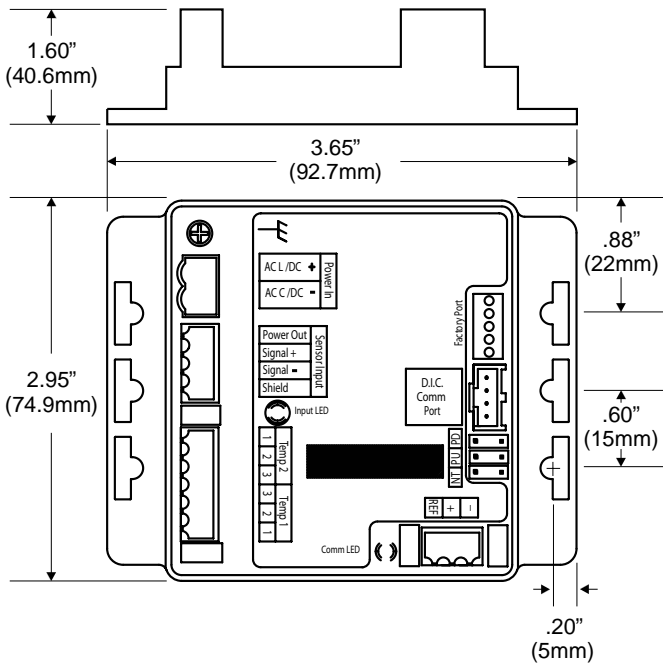
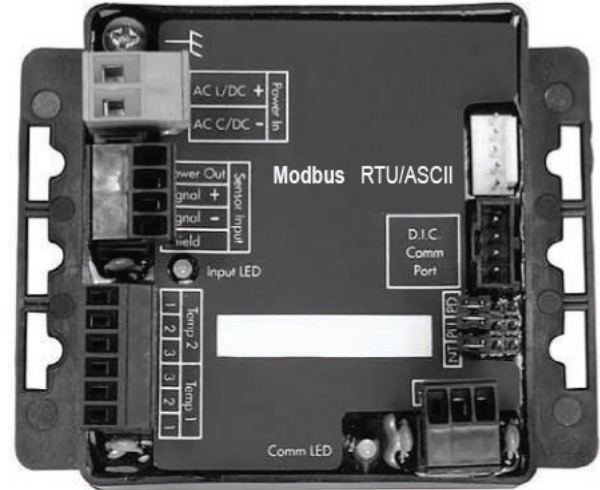


The Model I-340MB Btu Transmitter is an economical, compact device for sub-metering applications that utilize the Modbus communications protocol.

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.



		EXAMPLE:	I-340MB	-	xx
SERIES					
Btu Transmitter w/ Modbus output	I-340MB				
OPTIONS					
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

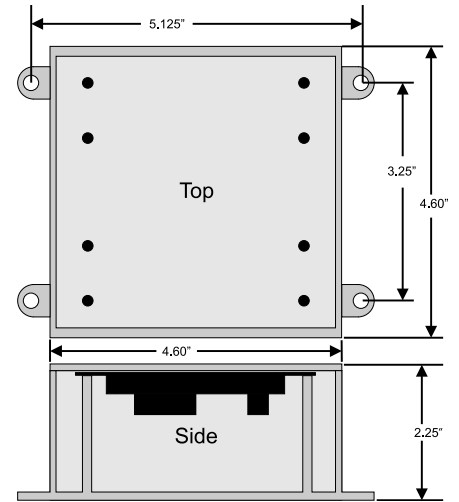
Fahrenheit, Centigrade

PROGRAMMING

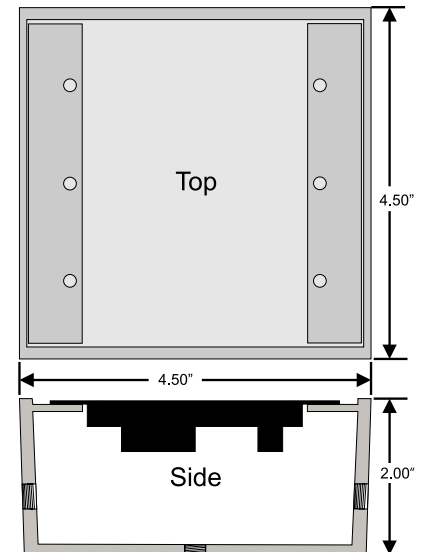
Requires PC or laptop running
Windows® 2000, XP

Model A-340BN

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



Plastic Enclosure Dimensions



Metal Enclosure Dimensions