.0**		•		•	
210	**Peak Flow Rate (Cor Vol)** Largest value of Item 209 during the Gas Day	**0.0**		•		•	
211	**Peak Hour Cor Vol** Largest 1–hour of accumulated CorVol during the Gas Day	**0.0**		•		•	
212	**Peak Hour Time** Ending hour for Item 211	**00 00 00**		•		•	
213	**Peak Hour Date** Date for Item 211	**01 01 01**		•		•	
214	**P1 Interval High Press** Highest value of P1 Pressure (008) measured within interval period set by Item 1178	**0.0**		•		•	
215	**P1 Interval Low Press** Lowest value of P1 Pressure (008) measured within interval period set by Item 1178	**99999.99**		•		•	
216	**Interval High Gas Temp**	**-40.0**		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Highest value of T1 Temperature (026) measured within interval period set by Item 1178						
217	**Interval Low Gas Temp** Lowest value of T1 Temperature (026) measured within interval period set by Item 1178	**158**		•		•	
218	**Inst Dial Rate (Unc Vol)** Meter Rate (based on Item 002) – updated every second if Instrument has any new volume input, in units of CF/Hr	**0.0**		•		•	
219	**Peak Dial Rate (Unc Vol)** Largest value of Item 218 for the interval	**0.0**		•		•	
221	**Daily Cor Vol Alarm Limit** CorVol High Alarm set point for tripping Alarm Item 222	**99999999**		•		•	
222	**Daily Cor Vol Alarm** Sets if Item 223 exceeds Item 221	**0** / 1	**No** / Yes	•		•	
223	**Daily Cor Vol** Accumulated Cor Vol for current Gas Day (Ends at Start Time)	**00000000**		•		•	
224	**Daily Unc Vol** Accumulated Unc Vol for current Gas Day (Ends at Start Time)	**00000000**		•		•	
225	**Incremental Cor Vol** Cor Vol (Item 000) per interval of Item 1178 interval period	**0**		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
226	**Incremental Unc Vol** Unc Vol (002) per interval of Item 1178 interval period	**0**		•		•	
229	**AT Group–1 Item–5** Configuration parameter for Audit Trail Log 1 – Record Item # 5.	**48**	**Battery Voltage** Any Valid Item Number	•		•	
	AT Group–1 Item–15 Configuration parameter for Audit Trail Log 1 – Record Item # 15.	**255**	***Not Assigned*** Any Valid Item Number		•		•
230	**AT Group–1 Item–6** Configuration parameter for Audit Trail Log 1 – Record Item # 6.	**0**	**Corrected Volume** Any Valid Item Number	•		•	
	AT Group–1 Item–16 Configuration parameter for Audit Trail Log 1 – Record Item # 16.	**255**	***Not Assigned*** Any Valid Item Number		•		•
231	**AT Group–1 Item–7** Configuration parameter for Audit Trail Log 1 – Record Item # 7.	**2**	**Uncorrected Volume** Any Valid Item Number	•		•	
	AT Group–1 Item–17 Configuration parameter for Audit Trail Log 1 – Record Item # 17.	**255**	***Not Assigned*** Any Valid Item Number		•		•
232	**AT Group–1 Item–8** Configuration parameter for Audit Trail Log 1 – Record Item # 8.	**8**	**P1 Gas Pressure** Any Valid Item Number	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	AT Group–1 Item–18 Configuration parameter for Audit Trail Log 1 – Record Item # 18.	**255**	***Not Assigned*** Any Valid Item Number		•		•
233	**AT Group–1 Item–9** Configuration parameter for Audit Trail Log 1 – Record Item # 9.	**26**	**Gas Temperature** Any Valid Item Number	•		•	
	AT Group–1 Item–19 Configuration parameter for Audit Trail Log 1 – Record Item # 19.	**255**	***Not Assigned*** Any Valid Item Number		•		•
234	**AT Group–1 Item–10** Configuration parameter for Audit Trail Log 1 – Record Item # 10.	**31**	**Case Temperature** Any Valid Item Number	•		•	
	AT Group–1 Item–20 Configuration parameter for Audit Trail Log 1 – Record Item # 20.	**255**	***Not Assigned*** Any Valid Item Number		•		•
243	**Month Peak Hour Cor Vol** Largest hourly CorVol of the current Gas month	**00000000**		•		•	
244	**Month Peak Hour Date** Date for Item 243	**01 01 01**		•		•	
245	**Month Peak Hour Time** Ending hour for Item 243	**00 00 00**		•		•	
246	**Month Peak Day Cor Vol**	**00000000**		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Largest daily CorVol of the current 'Gas' month						
247	**Month Peak Day Date** Date for Item 246	**01 01 01**		•		•	
248	**Prev Mo Pk Hour Cor Vol** Largest hourly CorVol of the previous 'Gas' month	**00000000**		•		•	
249	**Prev Mo Pk Hour Date** Date for Item 248	**01 01 01**		•		•	
250	**Prev Mo Pk Hour Time** Ending hour for Item 248	**00 00 00**		•		•	
251	**Prev Mo Pk Day Cor Vol** Largest daily CorVol of the previous 'Gas' month	**00000000**		•		•	
252	**Prev Mo Pk Day Date** Date for Item 251	**01 01 01**		•		•	
253	**Max Day Cor Vol** Largest Daily CorVol since last manual reset	**00000000**		•		•	
254	**Max Day Date** Date for Item 253	**01 01 01**		•		•	
255	**Reserved** "255" used to indicate an **unused** slot for Display List & Audit Trail columns		Indicates unused	•	•	•	•
256	**P1 Daily Average Press** Average of P1 Pressure (008) for the Gas Day	**0.0**		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
257	**Daily Average Temp** Average of T1 Temperature (026) for the Gas Day	**0.0**		•		•	
258	**AT Group 1 Item–1** Configuration parameter for Audit Trail Log 1 – Record Item # 1	**225**	**Incremental Cor Vol** Any Valid Item Number	•		•	
	AT Group 1 Item–11 Configuration parameter for Audit Trail Log 1 – Record Item # 11	**255**	***Not Assigned*** Any Valid Item Number		•		•
259	**AT Group–1 Item–2** Configuration parameter for Audit Trail Log 1 – Record Item # 2	**226**	**Incremental Unc Vol** Any Valid Item Number	•		•	
	AT Group–1 Item–12 Configuration parameter for Audit Trail Log 1 – Record Item # 12	**255**	***Not Assigned*** Any Valid Item Number		•		•
260	**AT Group–1 Item–3** Configuration parameter for Audit Trail Log 1 – Record Item # 3	**206**	**P1 Interval Avg Press** Any Valid Item Number	•		•	
	AT Group–1 Item–13 Configuration parameter for Audit Trail Log 1 – Record Item # 13	**255**	***Not Assigned*** Any Valid Item Number		•		•
261	**AT Group–1 Item–4** Configuration parameter for Audit Trail Log 1 – Record Item # 4	**207**	**Interval Avg Gas Temp** Any Valid Item Number	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	AT Group–1 Item–14 Configuration parameter for Audit Trail Log 1 – Record Item # 14	**255**	***Not Assigned*** Any Valid Item Number		•		•
262	**Date Format** Format of the Date at Item 204 and all other date related Items.	**0**	**MM–DD–YY**	•		•	
		1	DD–MM–YY	•		•	
		2	YY–MM–DD	•		•	
264	**Miscellaneous Action** Special actions – diagnostic usage. (e.g. Clear AT Log, Force Modem Pwr On/Off, etc.). These 'actions' are one–shot type. Actions happen only once per command. Several codes are used mainly by Production. Not normally accessed by field personnel.	**0**	Various unique codes Each code is 8 digits. (typically begin with: 201)	•	•	•	•
265	**Memory Address** Special diagnostic usage. Not normally accessed by field personnel. Used to retrieve data from Instrument using Item 266. Not usable by field personnel – data is raw / unformatted.	**0**		•	•	•	•
266	**Memory Data** Used in conjunction with Item 265 to obtain data from Instrument in a raw format.	**0**		•	•	•	•
267	**Miscellaneous Config**			•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Special code settings used to cause Instrument to operate in a specific manor generally for diagnostic purposes. These codes (settings) will remain set through a power cycle. Not normally accessed by field personnel.	**0**					
272	**Serial Baud Rate** Baud rate for the instrument's Serial port (TB4) for RS–232 or RS–485 Note: This baud rate must match the baud rate of the connected modem to establish a serial link Note: Baud Rate setting remains intact after a FW Upgrade or forcing basic defaults.	**0**	**9600**	•		•	
		1	4800	•		•	
		2	2400	•		•	
		3	1200	•		•	
		4	19200	•		•	
		5	38400	•		•	
		6	57600	•		•	
		7	115200	•		•	
273	**Max Flow Rate (Cor Vol)** Highest value for Item 209 since last manual reset	**0.0**		•		•	
274	**Max Flow Rate Time** Time for Item 273	**00 00 00**		•		•	
275	**Max Flow Rate Date** Date for Item 273	**01 01 01**		•		•	
276	**Max Flow Rate Press** Pressure for Item 273	**0.0**		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
277	**Max Hour Cor Vol** Highest value for Item 211 since last manual reset	00000000		•		•	
278	**Max Hour Cor Vol Time** End hour for Item 277	00 00 00		•		•	
279	**Max Hour Cor Vol Date** Date for Item 277	01 01 01		•		•	
280	**Max Hour Cor Vol Press** Pressure for Item 277	0.0		•		•	
281	**Max Dial Rate (Unc Vol)** Highest value for Item 218 since last manual reset	0		•		•	
282	**Max Dial Rate Time** Time for Item 281	00 00 00		•		•	
283	**Max Dial Rate Date** Date for Item 281	01 01 01		•		•	
284	**Max Dial Rate Press** Pressure for Item 281	0.0		•		•	
285	**P1 Max Pressure** Highest value for Item 008 since last manual reset	0.0		•		•	
286	**P1 Max Pressure Time** Time for Item 285	00 00 00		•		•	
287	**P1 Max Pressure Date** Date for Item 285	01 01 01		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
288	**Max Press Flow Rate** Flow Rate for Item 285	0.0		•		•	
289	**P1 Min Pressure** Lowest value for Item 008 since last manual reset	99999.99		•		•	
290	**P1 Min Pressure Time** Time for Item 289	00 00 00		•		•	
291	**P1 Min Pressure Date** Date for Item 289	01 01 01		•		•	
292	**Min Press Flow Rate** Flow Rate for Item 289	0.0		•		•	
293	**Max Gas Temperature** Highest value for Item 026 since last manual reset	-40.0		•		•	
294	**Max Gas Temp Time** Time for Item 293	00 00 00		•		•	
295	**Max Gas Temp Date** Date for Item 293	01 01 01		•		•	
296	**Max Gas Temp Flow Rate** Flow Rate for Item 293	0.0		•		•	
297	**Min Gas Temperature** Lowest value for Item 026 since last manual reset	158.0		•		•	
298	**Min Gas Temp Time** Time for Item 297	00 00 00		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
299	**Min Gas Temp Date** Date for Item 297	**01 01 01**		•		•	
300	**Min Gas Temp Flow Rate** Flow Rate for Item 297	**0.0**		•		•	
333	**Call–In Trigger Type** Determines which activity will cause the Instrument to Call–In to the Host system (Alarm / Scheduled Calls). Two Phone numbers are possible for each method. Note: to stop (cancel) Call–In retries – set Item 333 to code 0 (No Call–In) and then back to the desired value (i.e., toggle the value).	**0**	**No Call–In**	•	•	•	•
		1	Alarm Call–In Only	•	•	•	•
		2	Scheduled Call–In Only	•	•	•	•
		3	Alarm and Scheduled Call–In Only	•	•	•	•
334	**Scheduled Call–In Date** Date of next Call–in. Intended to be set to by host software after each Call–in	**01 01 01**	(must be set to date >= Item 204)	•	•	•	•
335	**Scheduled Call–In Time** Time of next Call–in. May be set by host software after each call or re–used for next Call–in	**00 00 00**	(must be set to time > Item 203)	•	•	•	•
336	**Call–In Retry By** The system sub–assembly that is expected to perform the call retry for failed Calls. **Host:** The Host system handles Call retries. **Instrument:** The MI Instrument handles Call retries.	0	Host	•	•	•	•
		1	Alarm: Host Scheduled: Instrument	•	•	•	•
		2	Alarm: Instrument Scheduled: Host	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	It's preferable to have **Instrument** initiate the call–in retries to ensure data is received by Host.	**3**	**Instrument** (Alarm + Sched)	●	●	●	●
337	**Last Mdm Call–In Result** Reports status of most recent Call–In – applies to both Alarm and Scheduled calls and also for Tel #1 or #2. Only the last (most recent) call status is reported.	0	Call Unsuccessful	●	●	●	●
		1	Call successful	●	●	●	●
		2	**No Call Attempted**	●	●	●	●
338	**Sched Call Unprocessed** Updated by Host system to indicate it has successfully completed data retrieval for the Call. At the start of each Schedule Call–In, Item 338 is initialized to '1'. The Host system is then required to write Item 338 to value of '0' as the last step in its data retrieval process of a Scheduled Call–In. Doing so informs the Instrument the Call is successful and all needed information was received. Failure to write Item 338 to '0' will cause a Call retry – if configured in Item 336 for **Instrument** retry.	**0**	**No** (indicates no Call–in activity since last interrogation)	●	●	●	●
		1	Yes (indicates Call–in activity since last interrogation)	●	●	●	●
339	**Sched Call–In Number 1** First Internet IP#/Phone# to use for Scheduled Call–In. If both Sched Numbers are used, each is called in an alternating manor (i.e. Number 1 then 2) until each is successful. Once a number is successful – that number stops call retries. Blank means disabled.	blank	50 Characters max	●	●	●	●

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
373	**% Methane (AGA8)** The following 19 Items are for reference only and display the values assigned to each of the individual gas composition parameters used in the AGA8 Detailed method of Super calculations. Specific Gravity, % Nitrogen, and % Carbon Dioxide are also part of this group but are displayed at Items 53 – 55. **Note:** The sum total for all parameters cannot exceed 100%.	**0**	0 – 100 %	•		•	
374	**% Ethane (AGA8)**	**0**	0 – 100 %	•		•	
375	**% Propane (AGA8)**	**0**	0 – 100 %	•		•	
376	**% I–Butane (AGA8)**	**0**	0 – 100 %	•		•	
377	**% N–Butane (AGA8)**	**0**	0 – 100 %	•		•	
378	**% I–Pentane (AGA8)**	**0**	0 – 100 %	•		•	
379	**% N–Pentane (AGA8)**	**0**	0 – 100 %	•		•	
380	**% Hexane (AGA8)**	**0**	0 – 100 %	•		•	
381	**% Heptane (AGA8)**	**0**	0 – 100 %	•		•	
382	**% Octane (AGA8)**	**0**	0 – 100 %	•		•	
383	**% Nonane (AGA8)**	**0**	0 – 100 %	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
384	**% Hydrogen Sulfide (AGA8)**	**0**	0 – 100 %	●		●	
385	**% Hydrogen (AGA8)**	**0**	0 – 100 %	●		●	
386	**% Helium (AGA8)**	**0**	0 – 100 %	●		●	
387	**% Oxygen (AGA8)**	**0**	0 – 100 %	●		●	
388	**% Carbon Monoxide (AGA8)**	**0**	0 – 100 %	●		●	
389	**% Argon (AGA8)**	**0**	0 – 100 %	●		●	
390	**% Decane (AGA8)**	**0**	0 – 100 %	●		●	
391	**% Water (AGA8)**	**0**	0 – 100 %	●		●	
399	**Flow Rate Lo Alarm Lim** High Flow Limit of Item 208 for tripping Alarm at Item 461	**0**		●		●	
404	**Previous Hour Cor Vol** Previous value of Item 225	**0**		●		●	
405	**Site ID Send Delay Time** Delay before sending Site ID string to Host system after modems connect on a Call–In. Allows time for Host to be ready for SITE ID string message once modems go 'transparent'. Generally, no need to adjust – as Instrument does retries for sending SITE ID if no response from Host.	**5 sec**	1 – 60 seconds	●	●	●	●
407	**P2 Transducer Type**	**0**	**Gauge**	●	●	●	●

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Type of transducer installed. Affects how Pressure factor is calculated. Note: value comes directly from the P2 PnPPT Transducer and value is not configurable (R-O).	1	Absolute	●	●	●	●
		2	None	●	●	●	●
408	**P2 Pressure Units** Unit–of–measure for P2 Pressure and all related P2 Pressure Items	**0**	**PSI**	●		●	
		1	kPa	●		●	
		2	mPa	●		●	
		3	Bar	●		●	
		4	mBar	●		●	
		5	KGcm2	●		●	
		6	in WC	●		●	
		7	in HG	●		●	
		8	mm HG	●		●	
		9	Ounces	●		●	
	P3 Pressure Units Unit–of–measure for P3 Pressure	**0**	**PSI**				●
		1	kPa				●
		2	mPa				●
		3	Bar				●
		4	mBar				●

