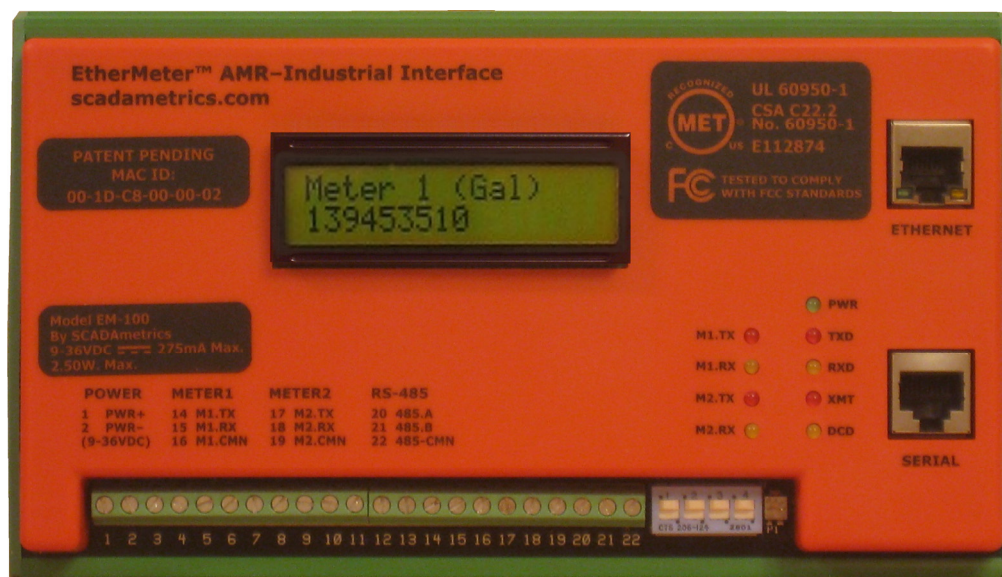


NOTE! - THIS DOCUMENT IS FOR A LEGACY-VERSION FIRMWARE. IF YOU ARE SEEKING THE LATEST COMPATIBILITY MATRIX DOC, THEN PLEASE VISIT OUR DOCUMENTATION AND SUPPORT CENTER ON THE WEB: [HTTP://SCADAMETRICS.COM/DOCS/DOCS.HTM](http://scadametrix.com/docs/docs.htm)

EtherMeter®

FLOW METER GATEWAY FOR SCADA, TELEMETRY, & BUILDING AUTOMATION SYSTEMS

COVERED BY US PATENT NO. 8,219,214



Flow-Meter Compatibility Matrix

11 March 2015

AUTHORIZED SCADAMETRICS RESELLER


SCADAmetrics
St. Louis, Missouri USA
scadametrix.com





EtherMeter™ Compatibility Matrix






The following compatibility matrix is by no means exhaustive, especially in light of the fact that there are a multitude of three-wire-protocol registers available on the market today. Advertised full compatibility is limited to registers deemed so based upon testing within the laboratory and/or the field; and those are denoted by the EtherMeter™ logo:











If there is a Sensus-protocol, Neptune-protocol, or K-Frame-protocol encoder meter register that is not listed as compatible based upon testing, and you would like to see it listed as such, then please contact SCADAmetrics. Note that in such cases, we may request a register for testing and verification.




Make	Model	Notes
ABB Elster-AMCO	AquaMaster III Mag-Meter K-Frame Protocol Option	<p>Compatible (based upon laboratory and/or field testing). Test Results provided courtesy City of Montreal, Quebec, Canada.</p> <p><u>Good</u> register for SCADA System interrogation of encoder register.</p> <p>Provides medium-resolution totalization (6 digits). The medium-resolution totalization delays flow-rate calculations and reverse-flow detection. (The "FIXED DTOTAL" flow calculation method is recommended.) Provides accurate bi-directional measurements of flow-rate and totalization.</p> <p>Note: The data-logging version of this meter does NOT provide the "ScanCoder" output signal that the EtherMeter requires.</p> <p>Mains-powered or battery-powered.</p> <p>Register requires user or factory pre-programming per Quick Reference Guide IM/AM/QRG_13:</p> <p>Set Parameter 326 (Adapter Code) to '0' (ScanCoder). Set Parameter 327 (Totalizer Source and Range) to '2' (Net x1).</p> <p>Must use the following EtherMeter setup command(s): SET ROLLn <most-significant 2 totalizer digits on meter display unit> SET PWRn 600</p> <p>Wiring Interface: +V(GREEN)=TX, DATA(RED)=RX, 0V(BLACK)=CMN Connect To: 3-Terminal PCB WADX2026</p>
Badger		<p>Compatible (based upon laboratory and/or field testing). Test Register provided courtesy of Badger Meter.</p> <p><u>Good</u> register for SCADA System interrogation of encoder register.</p> <p>Provides medium-resolution totalization (6 digits). The medium-resolution totalization delays flow-rate calculations and reverse-flow detection. (The "FIXED DTOTAL" flow calculation method is recommended.)</p> <p>Register requires factory pre-programming. The maximum (6 digits) is recommended.</p> <p>Wiring Color Codes: RED=TX, GREEN=RX, BLACK=CMN</p>




