

## BTU TRANSMITTER 340 SERIES

### DESCRIPTION

The **Badger Meter 340 Series** is an inexpensive **BTU transmitter** that calculates energy usage based on liquid flow rate from a Data Industrial impeller flow sensor, Type II and differential temperature using two 10 k $\Omega$  thermistor inputs. The onboard microcontroller provide precise measurements accurate drift-free outputs. Configuration is accomplished with a separately purchased Windows® based software programming kit. The **340 Series** comes with onboard communication technology for LonWorks, BACnet, Johnson Controls N2 Metasys, or Modbus networks.



340-00

6

### FEATURES

- *AC or DC powered for installation flexibility*
- *Field programmable makes changes easy*
- *Small footprint saves space*
- *Uses two matched 10 K $\Omega$  Type II thermistors*
- *Used with Data Industrial flow sensors*
- *Bas communication standard*

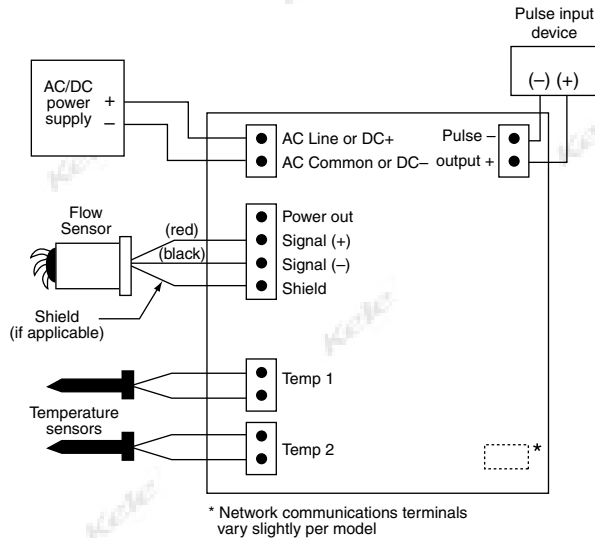
FLOW

### SPECIFICATIONS

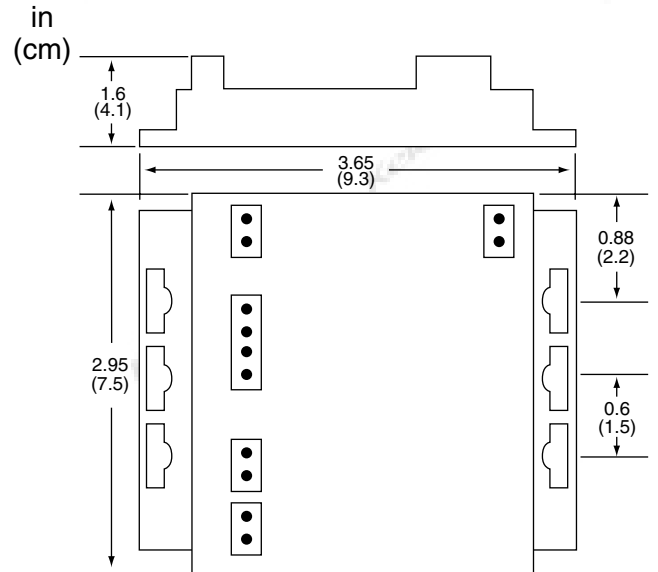
<b>Supply Voltage</b>	12-24 VAC $\pm 5\%$ or 12-35 VDC $\pm 10\%$ @ 60 mA	<b>Communication</b>	BACnet and Modbus, LonWorks, Metasys N2, or Modbus (select at time of ordering)
<b>Input Signal</b>	Excitation voltage: 3-wire, 7.9-11.4 VDC, 270 $\Omega$ source impedance Pulse sensors: Signal amplitude 2.5 VDC threshold, signal limit <35V AC or DC peak, Temperature sensors: Two matched 10 k $\Omega$ @ 25°C, two-wire, Type II	<b>Configuration</b>	Windows® based A301-20 programming kit (order separately) cable connects to DIC communication port and DB9 COM port on a computer for calibration of flow sensor information, units, output scaling; unit must be powered to configure
<b>Output Signal</b>	Pulse: isolated solid state switch BACnet and Modbus: MSTP, RS-485, LonWorks: TP/FT10 N2: RS-485	<b>Mounting</b>	
<b>BTU Pulse Output</b>	Voltage range: 0 to $\pm 60$ V (DC or AC peak); On-state load current: 700 mA maximum; On-state load resistance: 700 m $\Omega$ ; Off-state leakage: < 1 $\mu$ A @ 60 V peak; Pulse width: adjustable from .05 to 5.0 seconds	<b>-00 Enclosure</b>	Surface mount, no enclosure
<b>COMM Interface</b>	Computer connection allows visibility of real-time flow rate, flow total, temperature readings, energy rate and energy total	<b>-02 Enclosure</b>	Surface mount, in metal enclosure
		<b>-03 Enclosure</b>	Surface mount, in plastic enclosure
		<b>-04 Enclosure</b>	DIN rail mount, with clips
		<b>Operating Temperature</b>	-20° to 158°F (-29° to 70°C)
		<b>Weight</b>	0.3 lb (0.14 kg) without enclosure
		<b>Warranty</b>	1 year



### WIRING



### DIMENSIONS



### ORDERING INFORMATION

MODEL	DESCRIPTION
340	BTU meter
	<b>OUTPUT</b>
LW	Transmitter for use with LONWorks networks
N2	Transmitter for use with Johnson Metasys networks
BN	Transmitter for use with BACnet and Modbus networks
	<b>ENCLOSURE</b>
00	Transmitter only
02	Transmitter with metal enclosure
03	Transmitter with plastic enclosure
04	Transmitter only with DIN rail mounting clips

**340** - **-** - **02** *Example: 340 Series BTU meter with standard pulse output and metal enclosure*

### RELATED PRODUCTS

**200 Series**  
**A301-20**  
**ST-U24B-XP**  
**ST-U24S-XP**

Data Industrial impeller type flow sensors with pulse output  
Flow/BTU transmitter programming kit, includes cable  
Temperature sensors, matched  $\pm 0.1^{\circ}\text{F}$ , brass wells  
Temperature sensors, matched  $\pm 0.1^{\circ}\text{F}$ , stainless steel wells

### ACCESSORIES

**691-K0A**  
**DCP-1.5-W**

Control transformer, 120:24 VAC, 40 VA, Class 2  
Power supply, 24 VAC IN to 24 VDC OUT