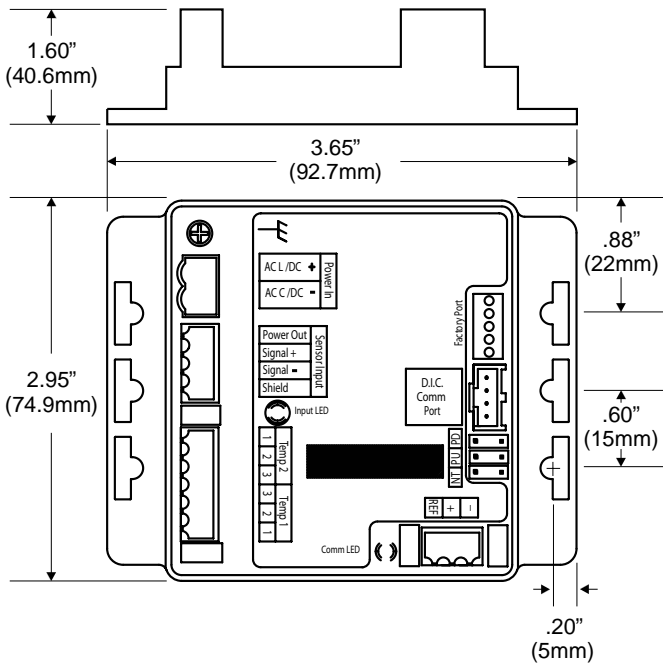
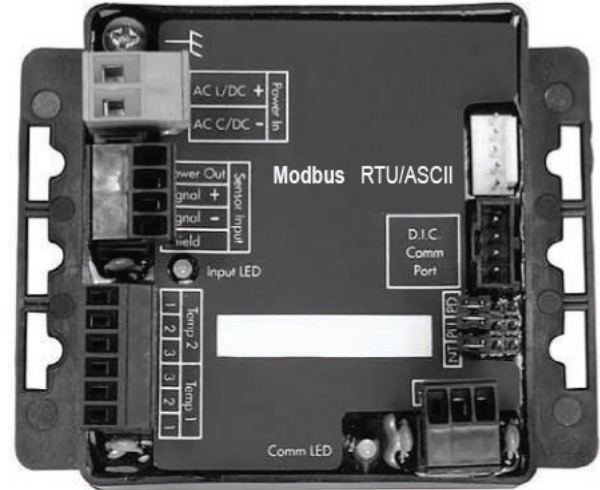


The Model I-340MB Btu Transmitter is an economical, compact device for sub-metering applications that utilize the Modbus communications protocol.

The Model I-340MB calculates thermal energy using the signal from a flow sensor installed in a hydronic heating or chilled water system, and the signals from two 10kΩ temperature thermistors or 100Ω RTD's installed in the system's inlet and outlet points. The flow input may be provided by many pulse or sine wave signal flow sensors.

The onboard microcontroller and digital circuitry provide precise measurements and produce accurate, drift-free outputs. The Model I-340MB is programmed using Windows® based software. Calibration information for the flow sensor type pipe size may be preselected or entered by the user in the field. While the unit is connected to a PC or laptop computer, real-time flow rate, flow total, temperatures, energy rate, and energy total are available.



		<b>EXAMPLE:</b>	<b>I-340MB</b>	-	<b>xx</b>
<b>SERIES</b>					
Btu Transmitter w/ Modbus output	I-340MB				
<b>OPTIONS</b>					
Transmitter Only					00
W / Metal Enclosure					02
W / Plastic Enclosure					03
W / DIN Rail Mounting Clips					04

**Series I-340MB Ordering Matrix**

The Model I-340MB transmitter features 2 LED's to verify sensor input signal and network link.

The Model I-340MB communicate via RS485.

The compact cast body measures 3.65" (93mm) x 2.95" (75mm) and can be easily mounted on panels, DIN rails or enclosures.

