

Monitor: Local Display, Output & BTU

Displays Flow Rate, Flow Total, and Energy



3000 Digital Flow Monitor

DESCRIPTION

3000 and 3050 Series digital flow monitors are designed for HVAC submetering applications. With panel and wall mounting options, these compact devices display flow rate and flow total on an alphanumeric LCD display. Calibration, selection of measurement units, and output programming are keypad controlled. Two pulse outputs are available for connection to external systems.

The 3050 BTU monitor has all of the features and programming flexibility of the 3000 flow monitor with the added ability to accept temperature inputs from 10 k Ω Dale thermistors and a single pulse output for energy total. This monitor provides an accurate measurement of total thermal energy along with temperature and liquid flow in closed pipe systems.

APPLICATIONS

- Interfacing and displaying sensor data
- Energy monitoring, communication, and management

FEATURES

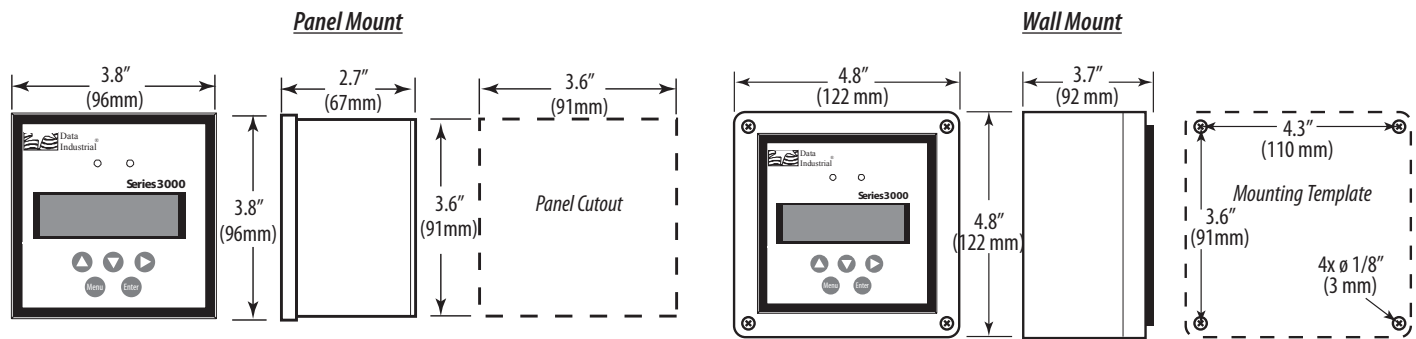
- Provides a display of energy rate, energy total, flow rate, and total flow with user-configurable units for convenient viewing (U001-0015 only)
- Password-based access control for added security
- 2-line x 16-character backlit LCD for easy visibility
- Conforms to DIN 96 mm standard dimensions...compatible with existing panels and enclosures
- NEMA 4 rated front panel...durable
- Information stored in non-volatile memory...no power required for memory backup of calibration information, units of measure, and flow totals
- High level communication with optional USB, RS-485 Modbus, and BACnet/MSTP

SPECIFICATIONS

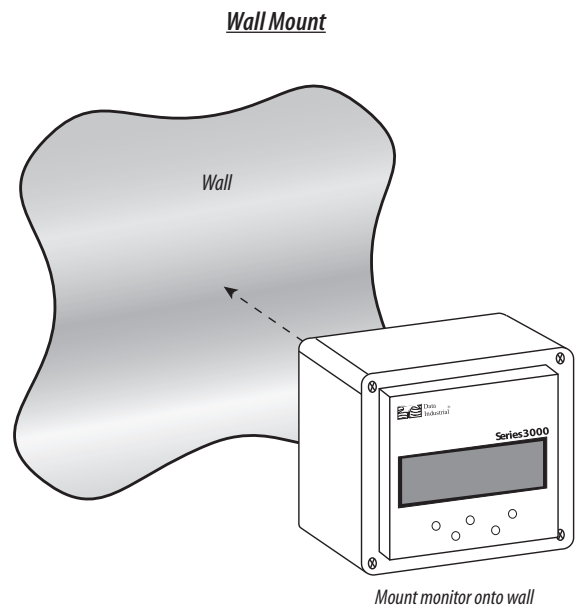
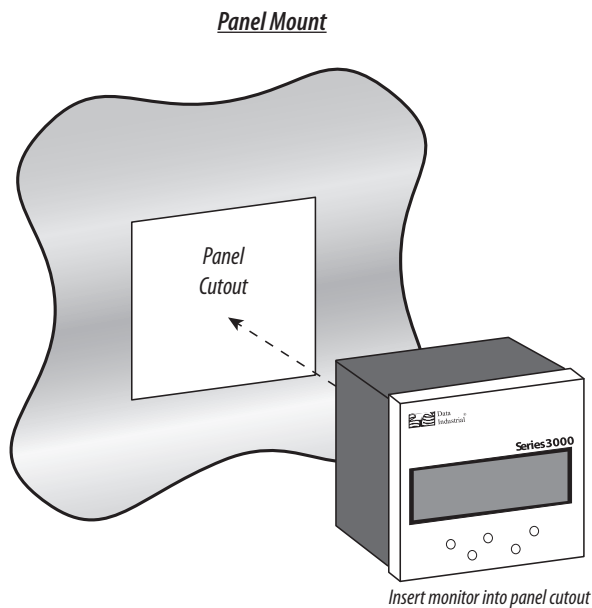


Input Power	+12-24VDC/VAC; limits: 8-35VDC, 8-28VAC
Input Frequency	0.4 to 160 Hz
Totalizer	0.000001 to 1,000,000
Operating Temperature	-20° to 70°C (-4° to 158°F)
Storage Temperature	-30° to 80°C (-22° to 176°F)
Maximum Sinking Current	150mA@+24VDC
Display	16 x 2 alphanumeric backlit LCD

DIMENSIONAL DRAWINGS



MOUNTING DIAGRAMS



ORDERING INFORMATION

MODEL	MANUF. PART #	DESCRIPTION
U001-0023	3000-10	Flow, Monitor, Panel Mount, Analog Output, USB, RS-485 with BACnet and Modbus
U001-0024	3050-11	Flow, BTU Monitor, Wall Mount, Analog Output, USB, RS-485 with BACnet and Modbus
U001-0086	3050-10	Flow, BTU Monitor, Panel Mount, Analog Output, USB, RS-485 with BACnet and Modbus
U001-0087	3000-11	Flow, Monitor, Wall Mount, Analog Output, USB, RS-485 with BACnet and Modbus
U001-0091	3000-00	Flow, Monitor, Panel Mount, Pulse Output
U001-0092	3000-01	Flow, Monitor, Wall Mount, Pulse Output
U001-0093	3050-00	Flow, BTU Monitor, Panel Mount, Pulse Output
U001-0094	3050-01	Flow, BTU Monitor, Wall Mount, Pulse Output

Note: For programming analog output versions, use a USB Type A to mini-B cable. Software is available from the manufacturer's website, www.badgermeter.com. Navigate to the product page to find a link to the software. Product is also programmable from the keypad.