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		5	KGcm2				●
		6	in WC				●
		7	in HG				●
		8	mm HG				●
		9	Ounces				●
409	**% of Dec for P2 Press** Number of digits to the right of the decimal point for P2 Pressure readings. Controls display resolution.	0	X XX X X X X X	●	●	●	●
		1	X X X X X X . X	●	●	●	●
		2	X X X X X . X X	●	●	●	●
		3	**X X X X . X X X**	●	●	●	●
		4	X X X . X X X X	●	●	●	●
410	**Calibration Date P2 Press** Calibration dates are auto–inserted after Zero calibration of P2	**01 01 01**		●		●	
	Calibration Date P3 Press Calibration dates are auto– inserted after Zero calibration of P3	**01 01 01**					●
411	**P2 Transducer S/N** Programmed at the factory to match P2 Transducer S/N label	**00000000**	20 Character Alpha–numeric string	●		●	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	P3 Transducer S/N Programmed at the factory to match P3 Transducer S/N label	**00000000**	20 Character Alpha–numeric string				•
412	**P2 Press Range (PSI)** Pressure range of transducer scaled to PSI Note: Range value comes directly from the P2 PnPPT Transducer and value is not configurable (R-O).	**30.0**	Range depends on Transducer Type	•		•	
	P3 Press Range (PSI) Pressure range of transducer, scaled to Pressure units per Item 408. Note: Range value comes directly from the P3 PnPPT Transducer and value is not configurable (R-O).	**30.0**	Range value is provided by the installed pressure transducer				•
413	**Pressure used at P2–Cal Zero** The pressure value used during the most recent P2 Pressure Zero calibration.	**0.0**		•	•	•	•
414	**Calibration P2–Zero** The offset (zero point) for the P2 Pressure transducer during the most recent P2 Pressure Zero calibration.	**0.0**		•		•	
	Calibration P3–Zero The offset (zero point) for the P3 Pressure transducer during the most recent P3 Pressure Zero calibration.	**0.0**					•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
415	**Cal Prev–1 P2–Zero**	**0.0**		•		•	
	Cal Prev–1 P3–Zero	**0.0**					•
416	**Pressure used at P2–Span** The pressure value used during the most recent P2 Pressure Span calibration.	**0.0**		•	•	•	•
417	**Calibration P2–Span** The span (gain factor) for the P2 Pressure transducer during the most recent P2 Pressure Span calibration.	**1.0**		•		•	
	Calibration P3–Span The span (gain factor) for the P3 Pressure transducer during the most recent P3 Pressure Span calibration	**1.0**					•
418	**Cal Prev–1 P2–Span**	**1.0**		•		•	
	Cal Prev–1 P3–Span	**1.0**					•
419	**P2 Pressure Range user** Pressure range of transducer, scaled to Pressure units per Item 408. Note: Range value comes directly from the P2 PnPPT Transducer and value is not configurable (R-O).	**0.0**	Range value is provided by the installed pressure transducer	•		•	
	P3 Press Range user Pressure range of transducer scaled to PSI. Note: Range value comes directly from the P3 PnPPT Transducer and value is not configurable (R-O)	**30.0**	Range depends on Transducer Type				•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
420	**P2 Gas Pressure** Most recently measured pressure of P2 transducer. Must be enabled for use from Item 1053. P2 Pressure measurement updated at interval selected by Item 586 (same as for P1 and T).	**0.0**		•		•	
	P3 Gas Pressure Most recently measured pressure of P3 transducer. Must be enabled for use from Item 1054. P3 Pressure measurement updated at interval selected by Item 586.	**0.0**					•
421	**P2 Interval Avg Press** P2 Pressure (420) average for the time period set by Item 1178	**0.0**		•		•	
	P3 Interval Avg Press P3 Pressure (420) average for the time period set by Item 1178	**0.0**					•
422	**P2 Interval High Press** Highest value of P2 Pressure (420) measured within interval period set by Item 1178	**0.0**		•		•	
	P3 Interval High Press Highest value of P3 Pressure (420) measured within interval period set by Item 1178	**0.0**					•
423	**P2 Interval Low Press**	**99999.99**		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Lowest value of P2 Pressure (420) measured within interval period set by Item 1178						
	P3 Interval Low Press Lowest value of P3 Pressure (420) measured within interval period set by Item 1178	**99999.99**					•
424	**P2 Daily Average Press** Average of P2 Pressure (420) for the Gas Day	**0.0**		•		•	
	P3 Daily Average Press Average of P3 Pressure (420) for the Gas Day	**0.0**					•
425	**P2 Prev Daily Avg Press** Average of P2 Pressure (420) for the previous Gas Day	**0.0**		•		•	
	P3 Prev Daily Average Press Average of P3 Pressure (420) for the previous Gas Day	**0.0**					•
426	**P2 Max Pressure** Highest value for Item 420	**0.0**		•		•	
	P3 Max Pressure Highest value for Item 420	**0.0**					•
427	**P2 Max Pressure Time** Time for Item 426	**00 00 00**		•		•	
	P3 Max Pressure Time Time for Item 426	**00 00 00**					•
428	**P2 Max Pressure Date**	**01 01 01**		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Date for Item 426						
	P3 Max Pressure Date Date for Item 426	**00 00 00**					•
429	**P2 Min Pressure** Lowest value for Item 420	**99999.99**		•		•	
	P3 Min Pressure Lowest value for Item 420	**99999.99**					•
430	**P2 Min Pressure Time** Time for Item 429	**00 00 00**		•		•	
	P3 Min Pressure Time Time for Item 429	**00 00 00**					•
431	**P2 Min Pressure Date** Date for Item 429	**01 01 01**		•		•	
	P3 Min Pressure Date Date for Item 429	**01 01 01**					•
432	**Meter Model** Model of meter to which the **EC 350** Corrector is mounted. Applies to both ID (UMB) and Rotary meter models.	**0**	**Other**	•		•	
		20	Dresser I–D B3 8C175/200	•		•	
		21	Dresser I–D B3 11C175/200	•		•	
		22	Dresser I–D B3 15C175/200	•		•	
		23	Dresser I–D B3 1M300	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Note: Changing the selection at this Item will **automatically set** the **values at Items 098 and 114** for the selected meter. Since the value at Item 114 should not be changed by the user, any additional minor adjustments to overall meter scaling can be made using Item 805 (Auxiliary Meter Factor). The default value of Item 114 for ID (UMB) meter models is 1.000. Select '**Other'** if your meter model is NOT listed and you want to **manually** enter values for **Items 114 and 098**	24	Dresser I–D B3 2M175/200	•		•	
		25	Dresser I–D B3 3M175/300	•		•	
		26	Dresser I–D B3 5M175	•		•	
		27	Dresser I–D B3 7M175	•		•	
		28	Dresser I–D B3 11M175	•		•	
		29	Dresser I–D B3 16M175	•		•	
		30	Dresser I–D B3 23M175	•		•	
		31	Dresser I–D B3 38M175	•		•	
		32	Dresser I–D B3 56M175	•		•	
		40	Dresser I–D LMMA 1.5M	•		•	
		41	Dresser I–D LMMA 2M	•		•	
		42	Dresser I–D LMMA 3M	•		•	
		43	Dresser I–D LMMA 5M	•		•	
		44	Dresser I–D LMMA 7M	•		•	
		45	Dresser I–D LMMA 11M	•		•	
		46	Dresser I–D LMMA 16M	•		•	
		47	Dresser I–D LMMA 23M	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		48	Dresser I–D LMMA 38M	●		●	
		49	Dresser I–D LMMA 56M	●		●	
		50	Dresser I–D LMMA 102M	●		●	
		60	Dresser ROT B3 8C175/200	●		●	
		61	Dresser ROT B3 11C175/200	●		●	
		62	Dresser ROT B3 15C175/200	●		●	
		63	Dresser ROT B3 1M300	●		●	
		64	Dresser ROT B3 2M175/200	●		●	
		65	Dresser ROT B3 3M175/300	●		●	
		66	Dresser ROT B3 5M175	●		●	
		67	Dresser ROT B3 7M175	●		●	
		68	Dresser ROT B3 11M175	●		●	
		69	Dresser ROT B3 16M175	●		●	
		70	Dresser ROT B3 23M175	●		●	
		71	Dresser ROT B3 23M232	●		●	
		72	Dresser ROT B3 38M175	●		●	
		73	Dresser ROT B3 56M175	●		●	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		80	Dresser ROT LMMA 1.5M	●		●	
		81	Dresser ROT LMMA 2M	●		●	
		82	Dresser ROT LMMA 3M	●		●	
		83	Dresser ROT LMMA 5M	●		●	
		84	Dresser ROT LMMA 7M	●		●	
		85	Dresser ROT LMMA 11M	●		●	
		86	Dresser ROT LMMA 16M	●		●	
		87	Dresser ROT LMMA 23M	●		●	
		88	Dresser ROT LMMA 38M	●		●	
		89	Dresser ROT LMMA 56M	●		●	
		90	Dresser ROT LMMA 102M	●		●	
		100	Elster–AMC ROT RPM 9.0C	●		●	
		101	Elster–AMC ROT RPM 1.5M	●		●	
		102	Elster–AMC ROT RPM 3.5M	●		●	
		103	Elster–AMC ROT RPM 5.5M	●		●	
		104	Elster–AMC ROT RPM 7.0M	●		●	
		105	Elster–AMC ROT RPM 11.0M	●		●	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		106	Elster–AMC ROT RPM 16.0M	•		•	
		107	Elster–AMC ROT RPM 2.0M	•		•	
		110	Elster I–D DIAPHR AL 800	•		•	
		111	Elster I–D DIAPHR AL 1000	•		•	
		112	Elster I–D DIAPHR AL 1400	•		•	
		113	Elster I–D DIAPHR AL 2300	•		•	
		114	Elster I–D DIAPHR AL 5000	•		•	
		120	Elster I–D TURBIN 3GT	•		•	
		121	Elster I–D TURBIN 4GT	•		•	
		122	Elster I–D TURBIN 6GT	•		•	
		123	Elster I–D TURBIN 12GT	•		•	
		141	Romet ROT RM1000	•		•	
		142	Romet ROT RM1500	•		•	
		144	Romet ROT RM3000	•		•	
		145	Romet ROT RM5000	•		•	
		146	Romet ROT RM7000	•		•	
		147	Romet ROT RM11000	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		148	Romet ROT RM16000–24	•		•	
		149	Romet ROT RM16000–20	•		•	
		150	Romet ROT RM23000	•		•	
		151	Romet ROT RM38000	•		•	
		153	Romet ROT RM600	•		•	
		154	Romet ROT RM2000	•		•	
		155	Romet ROT RM25000	•		•	
		156	Romet ROT RM56000	•		•	
		160	Sensus I–D DIAPHR 750	•		•	
		161	Sensus I–D DIAPHR 1600	•		•	
		162	Sensus I–D DIAPHR 3000	•		•	
		163	Sensus I–D DIAPHR 5000	•		•	
		164	Sensus I–D DIAPHR 10000	•		•	
		170	Sensus I–D ROTARY R–3	•		•	
		171	Sensus I–D ROTARY R–5	•		•	
		172	Sensus I–D ROTARY R–8	•		•	
		173	Sensus I–D ROTARY R–11	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		180	Sensus I–D TURBIN 2" TP–4	•		•	
		181	Sensus I–D TURBIN 2" 5–HP	•		•	
		182	Sensus I–D TURBIN 3" 10–HP	•		•	
		183	Sensus I–D TURBIN 4" T–18	•		•	
		184	Sensus I–D TURBIN 6" T–30	•		•	
		185	Sensus I–D TURBIN 8" T–60	•		•	
		186	Sensus I–D TURBIN 12" T–140	•		•	
		190	Dresser ROT MET B3 8C175/200	•		•	
		191	Dresser ROT MET B3 11C175/200	•		•	
		192	Dresser ROT MET B3 15C175/200	•		•	
		193	Dresser ROT MET B3 1M3 00	•		•	
		194	Dresser ROT MET B3 2M 175/200	•		•	
		195	Dresser ROT MET B3 3M 175/300	•		•	
		196	Dresser ROT MET B3 5M 175	•		•	
		197	Dresser ROT MET B3 7M 175	•		•	
		198	Dresser ROT MET B3 11M 175	•		•	
		199	Dresser ROT MET B3 16M 175	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		200	Dresser ROT MET B3 23M 175	●		●	
		201	Dresser ROT MET B3 23M 232	●		●	
		202	Dresser ROT MET B3 38M 175	●		●	
		203	Dresser ROT MET B3 56M 175	●		●	
		210	Romet ROT RM16	●		●	
		211	Romet ROT RM30	●		●	
		212	Romet ROT RM40	●		●	
		214	Romet ROT RM55	●		●	
		215	Romet ROT RM85	●		●	
		216	Romet ROT RM140	●		●	
		218	Romet ROT RM200	●		●	
		219	Romet ROT RM300	●		●	
		221	Romet ROT RM450	●		●	
		223	Romet ROT RM650	●		●	
		224	Romet ROT RM700	●		●	
		225	Romet ROT RM1100	●		●	
		226	Romet ROT RM1600	●		●	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		230	Romet ROT G10	●		●	
		231	Romet ROT G16	●		●	
		232	Romet ROT G25	●		●	
		233	Romet ROT G40	●		●	
		234	Romet ROT G65	●		●	
		235	Romet ROT G100	●		●	
		236	Romet ROT G160	●		●	
		237	Romet ROT G250	●		●	
		238	Romet ROT G400	●		●	
		239	Romet ROT G400–150	●		●	
		240	Romet ROT G650	●		●	
		241	Romet ROT G1000	●		●	
		250	Elster I–D RABO 3.5M/G65	●		●	
		251	Elster I–D RABO 5.5M/G100	●		●	
		252	Elster I–D RABO 9M/G165	●		●	
		253	Elster I–D RABO 14M/G250	●		●	
432		254	Elster I–D RABO 23M/G400	●		●	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		260	Elster **ROT** RABO 3.5M/G65	•		•	
		261	Elster **ROT** RABO 5.5M/G100	•		•	
		262	Elster **ROT** RABO 9M/G165	•		•	
		263	Elster **ROT** RABO 14M/G250	•		•	
		264	Elster **ROT** RABO 23M/G250	•		•	
433	**Volume Input Mode** Selection to identify the type and operation of uncorrected volume input signal. **For ID type Meters** (ID in name) – Item 433 will automatically be set to: LF–UMB/Instrument Drive (code 0). **For Rotary type Meters** (ROT in name) – Item 433 will automatically be set to: HF–Rotary Low Res (code 1). **For Bidirectional applications** – Item 433 needs to be set manually to either: LF Bidirectional CW or CCW depending meter Notes: • LF = "Low Frequency" • HF = "High Frequency" • CW = "Clock Wise" • CCW = "Counter–Clock Wise"	**0**	**LF–UMB/Instrument Drive**	•		•	
		1	HF–Rotary Low Res	•		•	
		2	HF–Rotary High Res	•		•	
		3	LF Bidirectional F=CW	•		•	
		4	LF Bidirectional F=CCW	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	➢ LF – UMB and Bidirectional inputs connect at TB2 / TB3. ➢ HF – (Rotary) input connects at P8 (white connector).						
434	**Daily Backup Volume** (EC 350 + Cloud Link) If using **Cloud Link** modem in mode for Pulse counting – Item 434 will synch on **daily** basis with Cloud Link to get pulses and scale them to units of Item 002 (UncVol). See Item 1463 for Backup Volume Alarm Limit setting – used to trip Alarm Item 435.	**0**	(Units per Item 002)	•		•	
435	**Daily Backup Vol Alarm** Alarm is set when value of Item 002 differs from Item 434 by more than configurable amount of Item 1463. Alarm operations requires a non–zero value for Item 1463 (disabled if Item 1463=0)	**0** / 1	**No** / Yes	•		•	
436	**Backup UVol Alarm Time** Time of Item 435 (since last Alarm clear)	**00 00 00**		•		•	
437	**Backup UVol Alarm Date** Date of Item 435 (since last Alarm clear)	**01 01 01**		•		•	
438	**Reversing Flow Alarm**	**0** / 1	**No** / Yes	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Sets when Item 433 is in modes '3' or '4' and Reverse Volume is detected. Generally, this Alarm is masked off as to not cause a nuisance alarm. User can decide if Reverse flow (volume) should represent an alarm type condition by unmasking this Alarm.						
439	**Meter Displacement (CF)** The volume displacement for meter type selected at Item 432 (Always expressed in CF)	**1.000**		•		•	
449	**Volume Switch Filter** Enable or disable a filter on the switch inputs. Enabling the filter prevents very short (unwanted) pulses from being counted.	**0** / 1	**Disable** / Enable	•		•	
451	**P2 Press High Alarm** Alarm is set when value of Item 420 exceeds configurable limit per Item 455. Manually clear unless in RBX mode.	**0** / 1	**No** / Yes	•		•	
	P3 Press High Alarm Alarm is set when value of Item 420 exceeds configurable limit per Item 455. Manually clear unless in RBX mode.	**0** / 1	**No** / Yes				•
452	**P2 Press Low Alarm** Alarm is set when value of Item 420 exceeds configurable limit per Item 456. Manually clear unless in RBX mode.	**0** / 1	**No** / Yes	•		•	
	P3 Press Low Alarm	**0** / 1	**No** / Yes				•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Alarm is set when value of Item 420 exceeds configurable limit per Item 456. Manually clear unless in RBX mode.						
453	**P3 Day High Press** Highest P3 Pressure (501) for the current Gas Day – *EC350* Highest P3 Pressure (420) for the current Gas Day – *ERX350*	**-1.0**				•	•
454	**P3 Day Low Press** Lowest P3 Pressure (501) for the current Gas Day – *EC350* Lowest P3 Pressure (420) for the current Gas Day – *ERX350*	**99999.99**				•	•
455	**P2 High Alarm Limit** P2 Pressure High Alarm set point for tripping Alarm Item 451.	**99999.99**		•		•	
	P3 High Alarm Limit P3 Pressure High Alarm set point for tripping Alarm Item 451.	**9999.99**					•
456	**P2 Low Alarm Limit** P2 Pressure Low Alarm set point for tripping Alarm Item 452.	**–1.0**		•		•	
	P3 Low Alarm Limit P3 Pressure Low Alarm set point for tripping Alarm Item 452.	**–1.0**					•
457	**P3 Day High P Time** Time for Item 453	**00 00 00**				•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
458	**P3 Day High P Date** Date for Item 453	**01 01 01**				•	•
459	**RBX Dead Band: P2 Press** Hysteresis band that's applied when resetting the RBX alarm for P2 pressure (high / low).	**5.0**	(PSI)	•	•	•	•
461	**Flow Rate Low Alarm** Low Flow Alarm indicator	**0** / 1	**No** / Yes	•		•	
462	**Battery Low Alarm Time** Time of Item 099 Alarm	**00 00 00**		•	•	•	•
463	**Battery Low Alarm Date** Date of Item 099 Alarm	**01 01 01**		•	•	•	•
464	**Vol Sensor–1 Alarm Time** Time of Item 102 Alarm	**00 00 00**		•		•	
465	**Vol Sensor–1 Alarm Date** Date of Item 102 Alarm	**01 01 01**		•		•	
466	**Vol Sensor–2 Alarm Time** Time of Item 103 Alarm	**00 00 00**		•		•	
467	**Vol Sensor–2 Alarm Date** Date of Item 103 Alarm	**01 01 01**		•		•	
468	**System Alarm Time** Time of Item 104 Alarm	**00 00 00**		•	•	•	•
469	**System Alarm Date**	**01 01 01**		•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Date of Item 104 Alarm						
470	**P1 Pressure Low Alarm Time** Time of Item 143 Alarm	00 00 00		•	•	•	•
471	**P1 Pressure Low Alarm Date** Date of Item 143 Alarm	01 01 01		•	•	•	•
472	**P1 Press High Alarm Time** Time of Item 145 Alarm	00 00 00		•	•	•	•
473	**P1 Press High Alarm Date** Date of Item 145 Alarm	01 01 01		•	•	•	•
474	**Temp Low Alarm Time** Time of Item 144 Alarm	00 00 00		•	•	•	•
475	**Temp Low Alarm Date** Date of Item 144 Alarm	01 01 01		•	•	•	•
476	**Temp High Alarm Time** Time of Item 146 Alarm	00 00 00		•	•	•	•
477	**Temp High Alarm Date** Date of Item 146 Alarm	01 01 01		•	•	•	•
478	**Daily CorVol Alarm Time** Time of Item 222 Alarm	00 00 00		•		•	
479	**Daily CorVol Alarm Date** Date of Item 222 Alarm	01 01 01		•		•	
480	**Flow High Alarm Time**	00 00 00		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Time of Item 163 Alarm						
481	**Flow High Alarm Date** Date of Item 163 Alarm	**01 01 01**		•		•	
482	**LCD Default Display** Item displayed on the LCD when the instrument is in Corrector Mode. Typically Item 0 – but can be any valid Item.	**0**	CorVol	•		•	
486	**Modem AT Call Enable** Selection for how Call–In connects with Host System. Options are: Normal AT Command mode (send AT Init and/ Dial strings) or 'Always Connected' call–in mode for certain modems that do not need AT dial commands (skip the dial phase). Note: in the 350 series products, option codes 0 and 1 have the same functionality (enable AT Command mode). To disable Call–In completely – see Item 333.	0 / **1**	**Normal AT Command mode**	•	•	•	•
		2	Always Connected – No Dial required	•	•	•	•
487	**Call–In Keep Alive Time** Amount of Time (in minutes) the instrument keeps the Modem powered up after a successful Call–in, to allow a host unit to call back for a follow–up call. For 3rd party Modems – this requires use of the Power Distribution Board (Modem Power Control). Cloud Link modem uses ATD	**0**	0 – 1440 min	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	command to enter in to a 'Server Mode' – PD Board is not used. '0' indicates disabled (off). See Item 790 for ERX 350						
488	**Call Out 1 Repeat Intrv** The time interval between the start of a new Call Out Window (i.e., how often Call Out Window 1 repeats within the limits set by Items 1231 and 1232 (Call Out Start / Stop times). Example: 60 indicates start a Call Window every 60 minutes. For 3rd party Modems – this requires the Power Distribution Board (Modem Power Control). Cloud Link modem uses ATD command to enter in to a 'Server Mode' – PD Board not used. 0 = disabled	**0**	0 – 1440 min	•	•	•	•
489	**Call Out 1 Keep Alive** The time duration the Modem should be On and able to take an incoming call. Duration of active server mode. 0 = disabled. For 3rd party Modems – this requires the Power Distribution Board (Modem Power Control). Cloud Link modem uses ATD command to enter in to a 'Server Mode' – PD Board not used.	**0**	0 – 1440 min	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
491	**Modem Init String** Initialization string sent to the instrument modem at beginning of Call–in.	**ATE0V0**	30 Characters max	•		•	
492	**Modem Dial String** AT–command sent to the modem to initiate Dialing.	**ATDT**	20 Characters max	•		•	
493	**Alarm Call–In Number 1** First Internet/Phone # to use for Alarm Call–In. If both Alarm Numbers are used, each is called in an alternating manor (i.e. Number 1 then 2) until each is successful. Once a number is successful – that number stops call retries. Blank means disabled.	blank	50 Characters max	•		•	
494	**Modem Hangup String** AT–command sent to the modem to Hang up.	**ATH0**	4 Characters max	•		•	
495	**Modem Retry–A Interval** Primary call–in retry period, in minutes.	**10 min**	0 - 1440	•		•	
496	**Modem Retry–B Interval** Secondary call–in retry period, in minutes.	**1260 (21 Hrs.)**	0 - 1440	•		•	
497	**Modem Retry–A Count** Number of Call–In retries using Retry-A Interval timing (per Item 495) attempted before switching to Retry-B Interval timing (per Item 496). Once Retry-A count is exceeded –	**3**	0 - 99	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	system will continue to use Retry-B Interval timing until Call-In ends or a new Call scenario is initiated.						
498	**P3 Day Low P Time** Time for Item 454	00 00 00				•	•
499	**P3 Day Low P Date** Date for Item 454	01 01 01				•	•
500	**P1 Gas Pressure** Pressure from the P1 pressure transducer.	0.0			•		•
501	**P2 Gas Pressure** Pressure from the P2 pressure transducer.	0.0			•		•
	P3 Gas Pressure Pressure from the P3 pressure transducer.	0.0				•	
502	**T1 Gas Temperature** Temperature from temperature probe.	0.0			•		•
503	**Case Temperature** Temperature from inside case.	32.0			•		•
504	**Case Temp Maximum** Max value of Item 503 since last reset	–40.0			•		•
505	**Case Temp Minimum** Min value of Item 503 since last reset	158.0			•		•
506	**P1 Calibration Zero**	0.0			•		•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Amount of offset required for the P1 transducer to obtain zero reading at zero pressure						
507	**Cal Prev–1 P1–Zero** Previous value of Item 506	**0.0**			•		•
508	**Calibration P1–Span** The span (gain factor) for the P1 Pressure transducer during the most recent P1 Pressure Span calibration.	**1.0**			•		•
509	**Cal Prev–1 P1–Span** Previous value of Item 508	**1.0**			•		•
510	**Calibration P2–Zero** Amount of offset required for the P2 transducer to obtain zero reading at zero pressure	**0.0**			•		•
	Calibration P3–Zero Amount of offset required for the P3 transducer to obtain zero reading at zero pressure	**0.0**				•	
511	**Cal Prev–1 P2–Zero** Previous value of Item 510	**0.0**			•		•
	Cal Prev–1 P3–Zero Previous value of Item 510	**0.0**				•	
512	**Calibration P2–Span** Amount of gain required for the P2 transducer to obtain correct readings at higher pressures	**1.0**			•		•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Calibration P3–Span Amount of gain required for the P3 transducer to obtain correct readings at higher pressures	**1.0**				•	
513	**Cal Prev–1 P2–Span** Previous value of Item 512	**1.0**			•		•
	Cal Prev–1 P3–Span Previous value of Item 512	**1.0**				•	
514	**Calibration T–Zero** Amount of offset required for the Temperature Probe to obtain zero degree reading at zero Temperature (assuming Deg F or C)	**0.0**			•		•
515	**Cal Prev–1 T–Zero** Previous value of Item 514	**0.0**			•		•
516	**Calibration Span** Amount of gain required for correct reading at higher temperatures.	**1.0**	1		•		•
517	**Cal Prev–1 Temp–Span** Previous value of Item 516	**1.0**			•		•
518	**Calibration Date P1 Press** Date P1 was last calibrated	**01 01 01**			•		•
519	**Calibration Date P2 Press** Date P2 was last calibrated	**01 01 01**			•		•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Calibration Date P3 Press Date P3 was last calibrated	**01 01 01**				•	
520	**Calibration Date Temp** Date Temperature probe was last calibrated	**01 01 01**			•		•
521	**Battery Voltage Reading** Measured voltage from the main Battery. Update rate is **10** minutes. Three consecutive low reading will trip a Battery Low Alarm condition (Item 565)	**6**	New Alkaline Packs are 6 V New Lithium Packs are 7.2 V		•		•
522	**Battery Low Volt Limit** Battery Voltage Low Alarm set point (see Item 565)	**4.6**	**Alkaline Packs**		•		•
		5.8	Lithium Battery Pack – should increase value to 6.0		•		•
523	**Shutdown Voltage Limit** Low limit for Item 528 at which Instrument may enter dormant mode of operations to help preserve any volatile Instrument data. See Item 050.	**4.0**	**Alkaline Battery Packs use value: 4.0** **Lithium Battery Packs use value: 5.7**		•		•
526	**Battery Usage Cycles** Battery Usage Cycle for tracking remaining life of Lithium Battery pack – see Item 527, 1001, and 1002 (same function as Item 59).	**8**	Max Alkaline Battery cycles = 43200000000. Max Lithium Battery cycles = 66600000000. Item 526 display resolution limited to: 999999999		•		•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
527	**Battery Months Remain Alarm Limit** Alarm threshold for Lithium Battery Usage Cycle (same function as Item 060)	**8 mos.**	0 – 60		•		•
530	**Scroll List Item 1** Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	**580**	**Site ID# Part 1** Any Valid Item Number		•		•
531	**Scroll List Item 2** Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	**582**	**Time** Any Valid Item Number		•		•
532	**Scroll List Item 3** Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	**583**	**Date** Any Valid Item Number		•		•
533	**Scroll List Item 4** Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	**500**	**P1 Gas Pressure** Any Valid Item Number		•		•
534	**Scroll List Item 5** Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	**521**	**Battery Voltage** Any Valid Item Number		•		•
535	**Scroll List Item 6** Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	**631**	**P1 Max Pressure** Any Valid Item Number		•		•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
537	**Scroll List Item 7** Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	**637**	**P1 Max Pressure Time** Any Valid Item Number		•		•
538	**Scroll List Item 8** Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	**638**	**P1 Max Pressure Date** Any Valid Item Number		•		•
539	**Scroll List Item 9** Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	**632**	**P1 Min Pressure** Any Valid Item Number		•		•
540	**Scroll List Item 10** Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	**639**	**P1 Min Pressure Time** Any Valid Item Number		•		•
541	**Scroll List Item 11** Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	**640**	**P1 Min Pressure Date** Any Valid Item Number		•		•
542	**Scroll List Item 12** Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	**651**	**P1 Interval Low Press** Any Valid Item Number		•		•
543	**Scroll List Item 13** Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	**650**	**P1 Interval High Press** Any Valid Item Number		•		•
544	**Scroll List Item 14**	**649**	**P1 Interval Avg Press** Any Valid Item Number		•		•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)						
545	**Scroll List Item 15** Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	**651**	**P1 Interval Low Press** Any Valid Item Number		•		•
546	**Scroll List Item 16** Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	**255**	***Not Assigned*** Any Valid Item Number		•		•
547	**Scroll List Item 17** Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	**255**	***Not Assigned*** Any Valid Item Number		•		•
548	**Scroll List Item 18** Configuration Item for defining which Item is viewable in HMI Display List menu (HMI Level-0)	**255**	***Not Assigned*** Any Valid Item Number		•		•
549	**P1 Pressure Units** Unit of measure for P1 Pressure related Items.	**0**	**PSI**		•		•
		1	kPa		•		•
		2	mPa		•		•
		3	Bar		•		•
		4	mBar		•		•
		5	KGcm2		•		•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		6	in WC		●		●
		7	in HG		●		●
		8	mm HG		●		●
		9	Ounces		●		●
550	**P2 Pressure Units** Unit of measure for P2 Pressure related Items.	**0**	**PSI**		●		●
		1	kPa		●		●
		2	mPa		●		●
		3	Bar		●		●
		4	mBar		●		●
		5	KGcm2		●		●
		6	in WC		●		●
		7	in HG		●		●
		8	mm HG		●		●
		9	Ounces		●		●
550	**P3 Pressure Units** Unit of measure for P3 Pressure related Items.	**0**	**PSI**			●	
		1	kPa			●	
		2	mPa			●	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		3	Bar			●	
		4	mBar			●	
		5	KGcm2			●	
		6	in WC			●	
		7	in HG			●	
		8	mm HG			●	
		9	Ounces			●	
551	**T1 Temperature Units** Unit of measure for Gas Temperature related Items	**0**	**Fahrenheit**		●		●
		1	Celsius		●		●
		2	Rankine		●		●
		3	Kelvin		●		●
552	**# of Dec for P1 Press** Number of digits displayed to the right of the decimal point for P1 pressure display.	0	X X X X X X .		●		●
		1	X X X X X . X		●		●
		2	X X X X . X X		●		●
		3	**X X X X . X X X**		●		●
		4	X X X . X X X X		●		●
	# of Dec for P3 Press	0	X X X X X X X			●	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Number of digits displayed to the right of the decimal point for P3 pressure display.	1	X X X X X X . X			•	
		2	X X X X X . X X			•	
		3	**X X X X . X X X**			•	
		4	X X X . X X X X			•	
553	**P1 High Alarm Limit** P1 High Alarm set point	**99999.99**			•		•
554	**P1 Low Alarm Limit** P1 Low Alarm set point	**–1.0**			•		•
555	**P2 High Alarm Limit** P2 High Alarm set point	**99999.99**			•		•
	P3 High Alarm Limit P3 High Alarm set point	**99999.99**				•	
556	**P2 Low Alarm Limit** P2 Low Alarm set point	**–1.0**			•		•
	P3 Low Alarm Limit P3 Low Alarm set point	**–1.0**				•	
557	**Gas Temp High Alarm Limit** Temperature High Alarm set point	**165.0**			•		•
558	**Gas Temp Low Alarm Limit** Temperature Low Alarm set point	**–35.0**			•		•
559	**P1 High Pressure Alarm**	**0** / 1	**No** / Yes		•		•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	(same function as Item 145)						
560	**P1 Low Pressure Alarm** (same function as Item 143)	**0** / 1	**No** / Yes		•		•
561	**P2 High Pressure Alarm** (same function as Item 451)	**0** / 1	**No** / Yes		•		•
	P3 Press High Alarm Alarm is set when value of Item 501 exceeds configurable limit per Item 555. Manually clear unless in RBX mode	**0** / 1	**No** / Yes			•	
562	**P2 Low Pressure Alarm** (same function as Item 452)	**0** / 1	**No** / Yes		•		•
	P3 Press Low Alarm Alarm is set when value of Item 501 exceeds configurable limit per Item 556. Manually clear unless in RBX mode	**0** / 1	**No** / Yes			•	
563	**T1 High Temp Alarm** (same function as Item 146)	**0** / 1	**No** / Yes		•		•
564	**T1 Low Temp Alarm** (same function as Item 144)	**0** / 1	**No** / Yes		•		•
565	**Battery Low Volt Alarm** (same function as Item 099)	**0** / 1	**No** / Yes		•		•
566	**Battery High Cycles Usage Alarm** (same function as Item 100)	**0** / 1	**No** / Yes		•		•
568	**Alarm Output (Master Alarm Status)**	**0** / 1	**No** / Yes		•		•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Main Alarm Indicator Item – set active '1' if any Alarm is active. (same function as Item 108)						
	P1 Pressure Transducer Type same function as Item 112	**0**	**Gauge**		•		•
		1	Absolute		•		•
569	**P3 Pressure Transducer Type** Type of transducer installed. Affects how Pressure factor is calculated. Note: value comes directly from the P3 PnPPT Transducer and value is not configurable (R-O)	**0**	**Gauge**			•	
		1	Absolute			•	
		2	None			•	
570	**P1 Pressure Range PSI** P1 Pressure range always specified in PSI	**30.0**			•		•
	P2 Pressure Range PSI P2 Pressure range always specified in PSI	**30.0**			•		•
571	**P3 Press Range User** Pressure range of transducer, scaled to Pressure units per Item 408.	**30.0**	Range value is provided by the installed pressure transducer			•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Note: Range value comes directly from the P3 PnPPT Transducer and value is not configurable (R-O).						
572	**P1 Pressure Range User** P1 Transducer range converted to the selected pressure units Read–Only – the value supplied is based on transducer installed.	**30.0**			•		•
573	**P2 Pressure Range User** P2 Transducer range converted to the selected pressure units Read–Only – the value supplied is based on transducer installed.	**30.0**			•		•
	P3 Press Range (PSI) P3 Transducer range converted to the selected pressure units Read–Only – the value supplied is based on transducer installed.	**30.0**	Range depends on Transducer Type			•	
574	**P1 Transducer S/N** Programmed at the factory to match P1 Transducer S/N label	**00000000**	20 Character Alpha–numeric string		•		•
575	**P2 Transducer S/N** Programmed at the factory to match P2 Transducer S/N label	**00000000**	20 Character Alpha–numeric string		•		•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	P3 Transducer S/N Programmed at the factory to match P3 Transducer S/N label	**00000000**	20 Character Alpha–numeric string			•	
577	**Unit Serial Number** Programmed at the factory to match the serial number label.	**00000000**	1–20 Alpha–numeric characters		•		•
578	**Firmware Version** Current installed version of Firmware (*same function as Item 122*)	**1.xxxx**	Number is product dependent (e.g. 1.2102)		•		•
580	**Site ID # Part 1** Configurable ID number – used by software as the main search criteria. – *same function as Item 200*	**00000000**	8 Digit Numeric value		•		•
581	**Site ID # Part 2** Configurable ID number 2 – used by software as the main search criteria. – *same function as Item 201*	**00000000**	8 Digit Numeric value		•		•
582	**Time** Instrument's internal Clock time. 24–hour clock (HH:MM:SS)	**00 00 00**	00:00:000 – 23:59:59		•		•
583	**Date** Instrument's date. 6–digit Calendar Date. Format selected using Item 584. Note: LCD (HMI) displays Year as 4–digits	**01–01–01**			•		•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
584	**Date Format** Format in which the Item Date (583) will be entered and displayed. Note: LCD (HMI) displays Year as 4–digits	**0**	**MM–DD–YY**		●		●
		1	DD–MM–YY		●		●
		2	YY–MM–DD		●		●
585	**AT Group–1 Interval** Time period to determine how often TIME records are placed in Audit Trail Log 1 memory. Statistical Items are not computed per this Item – see Item 1178	0	24 Hours		●		●
		1	**60 Minutes**		●		●
		2	30 Minutes		●		●
		3	15 Minutes		●		●
		4	5 Minutes		●		●
		5	1 Minute		●		●
		6	10 Minutes		●		●
586	**Sample Interval** Configurable number of seconds between **measurement** cycles. Each Sample measures connected Pressure and Temperature transducers (e.g. P1, P2, T1, and Case Temp). Note: Faster Sample rates reduce Battery Life (30 sec is default) Note: Battery Voltage is not measured at this rate.	0	60 Seconds	●	●	●	●
		1	**30 Seconds**	●	●	●	●
		2	15 Seconds	●	●	●	●
		3	10 Seconds	●	●	●	●
		4	5 Seconds	●	●	●	●
		5	2 Seconds	●	●	●	●
		6	1 Second	●	●	●	●