Badger	HRE-LCD High Resolution Encoder, LCD Version 	<p>Compatible (based upon laboratory and/or field testing). Test Register provided courtesy of ABS Water Cooperative (IL).</p> <p><u>Excellent</u> register for SCADA System interrogation of encoder register.</p> <p>Provides high-resolution totalization (9 digits). The high-resolution totalization speeds the flow-rate calculation and detection of reverse flows.</p> <p>Battery-powered (20-year battery life).</p> <p>Register requires factory pre-programming. The maximum (9 digits) is recommended.</p> <p>Wiring Color Codes: RED=TX, GREEN=RX, BLACK=CMN</p>
Badger	HRE-MECH High Resolution Encoder, Mechanical Version 	<p>Compatible (based upon laboratory and/or field testing). Test Register provided courtesy of ABS Water Cooperative (IL).</p> <p><u>Excellent</u> register for SCADA System interrogation of encoder register.</p> <p>Provides high-resolution totalization (8 digits). The high-resolution totalization speeds the flow-rate calculation and detection of reverse flows.</p> <p>Register requires factory pre-programming. The maximum (8 digits) is recommended.</p> <p>Wiring Color Codes: RED=TX, GREEN=RX, BLACK=CMN</p>
Badger	E-Series® Meter 	<p>Compatible (based upon laboratory and/or field testing). Test Results provided courtesy City of Montreal, Quebec, Canada.</p> <p><u>Excellent</u> register for SCADA System interrogation of encoder register.</p> <p>Provides high-resolution totalization (9 digits). The high-resolution totalization speeds the flow-rate calculation and detection of reverse flows.</p> <p>Battery-powered (20-year battery life).</p> <p>Register requires factory pre-programming. Specify 'High-Resolution E-Series ADE Mode'. The maximum (9 digits) is recommended.</p> <p>Wiring Color Codes: RED=TX, GREEN=RX, BLACK=CMN</p>
Badger	M5000 Mag-Meter 	<p>Compatible (based upon laboratory and/or field testing). Test Results provided courtesy City of Montreal, Quebec, Canada.</p> <p><u>Excellent</u> register for SCADA System interrogation of encoder register.</p> <p>Provides high-resolution totalization (8 digits). The high-resolution totalization speeds the flow-rate calculation and detection of reverse flows.</p> <p>Register requires field- or factory-programming. The maximum (8 digits) is recommended: Output #4 should be set to ADE. Communication method should be set to ADE.</p> <p>Mains-powered or battery-powered. SCADAmetrics recommends mains-powered, so that regular battery replacement is not required.</p> <p>Wiring: INPUT+ = TX, ADE_DATA = RX, INPUT- JUMPERED TO ADE_GROUND = CMN</p>




<p>Elster-AMCO (ABB/Kent)</p>	<p>InVISION™</p> <p>Sensus-Protocol Option</p> 	<p>Compatible (based upon laboratory and/or field testing). Test Register provided courtesy of Bond-Madison Water District.</p> <p><u>Good</u> register for SCADA System interrogation of encoder register.</p> <p>Provides medium-resolution totalization (6 digits). The medium-resolution totalization delays flow-rate calculations and reverse-flow detection. (The "FIXED DTOTAL" flow calculation method is recommended.)</p> <p>Register requires factory pre-programming. The maximum (6 digits) is recommended.</p> <p>Wiring Color Codes: RED=TX, GREEN=RX, BLACK=CMN</p>
<p>Elster-AMCO (ABB/Kent)</p>	<p>InVISION™</p> <p>K-Frame Protocol Option</p> 	<p>Compatible (based upon laboratory and/or field testing). Test Register provided courtesy of Elster-AMCO Water.</p> <p><u>Good</u> register for SCADA System interrogation of encoder register.</p> <p>Provides medium-resolution totalization (6 digits). The medium-resolution totalization delays flow-rate calculations and reverse-flow detection. (The "FIXED DTOTAL" flow calculation method is recommended.)</p> <p>Wiring Color Codes: GREEN=TX, RED=RX, BLACK=CMN Note: On the EtherMeter, the user must set PWRn parameter to 600 msec.</p>
<p>Elster-AMCO (ABB/Kent)</p>	<p>ScanCoder</p> <p>K-Frame Protocol Option</p> 	<p>Compatible (based upon laboratory and/or field testing).</p> <p><u>Good</u> register for SCADA System interrogation of encoder register.</p> <p>Provides medium-resolution totalization (6 digits). The medium-resolution totalization delays flow-rate calculations and reverse-flow detection. (The "FIXED DTOTAL" flow calculation method is recommended.)</p> <p>Wiring Color Codes: BLACK=TX, RED=RX, GREEN(OR BARE SHIELD)=CMN Note: On the EtherMeter, the user must set PWRn parameter to 600 msec.</p>
<p>Elster AMCO</p>	<p>evoQ4</p> <p>Mag-Meter</p> <p>Sensus-Protocol Option</p> 	<p>Likely Compatible (based upon published specifications).</p> <p><u>Excellent</u> register for SCADA System interrogation of encoder register.</p> <p>Provides high-resolution totalization (8 digits). The high-resolution totalization speeds the flow-rate calculation and detection of reverse flows.</p> <p>Battery-powered (10-year battery life).</p> <p>Register requires factory pre-programming. The maximum (8 digits) is recommended.</p> <p>Wiring Color Codes: RED=TX, GREEN=RX, BLACK=CMN</p>
<p>Elster AMCO</p>	<p>evoQ4</p> <p>Mag-Meter</p> <p>K-Frame Protocol Option</p> 	<p>Compatible (based upon laboratory and/or field testing). Test Register provided courtesy of Elster-AMCO Water.</p> <p><u>Good</u> register for SCADA System interrogation of encoder register.</p> <p>Provides medium-resolution totalization (6 digits). The medium-resolution totalization delays flow-rate calculations and reverse-flow detection. (The "FIXED DTOTAL" flow calculation method is recommended.)</p> <p>Provides accurate measurement of bi-directional flow-rate and totalization.</p> <p>Battery-powered (10-year battery life).</p> <p>Wiring Color Codes: WHITE=TX, RED=RX, BLACK=CMN Note: On the EtherMeter, the user must set PWRn parameter to 600 msec.</p>




