BTU METER
380 SERIES

DESCRIPTION

The **Badger Meter 380 Series BTU meters** provide an inexpensive solution to monitoring thermal energy consumption in cold or hot water systems. The integrated flow and temperature sensors along with the internal metering components make installation and commissioning easy. With on-board Modbus and BACnet communication and a compact design that will fit in a wall, the **380 Series** is perfect for networking and multi-tenant billing applications.

380CS07

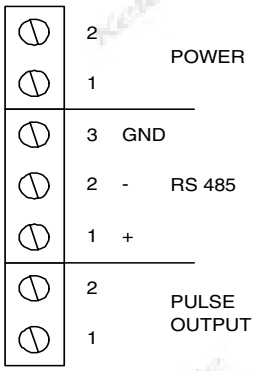
FEATURES

- ***AC or DC power***
- ***Field programmable***
- ***Scaled pulse output for direct BAS monitoring***
- ***Two temperature sensors included***
- ***Compact, fits within a standard 2X4 stud wall***
- ***Compatible with potable water and water/glycol mixtures***
- ***Modbus and BACnet, RS-485 standard***

APPLICATION

- ***Strip Malls***
- ***Multi-tenant buildings***
- ***Office buildings***
- ***Thermal storage systems***
- ***Sustainable design buildings***

WIRING

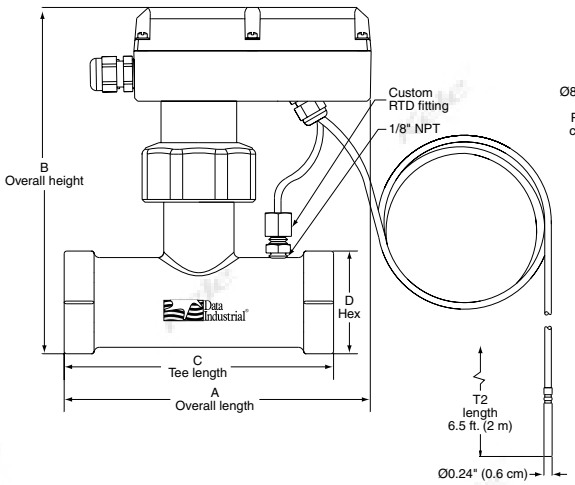


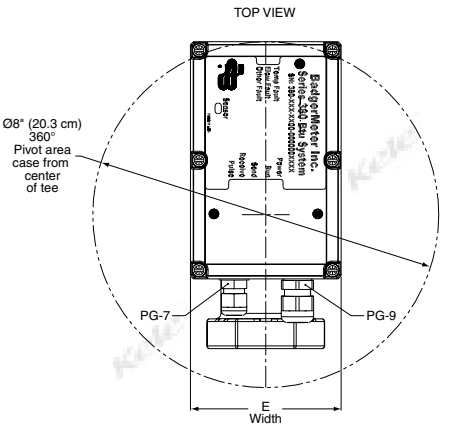
SPECIFICATIONS

Supply Voltage	12-28 VAC @ 5 VA or 12-35 VDC @ 200 mA
Supply VA	5 VA
Accuracy	± 2% of range
Repeatability	±0.5%
Supply Current	200 mA maximum
Sensor Input	0.24" diameter RTD probe, meets IEC751 Class B; 6.5' (2 m) cable for remote sensor, custom fitting for 1/8" NPT pipe tap included
Output	Scaled pulse: 10, 50, 150, 200 or 250 ms
Velocity Range	1 to 15 fps
Wiring	Two cable glands, PG6 and PG9
Wiring Terminations	Screw terminals inside enclosure
Communication	Modbus RTU, BACnet
Pipe Size	3/4", 1", 1-1/4", 1-1/2", 2" (FNPT)

Media Temperature Range	
Cold service	-4° to 140°F (-20° to 60°F)
Hot service	40° to 260°F (4° to 125°C)
Materials Of Construction	Cast bronze tee, 316 SS impeller, PEEK flow sensor, polyurethane potting material, polycarbonate housing
Operating Temperature	-4° to 149°F (-20° to 65°C)
Weight	
3/4"	6 lb (2.7 Kg)
1"	7 lb (3.2 Kg)
1-1/4"	8 lb (3.6 Kg)
1-1/2"	9 lb (4.1 Kg)
2"	13 lb (5.9 Kg)
Warranty	1 year

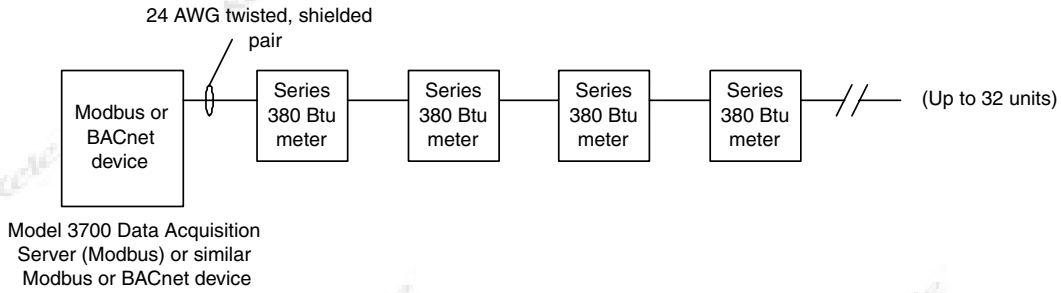
DIMENSIONS





TEE/NPT SIZE	Dimensions in (cm)				
	A	B	C	D	E
2"	7.9 (20.1)	8.5 (21.6)	7.8) (19.8)	3.3 (8.4)	3.5 (8.9)
1.5"	7.3 (18.5)	8.3 (21.1)	6.7 (17.1)	3.8 (9.7)	3.5 (8.9)
1.25"	7.1 (18)	8.1 (20.6)	6.3 (16)	2.4 (6.1)	3.5 (8.9)
1"	6.7 (17.1)	7.9 (20.1)	5.4 (13.7)	2 (5.1)	3.5 (8.9)
3/4"	6.7 (17.1)	7.9 (20.1)	5.4 (13.7)	2 (5.1)	3.5 (8.9)

INSTALLATION



ORDERING INFORMATION

MODEL	DESCRIPTION
380CS07	380 BTU System, cold service, 3/4" FNPT
380CS10	380 BTU System, cold service, 1" FNPT
380CS12	380 BTU System, cold service, 1-1/4" FNPT
380CS15	380 BTU System, cold service, 1-1/2" FNPT
380CS20	380 BTU System, cold service, 2" FNPT
380HS07	380 BTU System, hot service, 3/4" FNPT
380HS10	380 BTU System, hot service, 1" FNPT
380HS12	380 BTU System, hot service, 1-1/4" FNPT
380HS15	380 BTU System, hot service, 1-1/2" FNPT
380HS20	380 BTU System, hot service, 2" FNPT

RELATED PRODUCTS

3700	Data acquisition server
A304-1M	Model 380 programming software (required for commissioning and setup)