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
587	**Recorder's Start Time** User–assigned begin Time for 'Measurement Day'	**09:00:00**	00:00:00 – 23:59:00		•		•
588	**Serial Baud Rate** Baud rate for the instrument's Serial port (TB4) for RS–232 or RS–485	**0**	**9600**		•		•
		1	4800		•		•
		2	2400		•		•
		3	1200		•		•
		4	19200		•		•
		5	38400		•		•
		6	57600		•		•
		7	115200		•		•
589	**AT Group–1 Item–1**	**500**	**P1 Gas Pressure**		•		•
	AT Group–1 Item–11	**255**	***Not Assigned***	•		•	
590	**AT Group–1 Item–2**	**651**	**P1 Interval Low Press**		•		•
	AT Group–1 Item–12	**255**	***Not Assigned***	•		•	
591	**AT Group–1 Item–3**	**650**	**P1 Interval High Press**		•		•
	AT Group–1 Item–13	**255**	***Not Assigned***	•		•	
592	**AT Group–1 Item–4**	**649**	**P1 Interval Avg Press**		•		•
	AT Group–1 Item–14	**255**	***Not Assigned***	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
593	**AT Group–1 Item–5**	**501**	**P2 Gas Pressure**		•		•
	AT Group–1 Item–15	**255**	***Not Assigned***	•		•	
594	**AT Group–1 Item–6**	**654**	**P2 Interval Low Press**		•		•
	AT Group–1 Item–16	**255**	***Not Assigned***	•		•	
595	**AT Group–1 Item–7**	**653**	**P2 Interval High Press**		•		•
	AT Group–1 Item–17	**255**	***Not Assigned***	•		•	
596	**AT Group–1 Item–8**	**652**	**P2 Interval Avg Press**		•		•
	AT Group–1 Item–18	**255**	***Not Assigned***	•		•	
597	**AT Group–1 Item–9**	**503**	**Case Temperature**		•		•
	AT Group–1 Item–19	**255**	***Not Assigned***	•		•	
598	**AT Group–1 Item–10**	**521**	**Battery Voltage**		•		•
	AT Group–1 Item–20	**255**	***Not Assigned***	•		•	
631	**P1 Max Pressure** Highest value for Item 500	**0.0**			•		•
632	**P1 Min Pressure** Lowest value for Item 500	**99999.99**			•		•
633	**P2 Max Pressure** Highest value for Item 501	**0.0**			•		•
	P3 Max Pressure	**0.0**				•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Highest value for Item 501						
634	**P2 Min Pressure** Lowest value for Item 501	**99999.99**			•		•
	P3 Min Pressure Lowest value for Item 501	**99999.99**				•	
635	**T1 Max Gas Temperature** Highest value for Item 502	**-40.0**			•		•
636	**T1 Min Gas Temperature** Lowest value for Item 502	**158.0**			•		•
637	**P1 Max Pressure Time** Time for Item 631	**00 00 00**			•		•
638	**P1 Max Pressure Date** Date for Item 631	**01 01 01**			•		•
639	**P1 Min Pressure Time** Time for Item 632	**00 00 00**			•		•
640	**P1 Min Pressure Date** Date for Item 632	**01 01 01**			•		•
641	**P2 Max Pressure Time** Time for Item 633	**00 00 00**			•		•
	P3 Max Pressure Time Time for Item 633	**00 00 00**				•	
642	**P2 Max Pressure Date**	**01 01 01**			•		•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Date for Item 633						
	P3 Max Pressure Date Date for Item 633	**01 01 01**				•	
643	**P2 Min Pressure Time** Time for Item 634	**00 00 00**			•		•
	P3 Min Pressure Time Time for Item 634	**00 00 00**				•	
644	**P2 Min Pressure Date** Date for Item 634	**01 01 01**			•		•
	P3 Min Pressure Date Date for Item 634	**01 01 01**				•	
645	**T1 Max Gas Temperature Time** Time for Item 635	**00 00 00**			•		•
646	**T1 Max Gas Temperature Date** Date for Item 635	**01 01 01**			•		•
647	**T1 Min Gas Temperature Time** Time for Item 636	**00 00 00**			•		•
648	**T1 Min Temperature Date** Date for Item 636	**01 01 01**			•		•
649	**P1 Interval Avg Press** Average of all samples of Item 500 during the interval of Item 1178.	**0.0**			•		•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
650	**P1 Interval High Press** Highest value of P1 during the interval of Item 1178.	**0.0**			•		•
651	**P1 Interval Low Press** Lowest value of P1 during the interval of Item 1178.	**99999.99**			•		•
652	**P2 Interval Avg Press** Average of all samples of Item 501 during the interval of Item 1178.	**0.0**			•		•
	P3 Interval Avg Press Average of all samples of Item 501 during the interval of Item 1178.	**0.0**				•	
653	**P2 Interval High Press** Highest value of P2 during the interval	**0.0**			•		•
	P3 Interval High Press Highest value of P3 during the interval	**0.0**				•	
654	**P2 Interval Low Press** Lowest value of P2 during the interval	**99999.99**			•		•
	P3 Interval Low Press Lowest value of P3 during the interval	**99999.99**				•	
655	**T1 Interval Avg Gas Temp** Average of all samples of Item 502 during the interval of Item 1178.	**0.0**			•		•
656	**T1 Interval High Gas Temp**				•		•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Highest value of Temperature during the interval of Item 1178.	**-40.0**					
657	**T1 Interval Low Gas Temp** Lowest Value of Temperature during the interval of Item 1178.	**158**			•		•
658	**P1 Intrv High P Time** Time for Item 650	**00 00 00**		•	•	•	•
659	**P1 Intrv High P Date** Date for Item 650	**01 01 01**		•	•	•	•
660	**P1 Intrv Low P Time** Time for Item 651	**00 00 00**		•	•	•	•
661	**P1 Intrv Low P Date** Date for Item 651	**01 01 01**		•	•	•	•
662	**P2 Intrv High P Time** Time for Item 653	**00 00 00**		•	•	•	•
663	**P2 Intrv High P Date** Date for Item 653	**01 01 01**		•	•	•	•
664	**P2 Intrv Low P Time** Time for Item 654	**00 00 00**		•	•	•	•
665	**P2 Intrv Low P Date** Date for Item 654	**01 01 01**		•	•	•	•
666	**T Intrv High T Time**	**00 00 00**			•		•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Time for Item 656						
667	**T1 Intrv High T Date** Date for Item 656	**01 01 01**			•		•
668	**T1 Intrv Low T Time** Time for Item 657	**00 00 00**			•		•
669	**T1 Intrv Low T Date** Date for Item 657	**01 01 01**			•		•
670	**P1 Daily Average Press** Average of all samples of Item 500 for the current Gas Day	**0.0**			•		•
671	**P1 Day High Press** Highest P1 Pressure (500) for the current Gas Day	**0.0**			•		•
672	**P1 Day Low Press** Lowest P1 Pressure (500) for the current Gas Day	**99999.99**			•		•
673	**P2 Daily Average Press** Average of all samples of Item 501 for the current Gas Day	**0.0**			•		•
	P3 Daily Average Press Average of all samples of Item 501 for the current Gas Day	**0.0**				•	
674	**P2 Day High Press** Highest P2 Pressure (501) for the current Gas Day	**-1.0**		•	•	•	•
675	**P2 Day Low Press** Lowest P1 Pressure (500) for the current Gas Day	**99999.99**		•	•	•	•
676	**T1 Daily Average Temp**				•		•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Average of all samples of Item 502 during the current Gas Day.	**0.0**					
677	**T1 Day High Temp** Highest T1 Temperature (502) for the current Gas Day	**0.0**			•		•
678	**T1 Day Low Temp** Lowest T1 Temperature (502) for the current Gas Day	**99999.99**			•		•
679	**P1 Day High P Time** Time for Item 671	**00 00 00**			•		•
680	**P1 Day High P Date** Date for Item 671	**01 01 01**			•		•
681	**P1 Day Low P Time** Time for Item 672	**00 00 00**			•		•
682	**P1 Day Low P Date** Date for Item 672	**01 01 01**			•		•
683	**P2 Day High Time** Time for Item 674	**00 00 00**		•	•	•	•
684	**P2 Day High Date** Date for Item 674	**01 01 01**		•	•	•	•
685	**P2 Day Low Time** Time for Item 675	**00 00 00**		•	•	•	•
686	**P2 Day Low Date** Date for Item 675	**01 01 01**		•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
687	**T1 Day High Time** Time for Item 677	00 00 00			•		•
688	**T1 Day High Date** Date for Item 677	01 01 01			•		•
689	**T1 Day Low Time** Time for Item 678	00 00 00			•		•
690	**T1 Day Low Date** Time for Item 678	01 01 01			•		•
691	**P1 Prev Day Avg Press** Average of all samples of Item 500 for the previous Gas Day.	0.0			•		•
692	**P1 Prev Day High Press** Highest P1 Pressure (500) for the previous Gas Day	0.0			•		•
693	**P1 Prev Day Low Press** Lowest P1 Pressure (500) for the previous Gas Day	99999.99			•		•
694	**P2 Prev Daily Average Press** Average of all samples of Item 501 for the previous Gas Day.	0.0			•		•
	P3 Prev Daily Avg Press Average of all samples of Item 501 for the previous Gas Day.	0.0				•	
695	**P2 Prev Day High Press**	-1.0		•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Highest P2 Pressure (501) for the previous Gas Day						
696	**P2 Prev Day Low Press** Lowest P2 Pressure (501) for the previous Gas Day	**99999.99**		•	•	•	•
697	**T1 Prev Day Average Temperature** Average of all samples of Item 502 for the previous Gas Day.	**0.0**			•		•
698	**T1 Prev Day High Temp** Highest T1 Temperature (502) for the previous Gas Day	**0.0**			•		•
699	**T1 Prev Day Low Temp** Lowest T1 Temperature (502) for the previous Gas Day	**99999.99**			•		•
700	**P1 Prev Day High P Time** Time for Item 692	**00 00 00**			•		•
701	**P1 Prev Day High P Date** Date for Item 692	**01 01 01**			•		•
702	**P1 Prev Day Low P Time** Time for Item 693	**00 00 00**			•		•
703	**P1 Prev Day Low P Date** Time for Item 693	**01 01 01**			•		•
704	**P2 Prev Day High P Time** Time for Item 695	**00 00 00**		•	•	•	•
705	**P2 Prev Day High P Date** Date for Item 695	**01 01 01**		•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
706	**P2 Prev Day Low P Time** Time for Item 696	**00 00 00**		•	•	•	•
707	**P2 Prev Day Low P Date** Date for Item 696	**01 01 01**		•	•	•	•
708	**T1 Prev Day High T Time** Time for Item 698	**00 00 00**			•		•
709	**T1 Prev Day High T Date** Date for Item 698	**01 01 01**			•		•
710	**T1 Prev Day Low T Time** Time for Item 699	**00 00 00**			•		•
711	**T1 Prev Day Low T Date** Date for Item 699	**01 01 01**			•		•
762	**Digital Input 1 Enable** Selection of which switch state (Open or Closed) to trip Alarm Item 766. **ERX350:** Connections made at (SW1) **TB2** pins +1 & -1. **EC 350**: Connections made at (SW3) **TB3** pins +3 & -3**.**	**0**	**Input Disabled**	•	•	•	•
		1	Closed Switch Input	•	•	•	•
		2	Open Switch Input	•	•	•	•
763	**Digital Input 2 Enable** Selection of which switch state (Open or Closed) to trip Alarm Item 767. **ERX350:** Connections made at (SW2) **TB2** pins +2 & -2. **EC 350**: Connections made at (SW4) **TB3** pins +4 & -4**.**	**0**	**Input Disabled**	•	•	•	•
		1	Closed Switch Input	•	•	•	•
		2	Open Switch Input	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
764	**Digital Input 3 Enable** Selection of which switch state (Open or Closed) to trip Alarm Item 768. **ERX350**: Connections made at (SW3) **TB3** pins +3 & -3.	**0**	**Input Disabled**		•		•
		1	Closed Switch Input		•		•
		2	Open Switch Input		•		•
766	**Digital Input 1 Alarm** Indicators for Digital Input 1. Alarm will trip if input matches Item 762 setting. Must manually clear Alarm or enable RBX Mode.	**0** / 1	**No** / Yes	•	•	•	•
767	**Digital Input 2 Alarm** Indicators for Digital Input 2. Alarm will trip if input matches Item 763 setting. Must manually clear Alarm or enable RBX Mode.	**0** / 1	**No** / Yes	•	•	•	•
768	**Digital Input 3 Alarm** Indicators for Digital Input 3. Alarm will trip if input matches Item 764 setting. Must manually clear Alarm or enable RBX Mode.	**0** / 1	**No** / Yes		•		•
769	**RBX Function Enable** Enables RBX, which will auto–clear alarm when conditions return to normal. Alarms that support RBX mode: Battery Voltage, Digital Inputs 1–3, Flowrate High and Low, Pressure P1 High and Low, P2 High and Low, T1 High and Low.	**0**	**No**				
		1	Yes (enable RBX mode)		•		•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
770	**RBX Dead Band: P1 Press** P1 hysteresis band used by RBX	**5.00** PSI			•		•
771	**RBX Dead Band: Temp** Temperature hysteresis band used by RBX	**10.00** F			•		•
774	**Protocol Code A** (same function as Item 170)	0	Standard		•		•
		1	**No Timeout**		•		•
775	**ENQ Timeout Delay** (same function as Item 171)	**25**	1 – 60 seconds		•		•
776	**Sign–On Timeout Delay** (same function as Item 172)	**25**	1 – 60 seconds		•		•
777	**RBX Alarm Event** Status of RBX activity when RBX mode is enabled	**0**	**No RBX activity since last interrogation.**		•		•
		1	RBX activity since last interrogation, intended to be reset to zero after each read.		•		•
779	**Calibration Mode** Set by MasterLink to put Instrument in to mode where P / T Calibrations do not affect Alarms and Statistical Items.	**0**	**No Calibration**	•	•	•	•
		1	P1 Calibration	•	•	•	•
		2	T1 Calibration	•	•	•	•
		3	P2 Calibration	•	•	•	•
780	**Modem Init String** (same function as Item 491)	**ATE0Q0V0**	30 Characters max		•		•
781	**Modem Dial String**	**ATDT**	20 Characters max		•		•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	(same function as Item 492)						
782	**Modem Hangup String** (same function as Item 494)	**ATH0**	10 Characters max		•		•
783	**Call–Out Stop Time** (same function as Item 485)	**23 59 00**	00:00:00 – 23:59:00		•		•
784	**Alarm Call–In Number 2** Second Internet/Phone # to use for Alarm Call–In. If both Alarm Numbers are used, each is called in an alternating manor (i.e. Number 1 then 2) until each is successful. Once a Number is successful – this number stops call retries. Blank means disabled.	blank	50 Characters max		•		•
785	**Alarm Call–In Number 1** First Internet/Phone # to use for Alarm Call–In. If both Alarm Numbers are used, each is called in an alternating manor (i.e. Number 1 then 2) until each is successful. Once a Number is successful – this number stops call retries. Blank means disabled.	blank	50 Characters max	•		•	
786	**Modem Retry–A Interval** (same function as Item 495)	**10**	0 – 9999 minutes		•		•
787	**Modem Retry–B Interval** (same function as Item 496)	**1440 (24 Hrs.)**	0 – 9999 minutes		•		•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
788	**Modem Retry–A Count** (same function as Item 497)	**3**	0 – 255		•		•
789	**Modem AT Call Enable** (same function as Item 486)	0	Enables AT Commands		•		•
		1	**Enables AT Commands**		•		•
		2	Always Connected – No Dial Required (UDP mode)		•		•
790	**Call–In Keep Alive Time** (same function as Item 487)	**0**	0 – 1440 minutes		•		•
791	**Call–Out Start Time** (same function as Item 490)	**00 00 00**	00:00:00 – 23:59:00				
792	**Call–Out Repeat Interval** (same function as Item 488)	**0**	0 – 1440 minutes				
793	**Call–Out Keep Alive Time** (same function as Item 489)	**0**	0 – 1440 minutes				
795	**External Supply Low Limit** Low limit voltage set point for Item 796 Set to –1.0 when not using External Supply (disables Alarm)	**–1.0**	-1.0 to 20.0 Volts	•	•	•	•
796	**Extern Supply Low Alarm** Alarm sets when the External Supply voltage input drops below the configurable low limit set at Item 795.	**0** / 1	**No** / Yes	•	•	•	•
805	**Auxiliary Meter Factor**	**1.000**					