<p>Itron (Actaris)</p>	<p>Cyble™ Coder</p> 	<p>Compatible (based upon laboratory and/or field testing). Test Register provided courtesy of Itron (Actaris).</p> <p><u>Excellent</u> register for SCADA System interrogation of encoder register.</p> <p>Provides high-resolution totalization (8 digits). The high-resolution totalization speeds the flow-rate calculation and detection of reverse flows.</p> <p>Battery-Powered (12-year battery life).</p> <p>Register requires factory pre-programming. The maximum (8 digits) is recommended.</p> <p>Wiring Color Codes: RED=TX, GREEN=RX, BLACK=CMN</p>
<p>Master Meter</p>	<p>Acculinx™</p> 	<p>Compatible (based upon laboratory and/or field testing). Test Register and Results courtesy of Davis-Monthan AFB (Tucson, AZ).</p> <p><u>Excellent</u> register for SCADA System interrogation of encoder register.</p> <p>Provides high-resolution totalization (8 digits). The high-resolution totalization speeds the flow-rate calculation and detection of reverse flows.</p> <p>Register requires factory pre-programming. The maximum (8 digits) is recommended.</p> <p>Wiring Color Codes: RED=TX, GREEN=RX, BLACK=CMN</p>
<p>Master Meter</p>	<p>Octave®</p> 	<p>Compatible (based upon laboratory and/or field testing). Test Register and Results courtesy of Davis-Monthan AFB (Tucson, AZ).</p> <p><u>Excellent</u> register for SCADA System interrogation of encoder register.</p> <p>Battery-powered (10-year battery life).</p> <p>Provides high-resolution totalization (8 digits). The high-resolution totalization speeds the flow-rate calculation and detection of reverse flows.</p> <p>Register requires factory pre-programming. The maximum (8 digits) is recommended. Recommended SAMPn Setting: >75 seconds. Note: On the EtherMeter, the user must set PWRn parameter to 502 msec.</p> <p>Wiring Color Codes: RED=TX, GREEN=RX, BLACK=CMN</p>
<p>McCrometer (& Water Specialties)</p>	<p>FlowCom Sensus- Protocol Version</p> 	<p>Compatible (based upon laboratory and/or field testing). Test Register courtesy of McCrometer Corp. (Hemet, CA).</p> <p><u>Excellent</u> register for SCADA System interrogation of encoder register.</p> <p>Provides high-resolution totalization (8 digits). The high-resolution totalization speeds the flow-rate calculation and detection of reverse flows.</p> <p>Register requires factory pre-programming. The maximum (8 digits) is recommended.</p> <p>Battery-powered. In order to preserve battery capacity, recommend that the Flowcom be purchased with the 4-20mA output option, which allows for externally-powering the meter.</p> <p>Register requires factory pre-programming. The maximum (8 digits) is recommended.</p> <p>Wiring Color Codes: RED=TX, GREEN=RX, BLACK=CMN</p>