**DTB-073-01**

10-07

Not a controlled document.

## SPECIFICATIONS

### Power

Power supply options:  
12-24 VAC rms  
12-24 VDC  
Current draw:  
< 70mA @ 12 VDC

### Flow Sensor Input

Pulse type sensors:  
Signal amplitude:  
2.5 VDC threshold  
Signal limits:  
Vin < 35V (DC or AC peak)  
Frequency:  
0-10kHz  
Pull-up:  
15 VDC @ 2 kΩ Source Impedance  
Sine wave sensors:  
Signal amplitude:  
30 mV p-p threshold  
Signal limits:  
Vin < 35V (DC or AC peak)  
Frequency:  
0-10kHz  
Power out terminal  
Excitation voltage 3 wire sensors:  
15 VDC @ 500Ω Source Impedance

### Temperature Sensor Input

2 required:  
10 kΩ thermistor, 2 wire, type II,  
10 kΩ @ 25°C  
100Ω platinum RTD, DIN  
calibration curve conforms to  
IEC-751 Standard  
1000Ω platinum RTD, DIN  
calibration curve, conforms to  
IEC-751 Standard  
calibration range 0-150°C

### Communication Port

RS-485 with termination, pull-up and  
pull-down jumpers

### Operating Temperature

0° C to +70° C  
32° F to +158° F

### Storage Temperature

-40° C to +85° C  
-40° F to +185° F

### Weight

4.8 oz. with connector headers  
installed

### SENSOR CALIBRATION

**Sensors**  
Check with factory

### UNITS OF MEASURE

#### Flow measurement

Rate:  
gpm, gph, l/sec, l/min, l/hr, ft3/sec,  
ft3/min, ft3/hr, m3/sec, m3/min, m3/hr  
Total:  
gallons, liters, cubic feet, cubic  
meters

#### Energy measurement

Rate  
kBtu/min, kBtu/hr, kW, MW, hp, tons  
Total  
Btu, kBtu, MBtu, kWh, MWh, kJ, MJ

#### Temperature Units

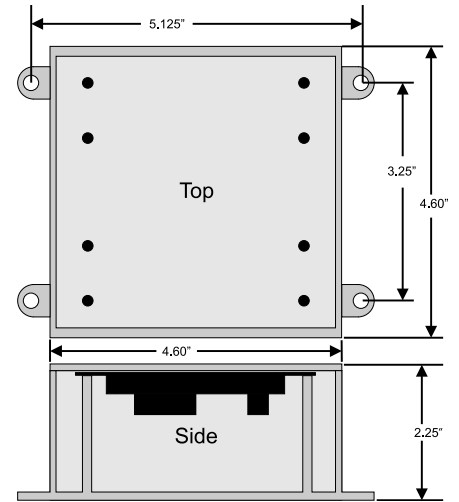
Fahrenheit, Centigrade

### PROGRAMMING

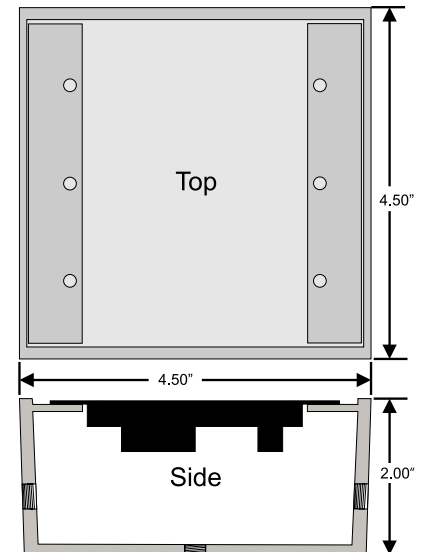
Requires PC or laptop running  
Windows® 2000, XP

Model A-340BN

programming kit containing software  
and Model A301 programming cable is  
required for programming and setup



**Plastic Enclosure Dimensions**



**Metal Enclosure Dimensions**