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Additional overall meter scaling factor provided for any adjustments needed to <u>both</u> UncVol and CorVol. Similar to Item 046 – but applies to both UncVol and CorVol. A method to adjust overall meter scaling when Item 114 is 'locked' (mostly for Rotary meter options). Generally, not needed – but offered to handle special cases where Meter input rate needs tweaking (typically only in Rotary meters)			•		•	
806	**"+–+clr alms" Response Timeout** The number of seconds the Instrument waits for '+–+ clralms' string from Host System during a Call–In before sending a retry of the SITE ID string. Multiple attempts are made (sending SITE ID string and waiting for the: +–+clralms response) before failing Call–In.	**15 sec**	1 – 90 seconds	•	•	•	•
807	**P3 High/High Alarm Limit** P3 Pressure High/High Alarm set point.	**99999.99**				•	•
808	**P3 Low/Low Alarm Limit** P3 Low/Low Alarm set point.	**-1.0**				•	•
809	**P3 Press High/High Alarm** Alarm is set when value of Item 501 exceeds configurable limit per Item 807. Manually clear unless in RBX mode- *EC350*	**0** / 1	**No** / Yes			•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Alarm is set when value of Item 420 exceeds configurable limit per Item 807. Manually clear unless in RBX mode – *ERX350*						
810	**P3 Press Low/Low Alarm** Alarm is set when value of Item 501 exceeds configurable limit per Item 808. Manually clear unless in RBX mode- *EC350* Alarm is set when value of Item 420 exceeds configurable limit per Item 808. Manually clear unless in RBX mode – *ERX350*	**0** / 1	**No** / Yes			•	•
811	**RBX Dead Band: P3 Press** Hysteresis band that's applied when resetting the RBX alarm for P3 pressure (high / low).	**5.0**	**PSI**			•	•
812	**LCD Default Display**	**0**			•		•
813	**P1 High/High Alarm Limit (FW 1.32)** P1 Pressure High Alarm set point.	**99999.99**		•	•	•	•
814	**P1 Low/Low Alarm Limit (FW 1.32)** P1 Low Alarm set point	**–1.0**		•	•	•	•
815	**P1 Press High/High Alarm (FW 1.32)** Alarm is set when value of Item 008 exceeds configurable limit per Item 813. Manually clear unless in RBX mode.	**0** / 1	**No** / Yes	•	•	•	•
816	**P1 Press Low/Low Alarm (FW 1.32)**	**0** / 1	**No** / Yes	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Alarm is set when value of Item 008 drops below configurable limit per Item 814. Manually clear unless in RBX mode.						
817	**P2 High/High Alarm Limit (FW 1.32)** P2 Pressure High/High Alarm set point.	**99999.99**		•	•	•	•
818	**P2 Low/Low Alarm Limit (FW 1.32)** P2 Low/Low Alarm set point	**–1.0**		•	•	•	•
819	**P2 Press High/High Alarm (FW 1.32)** Alarm is set when value of Item 420 exceeds configurable limit per Item 817. Manually clear unless in RBX mode.	**0** / 1	**No** / Yes	•	•	•	•
820	**P2 Press Low/Low Alarm (FW 1.32)** Alarm is set when value of Item 008 exceeds configurable limit per Item 818. Manually clear unless in RBX mode.	**0** / 1	**No** / Yes	•	•	•	•
821	**Modem Init Delay** (Displayed in 1/10s of a second) Mainly used for Non–Mercury brand Modems like RV–50 to allow the Modem time to power up and prepare for a cellular call. Note: Not needed when using Cloud Link Modems as it does not try to connect to cellular network until receiving an ATD dial command. For CloudLink Modems – use Item 1406 (Dial Command Timeout) which should be set to typically 90 sec and leave Item 821 at the default value of 50 (5 sec)	**50 (5 sec)**	0 – 6000 (600 sec)	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
843	**Sched Call–In Failures** Count of all Scheduled Call–In failures until reset manually	**0**		•	•	•	•
844	**Last Sched Call–In Time** Time of last Sched Call–in.	**09 00 00**		•	•	•	•
845	**Last Sched Call–In Date** Date of last Sched Call–in.	**01 01 01**		•	•	•	•
846	**Next Sched Call–In Time** Time of next Call–in – takes in to account any pending Call retries	**09 00 00**		•	•	•	•
847	**Next Sched Call–In Date** Date of next Call–in – takes in to account any pending Call retries	**01 01 01**		•	•	•	•
891	**Prev Hour Unc Vol** Uncorrected Vol (002) from previous hour	**0**		•		•	
892	**High Resolution Unc Vol** Uncorrected Vol (002) displayed to 4th decimal place	**0.0000**		•		•	
896	**Forward Cor Vol** Totalized corrected volume for the Forward direction only Requires 4 switch inputs and Item 433 to be set for Bidirectional modes (codes 3 or 4)	**0**	00000000 – 99999999	•		•	
897	**Incremental Fwrd Cor Vol**	**0**		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Corrected forward only volume for the interval per Item 1178. Requires 4 switch inputs and Item 433 to be set for Bidirectional modes (codes 3 or 4)						
898	**Forward Unc Vol** Totalized uncorrected volume for the Forward direction only Requires 4 switch inputs and Item 433 to be set for Bidirectional modes (codes 3 or 4)	**0**	00000000 – 99999999	•		•	
899	**Incremental Fwrd Unc Vol** Uncorrected forward only volume for the interval of Item 1178. Requires 4 switch inputs and Item 433 to be set for Bidirectional modes (codes 3 or 4)	**0**		•		•	
900	**Net Corrected Vol** Net CorVol = Forward CorVol minus Reverse CorVol Requires 4 switch inputs and Item 433 to be set for Bidirectional modes (codes 3 or 4)	**0**	00000000 – 99999999	•		•	
901	**Incremental Net Cor Vol** Net corrected volume for the interval (Item 897 minus Item 903). Interval rate per Item 1178. Requires 4 switch inputs and Item 433 to be set for Bidirectional modes (codes 3 or 4).	**0**		•		•	
902	**Reverse Cor Vol** Totalized corrected volume for the Reverse direction only	**0**	00000000 – 99999999	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Requires 4 switch inputs and Item 433 to be set for Bidirectional modes (codes 3 or 4)						
903	**Incremental Rev Cor Vol** Corrected volume in the reverse direction only for the interval of Item 1178. Requires 4 switch inputs and Item 433 to be set for Bidirectional modes (codes 3 or 4).	**0**		•		•	
904	**Net Uncorrected Vol** Net UncVol = Forward UncVol minus Reverse UncVol Requires 4 switch inputs and Item 433 to be set for Bidirectional modes (codes 3 or 4)	**0**	00000000 – 99999999	•		•	
905	**Incremental Net Unc Vol** Net Uncorrected volume for the interval (Item 899 minus Item 907). Interval rate per Item 1178 for the interval of Item 1178. Requires 4 switch inputs and Item 433 to be set for Bidirectional modes (codes 3 or 4).	**0**		•		•	
906	**Reverse Unc Vol** Uncorrected volume in the reverse direction only Requires 4 switch inputs and Item 433 to be set for Bidirectional modes (codes 3/4)	**0**	00000000 – 99999999	•		•	
907	**Incremental Rev Unc Vol** Uncorrected volume in the reverse direction only for the interval of Item 1178	**0**		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
914	**Registers Offset by One** When enabled, adds "1" to the starting register number supplied in the Host system's query msg to account for traditional reference to '0' addressing schemes. Needed for systems that subtract "1" from the starting register Address just prior to sending query. **Example**: User request starting register value: 7000, but Host SCADA system changes this value to 6999. Offset by one makes the inbound start register value 7000 as the User would expect.	**0**	**No**	•	•	•	•
		1	Yes	•	•	•	•
915	**Modbus Protocol Type** Selection of MODBUS protocol type Note – enable MODBUS using Item 934	0	ASCII	•	•	•	•
		1	**RTU**	•	•	•	•
930	**Modbus Read–Only Mode** Used to prevent MODBUS write commands – function codes 5, 6, 15, and 16 become blocked when enabled. Some Users do not want MODBUS systems to change Item values.	**0**	Disabled (allow writes via MODBUS)	•	•	•	•
		1	Enabled (block MODBUS func codes 5, 6, 15, and 16)	•	•	•	•
932	**Modbus Register Data Format** Selects data size of a Modbus Register (32 bits or 16 bits)	**0**	**32 bits MSB**	•	•	•	•
		1	16 bits MSB	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	When 16-bit size is used – Host system must concatenate the two adjacent registers to form a 32–bit end resulting value.	2	16 bits LSB	•	•	•	•
934	**Modbus Protocol Enable** Enable or disable the use of Modbus protocol	**0**	**Disabled**	•	•	•	•
		1	Enabled	•	•	•	•
935	**Modbus Float Mapping** Enable Float Item mapping See Items 940–979 block	**0**	**Disabled**	•	•	•	•
		1	Enabled	•	•	•	•
936	**Modbus Boolean Mapping** Enable Boolean Item mapping (see Items 1500–1539)	**0**	**Disabled**	•	•	•	•
		1	Enabled	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
940 – 979	**Modbus Float 7000 Item – 7039 Item** Items 940 –979 are configurable map locations corresponding to MODBUS Registers: 7000 – 7039. This register range is used for obtaining data points in **Floating Point format**. Item 940 maps to Register 7000, Item 979 maps to register 7039). User configures Items starting at Item 940 (register 7000) with desired data point (e.g. Item 000, 008, etc.) and continues with next Item 941… 942, etc. until all data points are mapped. This allows Host to read one continuous register range (e.g. 7000 – 7009) to obtain desired data via a single query poll. Values read from Register 7000 – 7999 are formatted in floating point. This is true for Time, Date, and Volumes – as well as Pressures and Temperatures and Meter Rates Items.	**255**	Any Valid Item Number (typically, Items like: 000, 002, 008, 026, 048, 209)	•	•	•	•
993	**Modbus Device Address** Slave Devices address (Salve ID for Host Modbus system)	**1**	1–255	•	•	•	•
998	**Modbus Cmd Inactivity Timeout** Timeout period (in sec.) to waits for Host SCADA System to send subsequent Modbus query commands before returning to sleep	**5**	1 – 90	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1001	**Remain Battery Months** Battery usage tracking – months remaining indication Based on 'Usage Cycles' counts – not Battery voltage	**60**	**Alkaline** packs – **60** Months life **2-Cell Lithium pack -** 60 Months – but actual battery life is approx. 100 months. Notice: 2-Cell Lithium pack - FWs 1.33 and older default to 60 months even though the usable lifespan is 100 months. Accordingly, the 60 months value is scaled to 100 so it will decrement slower at a ratio of 60 **:** 100 per month – thus not going to 0 until after 100 months of normal usage.	•	•	•	•
1002	**Battery Percent Remain** Battery usage tracking – percent remaining indication Based on 'Usage Cycles' counts – not Battery voltage	**100**	0 – 100%	•	•	•	•
1003	**Battery AmpHrs Override** To override preset constant values while calculating battery life. Effective on a non-zero value.	**0**	When item value is zero, it has no effect. But, when it is a non-zero value then, it will override the preset constants.	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1009	**LCD Default Contrast** Higher values = more contrast of LCD (darker segments). Generally, does not need to be modified.	**25**	1 – 32	•	•	•	•
1010	**Case Temp Zero Point** Factory calibration of Case Temperature	**0.0**		•	•	•	•
1014	**Ch–A Pulse On/Off Output Times** AMR pulse On–time and Off–time (in ms.) to obtain optimal performance. Note: Closed time values are exact, but Open time values are at least the amount shown or longer (a minimum value) – subject to rate of input volume.	0	Closed 10 ms – Open 20+ ms	•		•	
		1	Closed 20 ms – Open 40+ ms	•		•	
		2	Closed 30 ms – Open 60+ ms	•		•	
		3	Closed 50 ms – Open 100+ ms	•		•	
		4	Closed 75 ms – Open 150+ ms	•		•	
		5	Closed 100 ms – Open 200+ ms	•		•	
		6	Closed 200 ms – Open 400+ ms	•		•	
		7	Closed 500 ms – Open 1000 ms	•		•	
		8	**Closed 50 ms – Open 250+ ms**	•		•	
		9	Badger: Closed 10 ms – Open 400+ ms	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		10	Cellnet / Hunt: Closed 25 ms – Open 100+ ms	•		•	
		11	Aclara 501–7712: Closed 15 ms – Open 400+ ms	•		•	
		12	Closed 10ms – Open 400+ ms	•		•	
		13	Itron ERTs 40/100/150, Aclara 332X: Closed 30 ms – Open 400+ ms	•		•	
		14	Mercury PA (449 Filter Off) Closed 50 ms Open 80+ ms	•		•	
		15	Mercury / Melbourne SIP/CPA/IMU–II: Closed 50 ms – Open 80+ ms	•		•	
		16	Mercury / Melbourne SIP–CB Closed 25 ms Open 25+ ms	•		•	
		17	Closed 50 ms – Open 50+ ms	•		•	
		18	Closed 50 ms – Open 150+ ms	•		•	
		19	Closed 50 ms – Open 500+ ms	•		•	
		20	Closed 150 ms – Open 150+ ms	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1015	**Ch–B Pulse On/Off Times** Channel B timing. Same selections as **Item 1014**	**8**	Closed 50 ms – Open 250+ ms	•		•	
1016	**Alarm Channel Pulse Timing** Value selection in seconds	**10**	1 – 65534 seconds	•	•	•	•
1018	**Flow Rate Low Alarm Value** Low Flow Limit for tripping Alarm Item 461	**0.00**		•	•	•	•
1019	**Main Board S/N** Factory set – used to identify product hardware	**00000000**		•	•	•	•
1021	**Reversing Flow Alarm Time** Time for Item 438	**00 00 00**		•		•	
1022	**Reversing Flow Alarm Date** Date for Item 438	**01 01 01**		•		•	
1023	**Alarm Items Disable** Allows User to completely **disable** particular Alarm Item(s) so it does not trip (become active) – thus not generating an Alarm indication. Bit coded Item – same coded values as used for Item 1396 (Alarm Mask)	**8** (Reverse Flow Alarm disabled)	See User Manual for codes to disable Alarm Item(s)	•	•	•	•
1024	**Ch–C Pulse On/Off Times** Channel C timing. Same selections as **Items 1014 / 1015**	**8**	Closed 50 ms Open 250+ ms	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1025	**Super Compress Alarm** Indicates an issue with the Supercompress calculations – most likely an issue with out– of–range Temperature values or if Pressure Transducer not connected.	0		•		•	
1026	**P1 Xdcr Comp Temp** Temperature as seen inside Pressure Transducer – used to help perform precision characterization of pressure.	0.0		•	•	•	•
1027	**Supercompress Min ms** Minimum time taken for calculating super compressibility factor in millisecond (per item 043)	2		•		•	
1028	**Supercompress Max ms** Maximum time taken for calculating super compressibility factor in millisecond (per item 043)	2		•		•	
1029	**Supercompress Avg ms** Average time taken for calculating super compressibility factor in millisecond (per item 043)	2		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1030	**Sched Call–In Number–2** Second Internet/Phone # to use for Scheduled Call–In. Number 2 is called after Number 1 (Item 339). If both Sched Numbers are used, each is called in an alternating manor (i.e. Number 1 then 2) until each is successful. Blank means disabled (don't use second Call #). Only supporting Item 1230 with selection = 'Both' (where each Call Number operates independently with respect to call failure retries).	blank	50 Characters max	•	•	•	•
1032	**System Alarm Mask** Mask out any of the 'System Alarm' conditions (bit coded)	**0**	Slow CPU Clock + Audit Write Error	•	•	•	•
1033	**Temp Board Coef Zero** Factory set – zero point for Temperature Probe. Do not	**0.0**		•	•	•	•
1034	**Temp Board Coef Span** Factory set – span factor for Temperature Probe. Do not	**1.0**		•	•	•	•
1035	**Metro Cnfg Change Alarm** Indicates if Metrological Configuration type Items have had **values unexpectedly changed**. The coded alarms are based on Metrological protection classification type.	**0**	**No**	•	•	•	•
		1	Sealed Items	•	•	•	•
		2	Event Items	•	•	•	•
		3	Event & Sealed Items	•	•	•	•
1042	**AT Group–1 Enable**	0	No	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Enable usage of AT Log 1	**1**	**Yes**	●	●	●	●
1043	**AT Group–1 Allocation** Amount of memory space allocated to AT Log 1 – **Percent**	**100**	0 – 100 %	●	●	●	●
1044	**Board Version** Indicates the hardware version of the processor board (CDMA)	**CDMA –E**	Revs A – M (Rev–E is current version)	●	●	●	●
1046	**Extern Supply Volts** External supply voltage as measured by the Instrument. Update rate is **10** minutes Three consecutive low reading (defined by Item 1320) will trip an Extern Supply Low Alarm condition (Item 796)	**0.0**	5 – 15 Volts DC	●	●	●	●
1050	**Raw Sensor 3 Counts** (Honeywell Diagnostics) Unscaled counts of input pulses seen from Sensor 3. Zero this Item at start when using for testing purposes	**0**		●		●	
1051	**Raw Sensor 4 Counts** (Honeywell Diagnostics) Unscaled counts of input pulses seen from Sensor 4. Zero this Item at start when using for testing purposes	**0**		●		●	
1052	**P1 Transducer Enable**	0	No	●	●	●	●
		1	**Yes**	●	●	●	●