<p>Metron-Farnier</p>	<p>HawkEye™ OER</p> 	<p>Compatible (based upon laboratory and/or field testing). Test Register provided courtesy of Metron-Farnier. (Note: The 6-digit (newest) version of this register is recommended.)</p> <p><u>Good</u> register for SCADA System interrogation of encoder register.</p> <p>Provides medium-resolution totalization (6 digits). The medium-resolution totalization delays flow-rate calculations and reverse-flow detection. (The "FIXED DTOTAL" flow calculation method is recommended.)</p> <p>Register requires factory pre-programming. The maximum (6 digits) is recommended.</p> <p>Wiring Color Codes: RED=TX, WHITE=RX, BLACK=CMN</p>
<p>Metron-Farnier</p>	<p>MIU (Register Attachment)</p> 	<p>Compatible (based upon laboratory and/or field testing). Test Register provided courtesy of Metron-Farnier.</p> <p><u>Good</u> register for SCADA System interrogation of encoder register.</p> <p>Provides medium-resolution totalization (6 digits). The medium-resolution totalization delays flow-rate calculations and reverse-flow detection. (The "FIXED DTOTAL" flow calculation method is recommended.) Reverse-flows can cause erroneous readings and are not detected with this register.</p> <p>Battery-powered.</p> <p>Register requires factory pre-programming. The maximum (7 digits) is recommended.</p> <p>Wiring Color Codes: RED=TX, WHITE=RX, BLACK=CMN</p>
<p>Mueller (Hersey)</p>	<p>Translator</p> 	<p>Compatible (based upon laboratory and/or field testing). Test Register provided courtesy of Hersey Meter.</p> <p><u>Good</u> register for SCADA System interrogation of encoder register.</p> <p>Provides medium-resolution totalization (6 digits). The medium-resolution totalization delays flow-rate calculations and reverse-flow detection. (The "FIXED DTOTAL" flow calculation method is recommended.)</p> <p>Register requires factory pre-programming. The maximum (6 digits) is recommended.</p> <p>Wiring Color Codes: RED=TX, WHITE=RX, BLACK=CMN</p>
<p>Mueller (Hersey)</p>	<p>HbMAG Mag-Meter</p> <p>Sensus Protocol Option</p> 	<p>Compatible (based upon laboratory and/or field testing). Test Register provided courtesy of Siemens Industry.</p> <p><u>Excellent</u> register for SCADA System interrogation of encoder register.</p> <p>Provides high-resolution totalization (8 digits). The high-resolution totalization speeds the flow-rate calculation and detection of reverse flows.</p> <p>This mag-meter provides accurate measurement of bi-directional flow-rate and totalization.</p> <p>Battery-powered. In order to preserve battery capacity, recommend that the HbMAG be purchased with the externally-powered / internal backup battery option.</p> <p>Register requires user/factory pre-programming. The maximum (8 digits) is recommended.</p> <p>Wiring Codes: TX=TERM.91, RX=TERM.92, CMN=TERM.93</p>

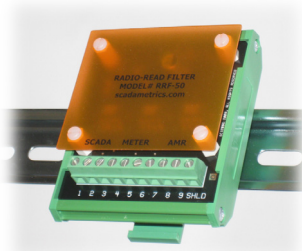
<p>Neptune (Schlumberger)</p>	<p>E-Coder™</p> 	<p>Compatible (based upon laboratory and/or field testing).</p> <p><u>Excellent</u> register for SCADA System interrogation of encoder register.</p> <p>Provides high-resolution totalization (8 digits). The high-resolution totalization speeds the flow-rate calculation and detection of reverse flows.</p> <p>Register does not require any special factory pre-programming (Neptune Factory Defaults = OK).</p> <p>Note: On the EtherMeter, the user should set PWRn parameter to 401 msec; and set SAMPn >= 20 seconds.</p> <p>Note: The EtherMeter is <u>NOT</u> compatible with the R900i version of the E-Coder. The R900i has a built-in radio, but no hookup cables or terminals, and therefore it is not compatible with the EtherMeter or any other non-Neptune reading equipment.</p> <p>Wiring Color Codes: BLACK=TX, RED=RX, GREEN=CMN</p> <p>SPECIAL NOTE FOR NEPTUNE COMPOUND METERS OUTFITTERD WITH TWO E-CODER REGISTERS: When using a compound meter, and 2 registers are connected in parallel, that means the registers are programmed into 'Network Mode'. The EtherMeter is not compatible with registers that are in 'Network Mode'. The register signal wires must be separated; and the registers must be re-programmed into 'Normal Mode' using a Neptune Handheld Programmer. Please call if a more details are required.</p>
<p>Neptune (Schlumberger)</p>	<p>Tru/Mag™</p> 	<p>Compatible (based upon laboratory and/or field testing).</p> <p><u>Excellent</u> register for SCADA System interrogation of encoder register.</p> <p>Provides high-resolution totalization (8 digits). The high-resolution totalization speeds the flow-rate calculation.</p> <p>Register does not require any special factory pre-programming (Factory Defaults = OK).</p> <p>Note: On the EtherMeter, the user should set PWRn parameter to 401 msec; and set SAMPn >= 20 seconds.</p> <p>Note 1: External-Power is recommended. Note 2: The Tru/Mag only measures flow in the forward direction (7/24/2012).</p> <p>Wiring Color Codes: BLACK=TX, RED=RX, GREEN=CMN</p>
<p>Neptune (Schlumberger)</p>	<p>ProRead™ "3-Board"</p> 	<p>Compatible (based upon laboratory and/or field testing). Register must be an Auto-Sense and Revision H or above (eg: "AUTO H65N").</p> <p><u>Fair</u> register for SCADA System interrogation of encoder register.</p> <p>Provides low/medium-resolution totalization (5.2 digits). The low/medium-resolution totalization delays flow-rate calculations and reverse-flow detection. (The "FIXED DTOTAL" flow calculation method is recommended.)</p> <p>Register requires factory pre-programming. The maximum (5.2 digits) is recommended.</p> <p>Wiring Color Codes: BLACK=TX, RED=RX, GREEN=CMN</p> <p>SPECIAL NOTE FOR NEPTUNE COMPOUND METERS OUTFITTERD WITH TWO PRO-READ REGISTERS: When using a compound meter, and 2 registers are connected in parallel, that means the registers are programmed into 'Network Mode'. The EtherMeter is not compatible with registers that are in 'Network Mode'. The register signal wires must be separated; and the registers must be re-programmed into 'Normal Mode' using a Neptune Handheld Programmer. Please call if a more details are required.</p>

<p>Neptune (Schlumberger)</p>	<p>ProRead™ "2-Board"</p> 	<p>Compatible (based upon laboratory and/or field testing). Register must be an Auto-Sense and Revision H or above (eg: "AUTO H49N"). Test Register provided courtesy of Ti-Sales.</p> <p><u>Fair</u> register for SCADA System interrogation of encoder register.</p> <p>Provides low -resolution totalization (4 digits). The low -resolution totalization delays flow-rate calculations and reverse-flow detection. (The "FIXED DTOTAL" flow calculation method is recommended.)</p> <p>Register requires factory pre-programming. The maximum (4 digits) is recommended.</p> <p>Wiring Color Codes: BLACK=TX, RED=RX, GREEN=CMN</p> <p>SPECIAL NOTE FOR NEPTUNE COMPOUND METERS OUTFITTERD WITH TWO PRO-READ REGISTERS: When using a compound meter, and 2 registers are connected in parallel, that means the registers are programmed into 'Network Mode'. The EtherMeter is not compatible with registers that are in 'Network Mode'. The register signal wires must be separated; and the registers must be re-programmed into 'Normal Mode' using a Neptune Handheld Programmer. Please call if a more details are required.</p>
<p>Sensus (Rockwell/ Invensys)</p>	<p>ICE® (ECR-III)</p> 	<p>Compatible (based upon laboratory and/or field testing). Test Registers provided courtesy of HD Supply Waterworks.</p> <p><u>Excellent</u> register for SCADA System interrogation of encoder register.</p> <p>Provides high-resolution totalization (8 digits). The high-resolution totalization speeds the flow-rate calculation and detection of reverse flows.</p> <p>Register requires factory pre-programming. The maximum (8 digits) is recommended.</p> <p><u>Recommended Pre-Programming Parameters:</u> Reading Wheels: 8 thru 1 Programmable ID: <disabled> Programmable Text: <disabled/blank> Multiplier: <disabled> Unit: <disabled> Reading String: <Normal Reading String></p> <p>Wiring Color Codes: RED=TX, GREEN=RX, BLACK=CMN</p>
<p>Sensus (Rockwell/ Invensys)</p>	<p>OMNI T² Turbo, C² Compound, F² Fire Svc, R² Residential</p> 	<p>Compatible (based upon laboratory and/or field testing). Test Registers provided courtesy of HD Supply Waterworks.</p> <p><u>Excellent</u> register for SCADA System interrogation of encoder register.</p> <p>Provides high-resolution totalization (8 digits). The high-resolution totalization speeds the flow-rate calculation and detection of reverse flows.</p> <p>Battery-powered (10-year battery life). Note: On the EtherMeter, the user should set SAMPn >= 30 seconds to preserve battery life.</p> <p>Register requires factory pre-programming. The maximum (8 digits) is recommended.</p> <p><u>Recommended Pre-Programming Parameters:</u> Reading Wheels: 8 thru 1 Programmable ID: <disabled> Programmable Text: <disabled/blank> Multiplier: <disabled> Unit: <disabled> Reading String: <Normal Reading String></p> <p>Wiring Color Codes: RED=TX, GREEN=RX, BLACK=CMN</p>