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Enable or disable P1 Pressure Transducer measurements. To save Battery Power and possible Alarm conditions – disable if P1 Pressure is not used. For Fixed Factor mode – disable this Item if P1 Transducer is not being connected to instrument. If Item 1052 is enabled – Instrument will attempt to measure P1 pressure regardless of Item 109 configuration (Live or Fixed).						
1053	**P2 Transducer Enable** Enable or disable P2 Pressure Transducer measurements. To save Battery Power and possible Alarm conditions – disable if P2 Pressure is not used.	**0**	**No**	•	•	•	•
		1	Yes	•	•	•	•
1054	**P3 Transducer Enable** Enable or disable P3 Pressure Transducer measurements. To save Battery Power and possible Alarm conditions – disable if P3 Pressure is not used	**0**	**No**			•	•
		1	Yes			•	•
1055	**T1 Temp Probe Enable** Enable or disable Temperature measurements. To save Battery Power and possible Alarm conditions – disable Temperature Probe if it is not used	0	No	•	•	•	•
		1	**Yes**	•	•	•	•
1056	**LCD Display On Time** Time when LCD will become turn on and be active (visible) Configurable only to within minutes (not seconds)	**00 00 00**	00:00:00 – 23:59:00	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1057	**LCD Display Off Time** Time when LCD will become turn off and be inactive Configurable only to within minutes (not seconds)	**00 00 00**	00:00:00 – 23:59:00	•	•	•	•
1058	**P1 Transducer Alarm** Bit coded Alarm – values greater 0 indicate a particular error with Press Transducer: most common error code is '**8**' indicating the Transducer is not connected as expected.	**0**	**No** Alarm Bits 1 – 13 set indicate some sort of internal PnPPT Error. Code '**8**' indicates The PnPPT is disconnected.	•	•	•	•
1059	**P2 Transducer Alarm** Bit coded Alarm – values greater 0 indicate a particular error with Press Transducer: most common error code is '**8**' indicating the Transducer is not connected as expected.	**0**	**No** Alarm Bits 1 – 13 set indicate some sort of internal PnPPT Error. Code '**8**' indicates The PnPPT is disconnected.	•	•	•	•
1060	**P3 Transducer Alarm** Bit coded Alarm – values greater 0 indicate a particular error with Press Transducer: most common error code is '**8**' indicating the Transducer is not connected as expected.	**0**	**No** Alarm Bits 1 – 13 set indicate some sort of internal PnPPT Error. Code '**8**' indicates The PnPPT is disconnected.			•	•
1061	**Battery Pack Type** Configuration Item for Battery Pack Type, which is used by the system for proper battery life usage tracking and Low Battery Alarming. **Note:** When using an External Supply (AC or Solar), the supply voltage >= 9 VDC if a Lithium Battery pack is being used as the 'back–up' battery.	**0**	**Alkaline 4 Cell pack**	•	•	•	•
		1	Lithium 2 Cell pack	•	•	•	•
		2	Lithium 2x 2 Cell packs –> two packs used to power only the Instrument to extend (double) battery life vs. a single 2 cell Lithium pack.	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1062	**Door Status** (open / closed) See Item 107 – Door Alarm (gives condition of Tamper Switch state).	0	Door Closed	•	•	•	•
		1	**Door Open**	•	•	•	•
1063	**Extern Supply Alarm Time** Time of Item 796 (since last Alarm clear)	**00 00 00**		•	•	•	•
1064	**Extern Supply Alarm Date** Date of Item 796 (since last Alarm clear)	**01 01 01**		•	•	•	•
1065	**AT Group–2 Interval** Logging interval for AT Log 2	1	1 Minute	•	•	•	•
		5	5 Minutes	•	•	•	•
		10	10 Minutes	•	•	•	•
		15	15 Minutes	•	•	•	•
		30	30 Minutes	•	•	•	•
		60	**60 Minutes**	•	•	•	•
		24	Daily	•	•	•	•
		31	Monthly	•	•	•	•
1066	**AT Group–2 Enable** Enable logging for log 2.	**0**	**No**	•	•	•	•
		1	Yes	•	•	•	•
1067	**AT Group–2 Allocation** Amount of memory allocated to AT Log 2.	**0.0**	0 – 100%	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1069	AT Group–2 Item–1	225	P1 Gas Pressure	●		●	
		255			●		●
1070	AT Group–2 Item–2	226	P1 Interval Low Press	●		●	
		255			●		●
1071	AT Group–2 Item–3	206	P1 Interval High Press	●		●	
		255			●		●
1072	AT Group–2 Item–4	207	P1 Interval Avg Press	●		●	
		255			●		●
1073	AT Group–2 Item–5	48	P2 Gas Pressure	●		●	
		255			●		●
1074	AT Group–2 Item–6	0	P2 Interval Low Press	●		●	
		255			●		●
1075	AT Group–2 Item–7	255	P2 Interval High Press	●		●	
		255			●		●
1076	AT Group–2 Item–8	8	P2 Interval Avg Press	●		●	
		255			●		●
1077	AT Group–2 Item–9	26	Case Temperature	●		●	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		255			●		●
1078	**AT Group–2 Item–10**	**31**	**Battery Voltage**	●		●	
		255			●		●
1079	**AT Group–2 Item–11**	**255**	**P1 Gas Pressure**	●	●	●	●
1080	**AT Group–2 Item–12**	**255**	**P1 Interval Low Press**	●	●	●	●
1081	**AT Group–2 Item–13**	**255**	**P1 Interval High Press**	●	●	●	●
1082	**AT Group–2 Item–14**	**255**	**P1 Interval Avg Press**	●	●	●	●
1083	**AT Group–2 Item–15**	**255**	**P2 Gas Pressure**	●	●	●	●
1084	**AT Group–2 Item–16**	**255**	**P2 Interval Low Press**	●	●	●	●
1085	**AT Group–2 Item–17**	**255**	**P2 Interval High Press**	●	●	●	●
1086	**AT Group–2 Item–18**	**255**	**P2 Interval Avg Press**	●	●	●	●
1087	**AT Group–2 Item–19**	**255**	**Case Temperature**	●	●	●	●
1088	**AT Group–2 Item–20**	**255**	**Battery Voltage**	●	●	●	●
1089	**AT Group–3 Interval** Logging interval for AT Log 3.	1	1 Minute	●	●	●	●
		5	5 Minutes	●	●	●	●
		10	10 Minutes	●	●	●	●
		15	15 Minutes	●	●	●	●