<p>Sensus (Rockwell/ Invensys)</p>	<p>ECR</p> 	<p>Compatible (based upon laboratory and/or field testing). Test Registers provided courtesy of HD Supply Waterworks. (Note 1: Register Utilizes The “Fixed-Length” Variation Of The Sensus Protocol.) (Note 2: Obsolete Register, No Longer Available From Sensus. SCADAmetrics recommends replacement with ICE® Register.)</p> <p><u>Fair</u> register for SCADA System interrogation of encoder register.</p> <p>Provides low resolution totalization (4 digits). The low -resolution totalization delays flow-rate calculations and reverse-flow detection. (The “FIXED DTOTAL” flow calculation method is recommended.)</p> <p>Register does not require factory pre-programming.</p> <p>Wiring Color Codes: RED=TX, GREEN=RX, BLACK=CMN</p>
<p>Sensus (Rockwell/ Invensys)</p>	<p>iPerl™</p> 	<p>Compatible (based upon laboratory and/or field testing). Test Registers provided courtesy of HD Supply Waterworks.</p> <p><u>Excellent</u> register for SCADA System interrogation of encoder register.</p> <p>Battery-powered (10-year battery life). Note: On the EtherMeter, the user should set SAMPn >= 30 seconds to preserve battery life.</p> <p>Provides high-resolution totalization (8 digits). The high-resolution totalization speeds the flow-rate calculation and detection of reverse flows.</p> <p>Register requires factory pre-programming. The maximum (8 digits) is recommended. Requires iPerl 3-Wire, Plain-End Connector.</p> <p><u>Recommended Pre-Programming Parameters:</u> Reading Wheels: 8 thru 1 Programmable ID: <disabled> Programmable Text: <disabled/blank> Multiplier: <disabled> Unit: <disabled> Reading String: <Normal Reading String></p> <p>Wiring Color Codes: RED=TX, GREEN=RX, BLACK=CMN Note: On the EtherMeter, the user must set PWRn parameter to 502 msec.</p>
<p>Sensus (Rockwell/ Invensys)</p>	<p>AccuStream™</p> 	<p>Compatible (based upon laboratory and/or field testing). Test Registers provided courtesy of HD Supply Waterworks.</p> <p><u>Excellent</u> register for SCADA System interrogation of encoder register.</p> <p>Provides high-resolution totalization (8 digits). The high-resolution totalization speeds the flow-rate calculation and detection of reverse flows.</p> <p>Register requires factory pre-programming. The maximum (8 digits) is recommended.</p> <p><u>Recommended Pre-Programming Parameters:</u> Reading Wheels: 8 thru 1 Programmable ID: <disabled> Programmable Text: <disabled/blank> Multiplier: <disabled> Unit: <disabled> Reading String: <Normal Reading String></p> <p>Wiring Color Codes: RED=TX, GREEN=RX, BLACK=CMN</p>

<p>Sensus (Rockwell/ Invensys)</p>	<p>AccuMag™</p> 	<p>Compatible (based upon laboratory and/or field testing). Test Results provided courtesy of City of Montreal, Quebec, Canada.</p> <p><u>Excellent</u> register for SCADA System interrogation of encoder register.</p> <p>Provides high-resolution totalization (8 digits). The high-resolution totalization speeds the flow-rate calculation and detection of reverse flows.</p> <p>Battery-powered (8-15 year battery life). Note: On the EtherMeter, the user should set SAMPn >= 30 seconds to preserve battery life.</p> <p>Register requires factory pre-programming. The maximum (8 digits) is recommended.</p> <p><u>Recommended Pre-Programming Parameters:</u> Reading Wheels: 8 thru 1 Programmable ID: <disabled> Programmable Text: <disabled/blank> Multiplier: <disabled> Unit: <disabled> Reading String: <Normal Reading String></p> <p>Wiring Color Codes: RED=TX, GREEN=RX, BLACK=CMN</p>
<p>Siemens (Sitrans)</p>	<p>F M MAG 8000</p> <p>Mag-Meter</p> <p>Sensus Protocol Option</p> 	<p>Compatible (based upon laboratory and/or field testing). Test Register provided courtesy of Siemens Industry.</p> <p><u>Excellent</u> register for SCADA System interrogation of encoder register.</p> <p>Provides high-resolution totalization (8 digits). The high-resolution totalization speeds the flow-rate calculation and detection of reverse flows.</p> <p>This mag-meter provides accurate measurement of bi-directional flow-rate and totalization.</p> <p>Battery-powered. In order to preserve battery capacity, recommend that the MAG8000 be purchased with the externally-powered / internal backup battery option.</p> <p>Register requires user/factory pre-programming. The maximum (8 digits) is recommended.</p> <p>Wiring Codes: TX=TERM.91, RX=TERM.92, CMN=TERM.93</p>
<p>PULSE OUTPUT SIGNAL FLOW METERS</p>		<p>The EtherMeter is compatible with pulse output signal flow meters that feature a passive (mechanical-switch or solid-state switch) output.</p> <p>The EtherMeter is NOT compatible with pulse-output meters that feature an active (voltage) pulse.</p> <p>When using the EtherMeter with a pulse output signal flow meter, both the EtherMeter and the flow meter MUST BE powered by a battery-backed power supply.</p> <p>Wiring Codes:</p> <p>Meter Channel 1: PULSE(+)=EtherMeter.Terminal.15, PULSE(-)=EtherMeter.Terminal.16</p> <p>Meter Channel 2: PULSE(+)=EtherMeter.Terminal.18, PULSE(-)=EtherMeter.Terminal.19</p>














Radio-Read Filter Compatibility Matrix












The following compatibility matrix is by no means exhaustive, especially in light of the fact that there are a multitude of three-wire-protocol registers available on the market today. Advertised full compatibility is limited to registers deemed so based upon testing within the laboratory and/or the field; and those are denoted by the EtherMeter™ logo:

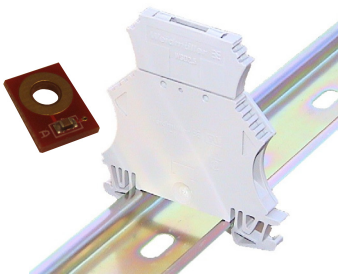


If there is a “3-Wire” Sensus-protocol, Neptune-protocol, or K-Frame-protocol encoder meter register that is not listed as compatible based upon testing, and you would like to see it listed as such, then please contact SCADAmetrics. Note that in such cases, we may request a register for testing and verification.

Make	Model		Notes
ABB	AquaMaster K-Frame		Not yet tested. If used, recommend RRF-50 Vers.400+
Badger	ADE®		Compatible (based upon laboratory and/or field testing). Register provided courtesy of Badger Meter.
Badger	HRE-LCD High Resolution Encoder		Compatible (based upon laboratory and/or field testing). Register provided courtesy of ABS Water Cooperative (IL).
Badger	HRE-MECH High Resolution Encoder		Compatible (based upon laboratory and/or field testing). Register provided courtesy of ABS Water Cooperative (IL).
Badger	E-Series® Meter		Likely compatible based upon published specifications, but not yet tested.
Badger	M5000 Mag-Meter		Likely compatible based upon published specifications, but not yet tested.
Elster AMCO (ABB/Kent)	InVISION™ Sensus-Protocol		Compatible (based upon laboratory and/or field testing). Register provided courtesy of Bond-Madison Water District.
Elster AMCO (ABB/Kent)	InVISION™ K-Frame		Compatible (based upon laboratory and/or field testing). Register provided courtesy of Bond-Madison Water District. Must Use RRF-50 Vers.400+.
Elster AMCO (ABB/Kent)	ScanCoder		Compatible (based upon laboratory and/or field testing). Must Use Version RRF-50, Vers.400+
Elster AMCO	evoQ4 Sensus-Protocol		Likely compatible based upon published specifications, but not yet tested.
Elster AMCO	evoQ4 K-Frame		Compatible (based upon laboratory and/or field testing). Meter provided courtesy of Elster AMCO Water. Must Jumper Terminals 3,6, and 9 or use RRF-50 Vers.400+.
Itron (Actaris)	Cyble™ Coder		Compatible (based upon laboratory and/or field testing). Register provided courtesy of Actaris Metering Systems.
Master Meter	Acculinx™		Compatible (based upon laboratory and/or field testing). Register and results courtesy of Davis-Monthan AFB (Tucson, AZ).
Master Meter	Octave®		Compatible (based upon laboratory and/or field testing). Results courtesy of City of Boone, IA.
McCrometer	FlowCom Sensus-Protocol Version		Compatible (based upon laboratory and/or field testing). Register provided courtesy of McCrometer Corp. (Hemet, CA).
Metron Farnier	HawkEye OER		Compatible (based upon laboratory and/or field testing). Registers provided courtesy of Metron Farnier.
Mueller (Hersey)	Translator		Compatible (based upon laboratory and/or field testing). Register provided courtesy of Hersey Meter.