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		30	30 Minutes	●	●	●	●
		60	**60 Minutes**	●	●	●	●
		24	Daily	●	●	●	●
		31	Monthly	●	●	●	●
1090	**AT Group–3 Enable** Enable logging data into AT Log 3.	**0**	**No**	●	●	●	●
		1	Yes	●	●	●	●
1091	**AT Group–3 Allocation** Amount of memory to be used by AT Log 3.	**0.0**	0 – 100%	●	●	●	●
1093	**AT Group–3 Item–1**	**225**	**P1 Gas Pressure**	●		●	
		255			●		●
1094	**AT Group–3 Item–2**	**226**	**P1 Interval Low Press**	●		●	
		255			●		●
1095	**AT Group–3 Item–3**	**206**	**P1 Interval High Press**	●		●	
		255			●		●
1096	**AT Group–3 Item–4**	**207**	**P1 Interval Avg Press**	●		●	
		255			●		●
1097	**AT Group–3 Item–5**	**48**	**P2 Gas Pressure**	●		●	
		255			●		●

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1098	AT Group–3 Item–6	0	P2 Interval Low Press	●		●	
		255			●		●
1099	AT Group–3 Item–7	2	P2 Interval High Press	●		●	
		255			●		●
1100	AT Group–3 Item–8	8	P2 Interval Avg Press	●		●	
		255			●		●
1101	AT Group–3 Item–9	26	Case Temperature	●		●	
		255			●		●
1102	AT Group–3 Item–10	31	Battery Voltage	●		●	
		255			●		●
1103	AT Group–3 Item–11	255	P1 Gas Pressure	●	●	●	●
1104	AT Group–3 Item–12	255	P1 Interval Low Press	●	●	●	●
1105	AT Group–3 Item–13	255	P1 Interval High Press	●	●	●	●
1106	AT Group–3 Item–14	255	P1 Interval Avg Press	●	●	●	●
1107	AT Group–3 Item–15	255	P2 Gas Pressure	●	●	●	●
1108	AT Group–3 Item–16	255	P2 Interval Low Press	●	●	●	●
1109	AT Group–3 Item–17	255	P2 Interval High Press	●	●	●	●

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1110	**AT Group–3 Item–18**	**255**	**P2 Interval Avg Press**	●	●	●	●
1111	**AT Group–3 Item–19**	**255**	**Case Temperature**	●	●	●	●
1112	**AT Group–3 Item–20**	**255**	**Battery Voltage**	●	●	●	●
1113	**AT Group–4 Interval** Logging interval for AT log 4	1	1 Minute	●	●	●	●
		5	5 Minutes	●	●	●	●
		10	10 Minutes	●	●	●	●
		15	15 Minutes	●	●	●	●
		30	30 Minutes	●	●	●	●
		60	**60 Minutes**	●	●	●	●
		24	Daily	●	●	●	●
		31	Monthly	●	●	●	●
1114	**AT Group–4 Enable** Enables Logging values into AT Log 4.	**0**	**No**	●	●	●	●
		1	Yes	●	●	●	●
1115	**AT Group–4 Allocation** Memory allocated to Log 4	**0.0**	0 – 100%	●	●	●	●
1117	**AT Group–4 Item–1**	**225**	**P1 Gas Pressure**	●		●	
		255			●		●
1118	**AT Group–4 Item–2**	**226**	**P1 Interval Low Press**	●	●	●	●

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		255			•		•
1119	AT Group–4 Item–3	206	P1 Interval High Press	•		•	
		255			•		•
1120	AT Group–4 Item–4	207	P1 Interval Avg Press	•		•	
		255			•		•
1121	AT Group–4 Item–5	48	P2 Gas Pressure	•		•	
		255			•		•
1122	AT Group–4 Item–6	0	P2 Interval Low Press	•		•	
		255			•		•
1123	AT Group–4 Item–7	2	P2 Interval High Press	•		•	
		255			•		•
1124	AT Group–4 Item–8	8	P2 Interval Avg Press	•		•	
		255			•		•
1125	AT Group–4 Item–9	26	Case Temperature	•		•	
		255			•		•
1126	AT Group–4 Item–10	31	Battery Voltage	•		•	
		255			•		•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1127	**AT Group–4 Item–11**	**255**	**P1 Gas Pressure**	●	●	●	●
1128	**AT Group–4 Item–12**	**255**	**P1 Interval Low Press**	●	●	●	●
1129	**AT Group–4 Item–13**	**255**	**P1 Interval High Press**	●	●	●	●
1130	**AT Group–4 Item–14**	**255**	**P1 Interval Avg Press**	●	●	●	●
1131	**AT Group–4 Item–15**	**255**	**P2 Gas Pressure**	●	●	●	●
1132	**AT Group–4 Item–16**	**255**	**P2 Interval Low Press**	●	●	●	●
1133	**AT Group–4 Item–17**	**255**	**P2 Interval High Press**	●	●	●	●
1134	**AT Group–4 Item–18**	**255**	**P2 Interval Avg Press**	●	●	●	●
1135	**AT Group–4 Item–19**	**255**	**Case Temperature**	●	●	●	●
1136	**AT Group–4 Item–20**	**255**	**Battery Voltage**	●	●	●	●
1137	**AT Group–5 Interval** Logging interval for AT Log 5	1	1 Minute	●	●	●	●
		5	5 Minutes	●	●	●	●
		10	10 Minutes	●	●	●	●
		15	15 Minutes	●	●	●	●
		30	30 Minutes	●	●	●	●
		60	**60 Minutes**	●	●	●	●
		24	Daily	●	●	●	●

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		31	Monthly	●	●	●	●
1138	**AT Group–5 Enable** Enables Logging values into Log 5.	**0**	**No**	●	●	●	●
		1	Yes	●	●	●	●
1139	**AT Group–5 Allocation** Memory to be allocated to AT Log 5.	**0.0**	0 – 100%	●	●	●	●
1141	**AT Group–5 Item–1**	**225**	**P1 Gas Pressure**	●		●	
		255			●		●
1142	**AT Group–5 Item–2**	**226**	**P1 Interval Low Press**	●		●	
		255			●		●
1143	**AT Group–5 Item–3**	**206**	**P1 Interval High Press**	●		●	
		255			●		●
1144	**AT Group–5 Item–4**	**207**	**P1 Interval Avg Press**	●		●	
		255			●		●
1145	**AT Group–5 Item–5**	**48**	**P2 Gas Pressure**	●		●	
		255			●		●
1146	**AT Group–5 Item–6**	**0**	**P2 Interval Low Press**	●		●	
		255			●		●
1147	**AT Group–5 Item–7**	**2**	**P2 Interval High Press**	●		●	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		255			●		●
1148	AT Group–5 Item–8	8	P2 Interval Avg Press	●		●	
		255			●		●
1149	AT Group–5 Item–9	26	Case Temperature	●		●	
		255			●		●
1150	AT Group–5 Item–10	31	Battery Voltage	●		●	
		255			●		●
1151	AT Group–5 Item–11	255	P1 Gas Pressure	●	●	●	●
1152	AT Group–5 Item–12	255	P1 Interval Low Press	●	●	●	●
1153	AT Group–5 Item–13	255	P1 Interval High Press	●	●	●	●
1154	AT Group–5 Item–14	255	P1 Interval Avg Press	●	●	●	●
1155	AT Group–5 Item–15	255	P2 Gas Pressure	●	●	●	●
1156	AT Group–5 Item–16	255	P2 Interval Low Press	●	●	●	●
1157	AT Group–5 Item–17	255	P2 Interval High Press	●	●	●	●
1158	AT Group–5 Item–18	255	P2 Interval Avg Press	●	●	●	●
1159	AT Group–5 Item–19	255	Case Temperature	●	●	●	●
1160	AT Group–5 Item–20	255	Battery Voltage	●	●	●	●

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1161	**P1 Fixed Pressure Value** Pressure value to use for calculation of the Pressure Factor (Item 044) when instrument is configured as Fixed Pressure per Item 109. **Do not set Item 008 or 044 for fixed mode.**	**0.0**		•		•	
1162	**Fixed Temperature Value** Temperature value to use for calculation of the Temperature Factor (Item 045) when instrument is configured as Fixed Temperature per Item 111. Do not set Item 026 or 045 for fixed mode.	**60.0**		•		•	
1163	**Access Jumper Status** Metrological protection jumper plug status (R–O)	**0**	**Disconnected**	•	•	•	•
		1	Connected	•	•	•	•
1164	**Prod Test Config** (Honeywell Test Item)	**0**		•	•	•	•
1166	**Raw Sensor 1 Counts** (Honeywell Diagnostics) Unscaled counts of input seen by Volume input Sensor 1 Zero this Item at start when using for testing purposes	**0**		•		•	
1167	**Raw Sensor 2 Counts** (Honeywell Diagnostics) Unscaled counts of input seen by Volume input Sensor 2.	**0**		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Zero this Item at start when using for testing purposes						
1168	**Battery Low Alarm Value** Value of Item 048 at which the low battery alarm (099) was detected	**6.0**		•	•	•	•
1169	**P1 High Alarm Value** Value of Item 008 at which the high pressure alarm (145) was detected	**0.0**		•	•	•	•
1170	**P1 Low Alarm Value** Value of Item 008 at which the low pressure alarm (143) was detected	**0.0**		•	•	•	•
1171	**Temp High Alarm Value** Value of Item 026 at which the high temperature alarm (146) was detected	**0.0**		•	•	•	•
1172	**Temp Low Alarm Value** Value of Item 026 at which the low temperature alarm (144) was detected	**0.0**		•	•	•	•
1173	**Daily CorVol Alarm Value** Value of Item 000 at which the Daily CorVol alarm (222) was detected	**0**		•		•	
1174	**Flow Rate Hi Alarm Value** Value of Item 208 at which the flow rate high alarm (163) was detected	**0.0**		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1175	**Firmware CRC** Calculated CRC of the main application firmware used to authenticate the firmware.	**0**		•	•	•	•
1176	**Loader CRC** Calculated CRC of the Boot–Loader firmware used to authenticate the firmware.	**0**		•	•	•	•
1177	**Loader Version** Boot–Loader's firmware version (read only)	**3.1**		•	•	•	•
1178	**Interval for Statistics** Value defines what interval for calculating statistical data. **Note** that EC/ERX 350 has 5 AT Logs – so Item 1178 now controls the interval rate for all statistical Item calculations.	1	1 Minute	•	•	•	•
		5	5 Minutes	•	•	•	•
		10	10 Minutes	•	•	•	•
		15	15 Minutes	•	•	•	•
		30	30 Minutes	•	•	•	•
		60	**Hourly**	•	•	•	•
		1440	Daily	•	•	•	•
		44640	Monthly	•	•	•	•
1185	**T1 Temp Probe Type** Shows the type of probe used (Read Only)	**0**	**Thermistor NTC**	•	•	•	•
1186	**T1 Temp Probe Range**	**0**	**–40 to 158 (F)**	•	•	•	•
		1	–40 to 70 (C)	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Shows the specified operating range of the Temperature Probe – based on Temp Units per Item 089. Read Only	2	420 to 618 (R)	●	●	●	●
		3	233 to 343 (K)	●	●	●	●
1187	**T1 Temp Probe S/N** Temperature probe serial number assigned by factory.	**00000000**	20 Characters max	●	●	●	●
1188	**Vol Conversion Method (Status)** Reports the status of PTZ correction being used based on the following Items: 109 (fixed / live pressure), 111 (fixed / live temperature), and 147 (super compressibility). Read–Only (not a configuration option)	0	None (Fixed)	●		●	
		1	Press	●		●	
		2	Temp	●		●	
		3	Press + Temp	●		●	
		4	Super	●		●	
		5	Press + Super	●		●	
		6	Temp + Super	●		●	
		7	**Press + Temp + Super**	●		●	
1189	**RABO Meter Transmission Factor** J2/J1 Gear Ratio value – typically set by Factory. Value can be obtained by RABO Calibration certificate and RABO Transmission table chart. Users should not adjust this value – unless performing a meter retrofit in the field.	**1.2500**		●		●	
1190	**Meter S/N**	**00000000**	20 Characters max	●		●	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	User can enter the serial number of the meter into the corrector for traceability						
1191	**Battery Usage Alarm Time** Time when battery usage alarm first occurred (since last Alarm clear).	**00 00 00**		•	•	•	•
1192	**Battery Usage Alarm Date** Date when battery usage alarm first occurred (since last Alarm clear).	**01 01 01**		•	•	•	•
1193	**Ch–A Pulse Output Value** Channel A pulse weighting / scaling	0	1 CF	•		•	
		1	10 CF	•		•	
		2	**100 CF**	•		•	
		3	1000 CF	•		•	
		4	10000 CF	•		•	
		5	0.1 m3	•		•	
		6	1 m3	•		•	
		7	10 m3	•		•	
		8	100 m3	•		•	
		9	1000 m3	•		•	
1194	**Ch–B Pulse Output Value**	0	1 CF	•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Channel B pulse weighting / scaling	1	10 CF	●		●	
		2	**100 CF**	●		●	
		3	1000 CF	●		●	
		4	10000 CF	●		●	
		5	0.1 m3	●		●	
		6	1 m3	●		●	
		7	10 m3	●		●	
		8	100 m3	●		●	
		9	1000 m3	●		●	
1195	**Ch–C Pulse Output Value** Channel C pulse weighting / scaling	0	1 CF	●		●	
		1	10 CF	●		●	
		2	**100 CF**	●		●	
		3	1000 CF	●		●	
		4	10000 CF	●		●	
		5	0.1 m3	●		●	
		6	1 m3	●		●	
		7	10 m3	●		●	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		8	100 m3	•		•	
		9	1000 m3	•		•	
1196–1200	**AT Log 1 Name – AT Log 5 Name** User can give each audit trail Log a descriptive name of up to 20 characters. Used as reference for assisting the user to determine the correct information before downloading the data or to makes it easier to sort the data once it is on their computer.	**1-5**	**One** **Two** **Three** **Four** **Five**	•	•	•	•
1211	**P2 Press Low Alarm Time** Time of Item 452 (since last Alarm clear).	**00 00 00**		•	•	•	•
1212	**P2 Press Low Alarm Date** Date of Item 452 (since last Alarm clear)	**01 01 01**		•	•	•	•
1213	**P2 Press High Alarm Time** Time of Item 451 (since last Alarm clear)	**00 00 00**		•	•	•	•
1214	**P2 Press High Alarm Date** Date of Item 451 (since last Alarm clear)	**01 01 01**		•	•	•	•
1215	**P2 High Alarm Value** Value recorded for Item 420 when P2 High Alarm first occurred (since last Alarm clear)	**0.00**		•	•	•	•
1216	**P2 Low Alarm Value**	**0.00**		•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Value recorded for Item 420 when P2 Low Alarm first occurred (since last Alarm clear)						
1217	**P2 Xdcr Comp Temp** The pressure transducer internal temperature associated with the most recent P2 pressure reading. Used for high precision characterization of pressure readings.	**0.00**		•	•	•	•
1220	**Serial Port Type** Selects interface type for Serial Port TB4 on the I/O board (RS–232 or RS–485). **Note**: I/O Board Jumper sections at JP1 and JP2 must match the selected RS–232/485 serial protocol type to operate properly. CloudLink modem serial port defaults to RS-232 upon "factory reset" shorting P1 pins.	**0**	**RS–232**	•	•	•	•
		1	RS–485	•	•	•	•
1222	**P1 Xdcr Alarm Time** Time of P2 Press Transducer Alarm first occurred (since last Alarm clear).	**00 00 00**		•	•	•	•
1223	**P1 Xdcr Alarm Date** Date of P1 Press Transducer Alarm first occurred (since last Alarm clear).	**01 01 01**		•	•	•	•
1224	**P2 Xdcr Alarm Time** Time of P2 Pressure Transducer Alarm first occurred (since last Alarm clear).	**00 00 00**		•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1225	**P2 Xdcr Alarm Date** Date of P2 Press Transducer Alarm first occurred (since last Alarm clear).	**01 01 01**		•	•	•	•
1226	**P3 Xdcr Alarm Time** Time of P3 Pressure Transducer Alarm first occurred (since last Alarm clear).	**00 00 00**				•	•
1227	**P3 Xdcr Alarm Date** Date of P3 Pressure Transducer Alarm first occurred (since last Alarm clear).	**01 01 01**				•	•
1228	**Modbus Map Integer Mapping Enable** Enable the use of **Registers 3000 – 3999** to access **short** value Integer data (Items). Typically, not used.	**0**	**No**	•	•	•	•
		1	Yes				
1229	**Modbus Map Long Mapping Enable** Enable the use of **Registers 5000 – 5999** to access **long** value Integer data (Items) such as Volumes (000. 002, 140, etc.) Choice to use the MODBUS registers 5000 – 5999 is customer application dependent. High majority of MODDBUS systems use only register range 7000 – 7999 (floating point).	**0**	**No**	•	•	•	•
		1	Yes	•	•	•	•
1230	**Call In Sequence** Applies when using **two** phone #s for the same purpose (i.e. two Alarm #s or two Sched #s)	0	Priority (Call retries stop when either one of the two phone #s calls are successful – only one	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Priority mode: When using two phone #s calls – only one of the two phone #s needs to be successful to complete the overall call-in process and end or prevent call retries. This mode is designed to work with the systems that use a backup phone number concept so that only one phone # is typically called. In this mode, the two phone #s work together in the process to have a successful Alarm/Sched call-in. Items 1235 and 1382 control which phone # to call first in Priority mode when initiating a 'new' Alarm or Scheduled call. **Both** mode: The two Alarm and/or Scheduled phone #s operate independently of each other. Phone # 1 is always called first when initiating a 'new' Alarm or Scheduled call. Phone #2 then follows after call to phone #1 in an alternating manor (1-2-1-2…). In this mode - **both** phone #s must be independently successful. Each phone number will continue to retry calls if it is not successful (Ex. If phone # 1 is successful – it stops call retries, but # 2 would continue to retry calls until it is also successful). Note: Item 1235 and 1380 do not apply in this mode.		phone # needs be successful to end call failure retries).				
		1	**Both**	•	•	•	•
1231	**Call Out 1 Start Time**			•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Call Out Window 1 starts at this time of day. (Seconds are always assumed to be 00 – Item can only be configured it in minutes).	**00 00 00**	00:00 – 23:59				
1232	**Call Out 1 Stop Time** Call Out Window 1 ends at this time of day. Call out window is disabled if Stop Time equals Start Time. (Seconds are always assumed to be 00 – Item can only be configured in minutes).	**00 00 00**	00:00 – 23:59	•	•	•	•
1233	**Call Out 2 Start Time** Second call out window starts at this time of day. (Seconds field is ignored – can only schedule it in minutes.)	**00 00 00**	00:00:00 – 23:59:00	•	•	•	•
1234	**Call Out 2 Stop Time** Second call out window ends at this time of day. This call out window disabled if Stop Time equals Start Time. (Seconds field is ignored – can only schedule it in minutes.)	**00 00 00**	00:00:00 – 23:59:00	•	•	•	•
1235	**Alarm Call Priority Number** Selects the phone # to call first (#1 or #2) upon the event of a new Alarm call-in. Only applies if Item 1230 is in 'Priority' mode setting.	**1**	1 = Call Alarm Tel Number 1 First 2 = Call Alarm Tel Number 2 First	•	•	•	•
1236	**Port Active during Call Out Window** Enable RS232/485 port will be active during a call out window so incoming characters are missed. Only needed	**0**	**Off**	•	•	•	•
		1	On	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	for Modbus (not MI Protocol). Consumes more battery power.						
1237	**Super Calc Alarm Time** Time of Super Compress Calculation error Alarm first occurred (since last Alarm clear).	**00 00 00**		•		•	
1238	**Super Calc Alarm Date** Date of Super Compress Calculation error Alarm first occurred (since last Alarm clear).	**01 01 01**		•		•	
1239	**Meteorological Config Mode** Used to temporarily disable metrological calculations during configuration changes (especially when making multiple changes). Enable it before making changes and disable it when done to return to normal operation.	**0**	**No**	•		•	
		1	Yes	•		•	
1240 – 1279	**Modbus Map Short 3000 Item –3039 Item** Mapping of Instrument's Items to MODBUS Short Integer type Registers **(typically not used).** • Item 1240 maps to Register 3000 • Item 1241 maps to register 3001 • Item 1279 maps to register 3039	**255**	Valid Item Numbers. Typically, not used.	•	•	•	•
1280 – 1319	**Modbus Map Long 5000 Item – 5039 Item**			•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Mapping of Instrument's Items to MODBUS Long Integer type Registers **(typically not used).** • Item 1280 maps to Register 5000 • Item 1281 maps to register 5001 • Item 1319 maps to register 5039	**255**	Valid Item Numbers. Typically, Volume type Items (000, 002, 140, etc.).				
1320	**Extern Supply Alarm Value** Value of Item 1046 External supply voltage when a low external voltage alarm (Item 796) occurs	**0.0**		•		•	
		6.0			•		•
1335	**Temperature Probe Alarms** Multiple bit–mapped Item used to indicate temperature probe malfunction conditions.	**0**	**No Errors – valid measurement**	•	•	•	•
		2	Hardware error – ADC values invalid to use.	•	•	•	•
		4	Temperature is > 10 deg C outside of the low range Specifications.				
		8	Temperature is > 10 deg C outside of the high range Specifications.				
		16	Temperature is <= 10 deg C outside of the low range Specifications				
		32	Temperature is <= 10 deg C outside of the high range Specifications				
		64	Temperature computed is not a valid number and cannot be used (corrupted data)				