Mueller (Hersey)	HbMag		Compatible (based upon laboratory and/or field testing). Register provided courtesy of Siemens Industry.
Neptune (Schlumberger)	E-Coder™		Compatible (based upon laboratory and/or field testing). Note: Must Jumper Terminals 3,6, and 9 or use RRF-50 Vers.400+.
Neptune (Schlumberger)	Tru/Mag™		Compatible (based upon laboratory and/or field testing). Note: Must Use RRF-50 Vers.400+ (otherwise, jumper terminals 3,6,9)
Neptune (Schlumberger)	ProRead™		Compatible (based upon laboratory and/or field testing). (Rev. "AUTO H65N" or "AUTO H49N" or later.) Registers provided courtesy of Ti-Sales. Note: Must Use RRF-50 Vers.400+ (otherwise, jumper terminals 3,6,9)
Sensus (Rockwell/ Invensys)	ICE®		Compatible (based upon laboratory and/or field testing). Registers provided courtesy of HD Supply Waterworks.
Sensus (Rockwell/ Invensys)	OMNI T ² , C ² , F ² , R ²		Compatible (based upon laboratory and/or field testing). Registers provided courtesy of HD Supply Waterworks.
Sensus (Rockwell/ Invensys)	iPerl™		Compatible (based upon laboratory and/or field testing). Registers provided courtesy of HD Supply Waterworks.
Sensus (Rockwell/ Invensys)	AccuStream™		Compatible (based upon laboratory and/or field testing). Registers provided courtesy of HD Supply Waterworks.
Siemens (Sitran)	F M MAG 8000		Compatible (based upon laboratory and/or field testing). Meter provided courtesy of Siemens Industry.
PULSE OUTPUT SIGNAL FLOW METERS			The Radio-Read Filter is NOT compatible with any pulse output signal flow meters. It is designed for use with encoder-signal flow meters only.









Touch-Read Filter Compatibility Matrix






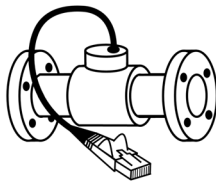
The following compatibility matrix is by no means exhaustive, especially in light of the fact that there are a multitude of three-wire-protocol registers available on the market today. Advertised full compatibility is limited to registers deemed so based upon testing within the laboratory and/or the field; and those are denoted by the EtherMeter™ logo:



If there is a “2-Wire” Sensus-protocol, Neptune-protocol, or K-Frame-protocol encoder meter register that is not listed as compatible based upon testing, and you would like to see it listed as such, then please contact SCADAmetrics. Note that in such cases, we may request a register and touch-reader for testing and verification.

Make	Model		Notes
ABB	AquaMaster K-Frame		Not yet tested.
Badger	ADE®		Compatible (based upon laboratory and/or field testing). Register provided courtesy of Badger Meter. Note: On the EtherMeter, the user must set PWRn parameter to 150 msec.
Badger	HRE-LCD High Resolution Encoder		Not yet tested.
Badger	HRE-MECH High Resolution Encoder		Not yet tested.
Badger	E-Series® Meter		Not yet tested.
Elster AMCO (ABB/Kent)	InVISION™ Sensus-Protocol		Compatible (based upon laboratory and/or field testing). Register provided courtesy of Bond-Madison Water District.
Elster AMCO (ABB/Kent)	InVISION™ K-Frame		Not yet tested.
Elster AMCO (ABB/Kent)	ScanCoder		Not Compatible (Based On Field Testing).
Elster AMCO	evoQ4 Sensus-Protocol		Likely compatible based upon published specifications, but not yet tested.
Elster AMCO	evoQ4 K-Frame		Not yet tested.
Mueller (Hersey)	Translator		Compatible (based upon laboratory and/or field testing). Register provided courtesy of Hersey Meter.
Itron (Actaris)	Cyble™ Coder		Compatible (based upon laboratory and/or field testing). Register provided courtesy of Actaris Metering Systems.
McCrometer	FlowCom Sensus-Protocol Version		Not yet tested.
Master Meter	Acculinx™		Compatible (based upon laboratory and/or field testing). Register and results courtesy of Davis-Monthan AFB (Tucson, AZ).
Master Meter	Octave®		Likely compatible based upon published specifications, but not yet tested.
Metron Farnier	HawkEye OER		Compatible (based upon laboratory and/or field testing). Registers provided courtesy of Metron Farnier.
Neptune (Schlumberger)	E-Coder™		Compatible (based upon laboratory and/or field testing). Note: On the EtherMeter, the user must set PWRn parameter to 200 msec.
Neptune (Schlumberger)	Tru/Mag™		Compatible (based upon laboratory and/or field testing). Note: On the EtherMeter, the user must set PWRn parameter to 200 msec.

Neptune (Schlumberger)	ProRead™		Compatible (based upon laboratory and/or field testing). (Rev. “AUTO H65N” or “AUTO H49N” or later.) Registers provided courtesy of Ti-Sales. Note: On the EtherMeter, the user must set PWRn parameter to 200 msec.
Sensus (Rockwell/ Invensys)	ICE®		Compatible (based upon laboratory and/or field testing). Registers provided courtesy of HD Supply Waterworks.
Sensus (Rockwell/ Invensys)	OMNI T ² , C ² , F ² , R ²		Compatible (based upon laboratory and/or field testing). Registers provided courtesy of HD Supply Waterworks.
Sensus (Rockwell/ Invensys)	iPerl™		Likely compatible based upon published specifications, but not yet tested.
Sensus (Rockwell/ Invensys)	AccuStream™		Likely compatible based upon published specifications, but not yet tested.
PULSE OUTPUT SIGNAL FLOW METERS			The Touch-Read Filter is NOT compatible with any pulse output signal flow meters. It is designed for use with encoder-signal flow meters only.



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