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1336	**Temp Probe Alarm Time** Time of Item 1335 (since last Alarm clear)	**00 00 00**		•	•	•	•
1337	**Temp Probe Alarm Date** Date of Item 1335 (since last Alarm clear)	**01 01 01**		•	•	•	•
1338	**Metrological Sealed Item CRC** Integrity Checksum of all Metrological 'Sealed' Configuration Items.	**0**	32–bit value dependent on values of all Items under this integrity check.	•		•	
1339	**Metrological Event Item CRC** Integrity Checksum of all Metrological 'Event Logged' Configuration Items.	**0**	32–bit value dependent on values of all Items under this integrity check.	•		•	
1340	**Error Volume Enable** Controls whether to redirect volume under error conditions to separate Error Volume Items when Instrument is a Metrological fault condition.	**0**	**No**	•		•	
		1	Yes (enable use of Error Volume registers)	•		•	
1376	**HMI Level 1 Spcl Access** Allows User to use specific HMI Level 1 operations that are normally only available in the more secure Level-2/3 menus. Enabling this Items puts security concerns on to the User	**0**	**0** = No Special Access allowed (most **secure** mode for Level-1 HMI) 1 = Allow Level-1 access to Force Call-Ins (Alarm/Sched) 2 = Allow Level-1 access to enter Meter Proving modes	•	•	•	•
1378	**Corrected Error Vol** CorVol accumulated under Metrological Error conditions – if Item 1340 is enabled.	**0**		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1379	**Uncorrected Error Vol** UncVol accumulated under Metrological Error conditions – if Item 1340 is enabled.	**0**		•		•	
1380	**P1 Press Range Low** Minimum pressure to operate within a total volume correction error less than 1% (based on % of reading calculations, not % full scale). Not applicable for ERX mode but still available.	**0**	Values dependent of Transducer Type and Range	•		•	
1382	**Sched Call Priority Number** Selects the phone # to call first (#1 or #2) upon the event of a new Scheduled call-in. Only applies if Item 1230 is in 'Priority' mode setting.	**1**	1 = Call Sched Tel Number 1 First 2 = Call Sched Tel Number 2 First	•	•	•	•
1383	**Recent Flow Direction** Indicates the most recent direction of volume flow when Bidirectional mode is enabled per Item 433.	**0**	0 = Direction Unknown 1 = Forward Direction 2= Reverse Direction	•		•	
1384	**Forward Cor Error Vol** Forward CorVol accumulated under Metrological Error conditions – if Item 1340 is enabled and in Bidirectional mode.	**0**		•		•	
1385	**Reverse Cor Error Vol** Reverse CorVol accumulated under Metrological Error conditions – if Item 1340 is enabled and in Bidirectional mode.	**0**		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1386	**Forward Unc Error Vol** Forward UncVol accumulated under Metrological Error conditions – if Item 1340 is enabled and in Bidirectional mode.	**0**		•		•	
1387	**Reverse Unc Error Vol** Reverse UncVol accumulated under Metrological Error conditions – if Item 1340 is enabled and in Bidirectional mode.	**0**		•		•	
1388	**Comms Login Alarm** Activated when a wrong passcode is entered when attempting to connect through IRDA, RS–232, or RS–485 (requires 3 consecutive failed attempts).	**0** / 1	**No** / Yes	•	•	•	•
1389	**Comms Login Failure Count** Count of Serial / IrDA Access denials (due to passcode)	**0**		•	•	•	•
1390	**Comms Login Alarm Time** Time of Item 1388 (since last Alarm clear)	**00 00 00**		•	•	•	•
1391	**Comms Login Alarm Date** Date of Item 1388 (since last Alarm clear)	**01 01 01**		•	•	•	•
1392	**HMI Login Alarm** Alarm is activated when a wrong HMI passcode is entered. (Requires 3 consecutive failed attempts).	**0**	**No** / Yes	•	•	•	•
1393	**HMI Login Failure Count** Count of HMI Access denials (due to passcode)	**0**		•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1394	**HMI Login Alarm Time** Time of Item 1392 (since last Alarm clear)	**00 00 00**		•	•	•	•
1395	**HMI Login Alarm Date** Date of Item 1392 (since last Alarm clear)	**01 01 01**		•	•	•	•
1396	**Alarm Mask** Mask out any of the 'Alarm' conditions (bit coded)	**8**		•	•	•	•
1397	**Compress Z Base** Compressibility factor at base conditions **Zb**.	**1.0**		•		•	
1398	**Compress Z Flow** Compressibility factor at flowing conditions **Zf**.	**1.0**		•		•	
1399	**Metrological Config Chng Alarm Time** Time of Item 1035 (since last Alarm clear).	**00 00 00**		•		•	
1400	**Metrological Config Chng Alarm Date** Date of Item 1035 (since last Alarm clear).	**01 01 01**		•		•	
1403	**Low Flow Alarm Time** Time of Item 461 Alarm	**00 00 00**		•		•	
1404	**Low Flow Alarm Date** Date of Item 461 Alarm	**01 01 01**		•		•	
1405	**Serial Comms Format** Data Bits / Parity / Stop Bits used for Serial comms port. Applies only to MODBUS (not Mi Protocol).	**0**	**8 / N / 1**	•	•	•	•
		1	7 / E / 1	•	•	•	•
		2	7 / O / 1	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		3	8 / E / 1	•	•	•	•
		4	8 / O / 1	•	•	•	•
1406	**Dial Cmd Resp Timeout** Configurable time period to wait for modem to respond back to ATDT dial command string (i.e. wait for connect). Suggested range limits: 60 – 120 seconds. Max 120 seconds.	**90**		•	•	•	•
1409	**Alarm Log Record Alarm**	**0** / 1	**No** / Yes	•	•	•	•
1410	**Event Log Record Alarm**	**0** / 1	**No** / Yes	•	•	•	•
1411	**Audit Log Record Alarm**	**0** / 1	**No** / Yes	•	•	•	•
1412	**Alarm Record Alarm Time** Time when Item 1409 Alarm first occurred (since last Alarm clear).	**00 00 00**		•	•	•	•
1413	**Alarm Record Alarm Date** Date when Item 1409 Alarm first occurred (since last Alarm clear).	**01 01 01**		•	•	•	•
1414	**Event Record Alarm Time** Time when Item 1410 Alarm first occurred (since last Alarm clear).	**00 00 00**		•	•	•	•
1415	**Event Record Alarm Date**	**01 01 01**		•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Date when Item 1410 Alarm first occurred (since last Alarm clear).						
1416	**Audit Record Alarm Time** Time when Item 1411 Alarm first occurred (since last Alarm clear).	**00 00 00**		•	•	•	•
1417	**Audit Record Alarm Date** Time when Item 1411 Alarm first occurred (since last Alarm clear).	**01 01 01**		•	•	•	•
1424	**Vol Sensor–3 Alarm** Volume Input Sensor–3 fault alarm (switch found to be missing from sequential pattern expected per meter rotations). Only applies when using Bidirectional modes per Item 433	**0** / 1	**No** / Yes	•		•	
1425	**Vol Sensor–4 Alarm** Volume Input Sensor–4 fault alarm (switch found to be missing from sequential pattern expected per meter rotations). Only applies when using Bidirectional modes per Item 433	**0** / 1	**No** / Yes	•		•	
1426	**Vol Sensor–3 Alarm Time** Time when Item 1424 Alarm first occurred (since last Alarm clear)	**00 00 00**		•		•	
1427	**Vol Sensor–3 Alarm Date** Date of Item 1424 (since last Alarm clear)	**01 01 01**		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1428	**Vol Sensor–4 Alarm Time** Time of Item 1425 (since last Alarm clear)	**00 00 00**		•		•	
1429	**Vol Sensor–4 Alarm Date** Date of Item 1425 (since last Alarm clear)	**01 01 01**		•		•	
1430	**Bi–Directional Errors** Bidirectional volume input error status (Switch Alarm status). Applies only when using **Bidirectional Volume** input mode via Item 433 (Reverse Flow). Note – 4 switch inputs used for Bidirectional volume mode (TB2 and TB3 terminals – LF input)	**0**	No Errors	•		•	
		16	SW1 Fault	•		•	
		32	SW2 Fault	•		•	
		64	SW3 Fault	•		•	
		128	SW4 Fault	•		•	
1457	**Fixed Unsquared Super Factor** Value to use for calculating Super Factor (Items 047 and 116) when Item 147 is set to Fixed Super (code 0). See Item 147 for options to compute Super Factor	1.0	0.50 – 2.00	•		•	
1458	**Modem Type** Selects which Modem is used for communications. Must be properly selected to ensure full Modem type functionality (e.g. Modem Power Control, or Daily Vol Backup, etc.). Non–Mercury modems are 'third party' modems (e.g. RV–50)	0	No Modem	•	•	•	•
		1	CNI–2	•	•	•	•
		2	Cloud Link Modem	•	•	•	•
		3	Messenger	•	•	•	•
		4	Non–Mercury Modems				

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Note: Modem Type setting remains intact after a FW Upgrade or forcing basic defaults.		(e.g. **RV–50** or other 3rd party modems – consume high power requiring Modem Power Control)	•	•	•	•
1459	**CldLnk Read Reg Errors** It is a diagnostic item which gives the error count on CloudLink reading items.	**0**		•	•	•	•
1460	**CldLnk Last Read Reg** This holds the item number in the last CloudLink item read error	**0**		•	•	•	•
1461	**CldLnk Last Error Code** This gives error code associated in last CloudLink item read error	**0**	0= MICELL_NO_ERROR, 1=MICELL_RESOURCE_ERROR 2=MICELL_RESOURCE_TIMEOUT, 3=MICELL_PORT_CLAIM_FAILURE, 4=MICELL_NO_RESPONSE 5=MICELL_REPLIED_WITH_ERROR_MSG, 6=MICELL_IS_BUSY_ERROR 7=MICELL_WRITE_S_REG_ERROR	•	•	•	•
1462	**Cloud Link Super Cap Charge Limit (seconds)** Range 0 – 7200 seconds specifying a max time limit of Cloud Link ability to make a call while running on its Super–Cap.	0	Leave at value 0 – not currently supported by Cloud Link	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1463	**Backup Volume Alarm Limit** Used with Cloud Link 'Pulse Input' option for volume backup tracking. Threshold limit for tripping Alarm Item 435 when difference between Items 002 and 434 exceeds Item 1463 limit. To use this feature (Volume backup) – Cloud Link must be configured for Pulse Input counting and wired to EC350. See Items 434 and 435.	0	0 = disable the Alarm notification of Item 435 1 – n = values > 0 enable the Alarm ability and set the threshold for difference.	•		•	
1464	**Tamper Alarm Time** Time of Item 107 (since last Alarm clear)	**00 00 00**		•	•	•	•
1465	**Tamper Alarm Date** Date of Item 107 (since last Alarm clear)	**01 01 01**		•	•	•	•
1467	**Firmware Download State** (Honeywell Diagnostic Item)	0	Idle	•	•	•	•
		1	Sleeping				
		2	FW loading				
		3	Load complete				
		4	Validating				
		5	FW Load Error				
1468	**Firmware Download Packet Size**	**1024**	Fixed at 1024	•	•	•	•
1469	**Last FW Download Sequence Number**	**0**		•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Used by software to know the last packet sent during upgrades						
1478	**Call–In Current State** Indicates current state of the Call–In process. Mainly added for Production support. Item can be read any time during Call to see what stage the Call is in. Item returns an enumerated code for status. Not to be used as a Pass/Fail status – for that – see Item 337. Read – Only Item.	0	Call Idle	•	•	•	•
		1	Waking Modem				
		2	Modem Init phase				
		4	Modem Dialing				
		6	Modems Connected				
		7	Waiting for +–+clralms				
		8	Received +–+clralms				
		9	Sent OK Response				
		10	Host Link phase				
1480	**HMI Diagnostics Enable** **Enables** HMI (LCD) to show all various **diagnostic information** for things like Communications, Call–In, Callout Window status information.	0	**Disables** diagnostic information	•	•	•	•
		1	**Enables** diagnostic information				
1484	**Digi In 1 Alarm Time** Time of the item 766.	**0:00:00**		•	•	•	•
1485	**Digi In 1 Alarm Date** Date of the item 766.	**1/1/2001**		•	•	•	•
1486	**Digi In 2 Alarm Time** Time of the item 767.	**0:00:00**		•	•	•	•
1487	**Digi In 2 Alarm Date**	**1/1/2001**		•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Date of the item 767.						
1488	**Digi In 3 Alarm Time** Time of the item 768	**0:00:00**			•		•
1489	**Digi In 3 Alarm Date** Date of the item 768	**1/1/2001**			•		•
1490	**Comm Port Reset Interval Minutes** Selects the interval in minutes to reset the serial comm port (Rs-232 / 485 interface). Controls a feature for automatic recovery from some communications issues. Default of 0 disables this feature. If non-zero, communications will be automatically reset if there are no valid communication packets within this number of minutes. Generally used with periodic polling (where this would be set to something longer than the polling interval, so it only resets communications if expected activity has ceased).	**46**	**0 – 65535 (minutes)** **0 = disabled (off)** **4 minutes is lowest / min value**	•	•	•	•
1491	**Modbus Archive 1 Size** Selects Archive capacity when reading **Register 702 via MODBUS** protocol. Register 702 is assigned to **AT Log 1**. **See: EC350_MODBUS_Interface Specifications.docx**	**840** (35 days of hourly)	**0 – 4380 (6 months hourly records).**	•	•	•	•
1492	**Modbus Archive 2 Size** Selects Archive capacity when reading **Register 703 via MODBUS** protocol. Register 702 is assigned to **AT Log 2**. **See: EC350_MODBUS_Interface Specifications.docx**	**35**	**0 – 4380 (6 months hourly records)**	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1493	**Modbus Archive 3 Size** Selects Archive capacity when reading **Register 704 via MODBUS** protocol. Register 702 is assigned to **AT Log 3**. **See: EC350_MODBUS_Interface Specifications.docx**	**840** (35 days of hourly)	**0 – 4380 (6 months hourly records)**	•	•	•	•
1494	**Modbus Archive 4 Size** Selects Archive capacity when reading **Register 705 via MODBUS** protocol. Register 702 is assigned to **AT Log 4**. **See: EC350_MODBUS_Interface Specifications.docx**	**35**	**0 – 4380 (6 months hourly records)**	•	•	•	•
1495	**Modbus Archive 5 Size** Selects Archive capacity when reading **Register 706 via MODBUS** protocol. Register 702 is assigned to **AT Log 5**. **See: EC350_MODBUS_Interface Specifications.docx**	**840** (35 days of hourly)	**0 – 4380 (6 months hourly records)**	•	•	•	•
1496	**Modbus Archive Data Native Format** Selects if Archive data (AT Log records) are returned in either only floating point format – or – in long integer / floating point formats based on their associated data type. **See: EC350_MODBUS_Interface Specifications.docx**	**0**	Return all Archive (AT Log) data in floating point format. Note: Volume data can lose resolution when values become very large (> 7 digits).	•	•	•	•
		1	Return Archive (AT Log) data in its natural format: long integer formats for Volumes, and floating point for measurement values like Press, Temp, Super, Battery, etc. Keeps Volume data in its normal integer format so there is no resolution loss when values become very large (> 7 digits).				

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1500 – 1539	**Modbus Map Boolean 1000 – 1039 Item** Mapping of Instrument's Items to MODBUS BOOLEAN type Registers (Alarms: 0/1) • Item 1500 maps to Register 1000 • Item 1501 maps to register 1001 • Item 1539 maps to register 1039	**255**		•	•	•	•
1540	**P1 Press High/High Alarm Value** Value at which P1 high/high pressure alarm (815) was detected	**0.0**		•	•	•	•
1541	**P1 Press Low/Low Alarm Value** Value at which P1 low/low pressure alarm (816) was detected	**0.0**		•	•	•	•
1542	**P2 Press High/High Alarm Value** Value at which P2 high/high pressure alarm (819) was detected	**0.0**		•	•	•	•
1543	**P2 Press Low/Low Alarm Value** Value at which P2 low/low pressure alarm (820) was detected	**0.0**		•	•	•	•
1544	**P1 Press High/High Alarm Time** Time at which P1 high/high pressure alarm (815) was detected	**00 00 00**		•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1545	**P1 Press High/High Alarm Date** Time at which P1 high/high pressure alarm (815) was detected	**01 01 01**		•	•	•	•
1546	**P1 Press Low/Low Alarm Time** Time at which P1 low/low pressure alarm (816) was detected	**00 00 00**		•	•	•	•
1547	**P1 Press Low/Low Alarm Date** Time at which P1 low/low pressure alarm (816) was detected	**01 01 01**		•	•	•	•
1548	**P2 Press High/High Alarm Time** Time at which P2 high/high pressure alarm (819) was detected	**00 00 00**		•	•	•	•
1549	**P2 Press High/High Alarm Date** Time at which P2 high/high pressure alarm (819) was detected	**01 01 01**		•	•	•	•
1550	**P2 Press Low/Low Alarm Time** Time at which P2 low/low pressure alarm (820) was detected	**00 00 00**		•	•	•	•
1551	**P2 Press Low/Low Alarm Date** Time at which P2 low/low pressure alarm (820) was detected	**01 01 01**		•	•	•	•
1553	**Comm Port Reset Diagnostic Bits**	**0**	**0** = no issue 1 = Wake-Up IRQ not set	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Identifies type of communication issue found by item 1490 communications reset feature.		2= Control var for wake-up not set				
1554	**Comm Port Reset Run Count** Count of number of times the item 1490 communication reset inactivity time-out has occurred.	**0**	0 – 99999999	•	•	•	•
1555	**Comm Port Reset Fix Count** Count of number of times the item 1490 communication reset found communication settings requiring reset (see item 1553 for issue(s) found).	**0**	0 – 99999999	•	•	•	•
1578	**External Supply Type**	**0**	**None**	•	•	•	•
		1	DC Supply				
		2	SLA Battery 7AH				
		3	Alkaline Quad pack				
		4	Alkaline Dual Pack				
		5	SLA Battery 21AH				
1582	**P3 Press High Alarm Time** Time of Item 561 (since last Alarm clear) – *EC350* Time of Item 451 (since last Alarm clear) – *ERX350*	**00 00 00**				•	•
1583	**P3 Press High Alarm Date**						

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Date of Item 561 (since last Alarm clear) – *EC350* Date of Item 451 (since last Alarm clear) – *ERX350*	**01 01 01**				•	•
1584	**P3 High Alarm Value** Value recorded for Item 501 when P3 High Alarm first occurred (since last Alarm clear) – *EC350* Value recorded for Item 420 when P3 High Alarm first occurred (since last Alarm clear) – *ERX350*	**0.0**				•	•
1585	**P3 Press High/High Alarm Time** Time at which P3 high/high pressure alarm Item 809 was detected	**00 00 00**				•	•
1586	**P3 Press High/High Alarm Date** Date at which P3 high/high pressure alarm Item 809 was detected	**01 01 01**				•	•
1587	**P3 High/High Alarm Value** Value at which P3 high/high pressure alarm (809) was detected	**0.0**				•	•
1588	**P3 Press Low Alarm Time** Time of Item 562 (since last Alarm clear) – *EC350* Time of Item 452 (since last Alarm clear) – *ERX350*	**00 00 00**				•	•
1589	**P3 Press Low Alarm Date** Date of Item 562 (since last Alarm clear) – *EC350* Date of Item 452 (since last Alarm clear) – *ERX350*	**01 01 01**				•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1590	**P3 Low Alarm Value** Value recorded for Item 501 when P3 Low Alarm first occurred (since last Alarm clear) – *EC350* Value recorded for Item 420 when P3 Low Alarm first occurred (since last Alarm clear) – *ERX350*	**0.0**				•	•
1591	**P3 Press Low/Low Alarm Time** Time at which P3 low/low pressure alarm Item 810 was detected	**00 00 00**				•	•
1592	**P3 Press Low/Low Alarm Date** Date at which P3 low/low pressure alarm Item 810 was detected	**01 01 01**				•	•
1593	**P3 Low/Low Alarm Value** Value at which P3 low/low pressure alarm (810) was detected	**0.0**				•	•
1594	**P3 Prev Day High Press** Highest P3 Pressure (501) for the previous Gas Day – *EC350* Highest P3 Pressure (420) for the previous Gas Day – *ERX350*	**-1.0**				•	•
1595	**P3 Prev Day High P Time** Time for Item 1594	**00 00 00**				•	•
1596	**P3 Prev Day High P Date** Date for Item 1594	**01 01 01**				•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1597	**P3 Prev Day Low Press** Lowest P3 Pressure (501) for the previous Gas Day – *EC350* Lowest P3 Pressure (420) for the previous Gas Day – *ERX350*	**99999.99**				•	•
1598	**P3 Prev Day Low P Time** Time for Item 1597	**00 00 00**				•	•
1599	**P3 Prev Day Low P Date** Date for Item 1597	**01 01 01**				•	•
1602	**Press used at P3-Span** The pressure value used during the most recent P3 Pressure Span calibration	**0.0**				•	•
1603	**Press used at P3-Zero** The pressure value used during the most recent P3 Pressure Zero calibration	**0.0**				•	•
1604	**PnPPT Expansion Status** Indicates the Pressure expansion board (for P3 configuration) connection status on the device	**0** / 1	**Not connected** / Connected			•	•
1605	**SLA Last Charged Tm** This item gives last charged time of SLA battery	**00 00 00**				•	•
1606	**SLA Last Charged Dt** This item gives last charged date of SLA battery	**01 01 01**				•	•
1607	**SLA Not Charging Alarm Days**					•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	This item indicates the number of days that the user can configure. For example, if the user configures it as 2 then the device will alarm the user if the solar panel does not charge the SLA battery continuously for 2 days.	**0**	0 – 255 days (0 means alarm will be disabled)				
1608	**SLA Not Charging Alarm** This item indicates whether the alarm is active or not, based on item 1607	**0**	**Inactive**			•	•
		1	Active				
1609	**SLA Not Charging Alarm Time** The time recorded when the alarm is raised	**00 00 00**				•	•
1610	**SLA Not Charging Alarm Date** The date recorded when the alarm is raised	**01 01 01**				•	•
1612	**SLA Charging Status** For every 30 minutes the charging status is monitored which indicates whether the SLA is charging or not charging	**0**	**Not Charging**			•	•
		1	Charging				
1613	**As-Shipped Config Storage Status** If an "as-shipped configuration" has been saved (i.e. can be retrieved), this item will have a value of **21214888**. If not, this will be zero.	**0**	**Not Available**	•	•	•	•
1614	**SLA Not charging alarm counter** Gives the days' count on battery not charging status	**0 (days)**		•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1617	**LCD refresh rate** This item refreshes the LCD screen on configured interval. Ex: 1,2,...min	0	Disable	•	•	•	•
1624	**CloudLink Last Read Time** This item will populate with the last successful CloudLink items read time that are configured in 350S audit trail log.	00 00 00		•	•	•	•
1625	**CloudLink Last Read Date** This item will populate with the last successful CloudLink items read date that are configured in 350S audit trail log.	01 01 01		•	•	•	•
1627	**Active Alarms A** List of alarms by using each bit in the item value	0	First bit – 0 (battery low) Second bit – 1 (battery usage cycles alarm) . . . . . 25 ENSURE THAT U ADD THE RESPECTIVE ITEM DESCRIPTIONS FROM HERE AS GIVEN IN THE WORD DOC	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1628	**SAME AS ABOVE FOR ALARMS B**			•	•	•	•
1629	**Alarm Call Keep Alive Mode** Used to configure Keep Alive feature in Standard or extended modes	**0/1** **0**	0- Standard (current settings) **1- Extended (will be in active unless and until the alarm is cleared).**	•	•	•	•
1630	**Last Call-In Failure** Gives the last call-in failure reason	**0**	0 – No Failure 1 –Telephone Number error 2 – Comm Port in Use 3 – Modem Init Failed 4 – Dial failed 5 - +-+clralarms failed 6 – Link state SF (Sign out) failure	•	•	•	•
1631	**P4 Transducer Enable** Enable or disable P4 Pressure Transducer measurements. To save Battery Power and possible Alarm conditions – disable if P4 Pressure is not used. For Fixed Factor mode – disable this Item if P4 Transducer is not being connected to instrument.	**0**	**Disable**	•	•	•	•
		1	P1-P2	•	•	•	•
		2	P1-P3	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		3	P2-P1	•	•	•	•
		4	P2-P3	•	•	•	•
		5	P3-P1	•	•	•	•
		6	P3-P2	•	•	•	•
1632	**P4 Gas Pressure** Pressure from the P4 pressure transducer. (Read only).	**0**		•	•	•	•
1634	**P4 High Alarm Limit** P4 High Alarm set point.	**99999.99**		•	•	•	•
1635	**P4 Low Alarm Limit** P4 Low Alarm set point.	**-1**		•	•	•	•
1636	**P4 Pressure Units** Unit of measure for P4 Pressure related Items.	**0**	**PSI**	•	•	•	•
		1	kPa	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
		2	MPa	•	•	•	•
		3	Bar	•	•	•	•
		4	mBar	•	•	•	•
		5	KGcm2	•	•	•	•
		6	in WC	•	•	•	•
		7	in HG	•	•	•	•
		8	mm HG	•	•	•	•
		9	Ounces	•	•	•	•
1637	**# of Dec for P4 Press**	0	X X X X X X X	•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
	Number of digits displayed to the right of the decimal point for P4 pressure display.	1	X X X X X X . X	•	•	•	•
		2	X X X X X . X X	•	•	•	•
		3	**X X X X . X X X**	•	•	•	•
		4	X X X . X X X X	•	•	•	•
1638	**P4 Press High Alarm** Alarm is set when value of Item 1632 exceeds configurable limit per Item 1634. Manually clear unless in RBX mode.	**00000000**	**No**	•	•	•	•
		11111111	Yes	•	•	•	•
1639	**P4 Press Low Alarm** Alarm is set when value of Item 1632 drops configurable limit per Item 1635. Manually clear unless in RBX mode.	**00000000**	**No**	•	•	•	•
		11111111	Yes	•	•	•	•
1640	**RBX Deadband:P4 Press** Hysteresis band that's applied when resetting the RBX alarm for P4 pressure (high / low)**.**	**5**		•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1641	**P4 Interval Avg Press** Average of all samples of Item 1632 during the interval of Item 1178.	0		•	•	•	•
1642	**P4 Daily Average Press** Average of P4 Pressure (1632) for the Gas Day	0		•	•	•	•
1643	**P4 Prev Daily Avg Press** Average of P4 Pressure (1632) for the previous Gas Day	0		•	•	•	•
1644	**P4 Max Pressure** Highest value for Item 1632	0		•	•	•	•
1645	**P4 Max Pressure Time** Time for the item 1644	00 00 00		•	•	•	•
1646	**P4 Max Pressure Date** Date for the item 1644	01 01 01		•	•	•	•
1647	**P4 Min Pressure** Lowest value for Item 1632	99999.99		•	•	•	•
1648	**P4 Min Pressure Time** Time for the item 1647	00 00 00		•	•	•	•
1649	**P4 Min Pressure Date** Date for the item 1647	01 01 01		•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1650	**P4 Interval High Press** Highest value of P4 Pressure (1632) measured within interval period set by Item 1178.	**0**		•	•	•	•
1651	**P4 Intrv High P Time** Time for the item 1650	**00 00 00**		•	•	•	•
1652	**P4 Intrv High P Date** Date for the item 1650	**01 01 01**		•	•	•	•
1653	**P4 Interval Low Press** Highest value of P4 Pressure (1632) measured within interval period set by Item 1178.	**99999.99**		•	•	•	•
1654	**P4 Intrv Low P Time** Time for the item 1653	**00 00 00**		•	•	•	•
1655	**P4 Intrv Low P Date** Date for the item 1653	**01 01 01**		•	•	•	•
1656	**P4 Day High Press** Highest P4 Pressure (1632) for the current Gas Day.	**-1**		•	•	•	•
1657	**P4 Day High P Time** Time for the item 1656.	**00 00 00**		•	•	•	•
1658	**P4 Day High P Date** Date for the item 1656.	**01 01 01**		•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1659	**P4 Day Low Press** Lowest P4 Pressure (1632) for the current Gas Day.	99999.99		•	•	•	•
1660	**P4 Day Low P Time** Time for the item 1659.	00 00 00		•	•	•	•
1661	**P4 Day Low P Date** Date for the item 1659.	01 01 01		•	•	•	•
1662	**P4 Prev Day High Press** Highest P4 Pressure (1632) for the previous Gas Day.	-1		•	•	•	•
1663	**P4 Prev Day High P Time** Time for the item 1662.	00 00 00		•	•	•	•
1664	**P4 Prev Day High P Date** Date for the item 1662.	01 01 01		•	•	•	•
1665	**P4 Prev Day Low Press** Lowest P4 Pressure (1632) for the previous Gas Day.	99999.99		•	•	•	•
1666	**P4 Prev Day Low P Time** Time for the item 1665.	00 00 00		•	•	•	•
1667	**P4 Prev Day Low P Date** Date for the item 1665.	01 01 01		•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1668	**P4 Press High Alarm Time** Time for the item 1638.	00 00 00		•	•	•	•
1669	**P4 Press High Alarm Date** Date for the item 1638.	01 01 01		•	•	•	•
1670	**P4 Press Low Alarm Time** Time for the item 1639.	00 00 00		•	•	•	•
1671	**P4 Press Low Alarm Date** Date for the item 1639.	01 01 01		•	•	•	•
1672	**P4 High/High Alarm Limit** P4 Pressure High/High Alarm set point.	99999.99		•	•	•	•
1673	**P4 Low/Low Alarm Limit** P4 Pressure Low/Low Alarm set point.	-1		•	•	•	•
1674	**P4 Press High/High Alarm** Alarm is set when value of Item 1632 exceeds configurable limit per Item 1672. Manually clear unless in RBX mode.	00000000	No	•	•	•	•
		11111111	Yes	•	•	•	•
1675	**P4 Press High/High Alarm Time** Time for the item 1674.	00 00 00		•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1676	**P4 Press High/High Alarm Date** Date for the item 1674.	**01 01 01**		•	•	•	•
1677	**P4 Press Low/Low Alarm** Alarm is set when value of Item 1632 drops below configurable limit per Item 1673. Manually clear unless in RBX mode.	**00000000**	**No**	•	•	•	•
		11111111	Yes	•	•	•	•
1678	**P4 Press Low/Low Alarm Time** Time for the item 1677.	**00 00 00**		•	•	•	•
1679	**P4 Press Low/Low Alarm Date** Date for the item 1677.	**01 01 01**		•	•	•	•
1680	**P4 Transducer Alarm** Any error occurs while calculating P4 gas pressure (1632) this alarm will set.	**00000000**	**No**	•	•	•	•
		11111111	Yes	•	•	•	•
1681	**P4 Xdcr Alarm Time** Time of P4 Press Transducer Alarm (1680) first occurred (since last Alarm clear).	**00 00 00**		•	•	•	•
1682	**P4 Xdcr Alarm Date** Date of P4 Press Transducer Alarm (1680) first occurred (since last Alarm clear)**.**	**01 01 01**		•	•	•	•

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1683	**P4 High Alarm Value** Value of Item 1632 at which the high pressure alarm (1638) was detected.	**0**		•	•	•	•
1684	**P4 Low Alarm Value** Value of Item 1632 at which the high pressure alarm (1639) was detected.	**0**		•	•	•	•
1685	**P4 High/High Alarm Value** Value of Item 1632 at which the high pressure alarm (1674) was detected.	**0**		•	•	•	•
1686	**P4 Low/Low Alarm Value** Value of Item 1632 at which the high pressure alarm (1677) was detected.	**0**		•	•	•	•
1687	**P4 Transducer Error Config Value** Error value to populate in item 1632 if any errors occurs while calculating P4 pressure (1632).	**9999**		•	•	•	•
1690	**Flow Time Seconds** It shows the number of seconds the instrument is not in a "no flow" state with is the statistic interval.	**0**		•		•	
1691	**Flow Time Cuttoff rate** If the flow is equal to or above the threshold, the Flow Time value advances. If the flow is less than the threshold, the Flow Time stops.	**0**		•		•	

#	Item Name and Brief Description	Code or Default Value	Options / Range (if applicable)	EC 350	ERX 350	MIWI350 (EC 350)	MIWI350 (ERX 350)
1693	**Forced Schedule Call-In Time** If the Force Schedule Call (1693) is configured and enabled, and the device does not attempt Schedule Call In (i1693) in configured time for various reasons, the Force Schedule Call Initiates Call In with the server.	**2160**		•	•	•	•
1694	**Forced Schedule Call-In Time After FW Update** This item is for remote firmware update. After firmware is updated and there is no configuration in item 1694 the device initiates forced schedule call to the server. It will load the previous/backup item values.	**10 min**	0=Disable	•	•	•	•