

## BTU MONITOR 1550 SERIES

### DESCRIPTION

The **1550 Series BTU Monitor** is an economical, full-featured, microprocessor-based unit designed for sub-metering applications. It accepts the inputs of one flow sensor and two Precon Type 24 temperature sensors and calculates the energy being produced or consumed. The flow sensor input may be from any 200 or 4000 Series flow sensor or any other pulse or sine wave signal flow sensor.

The **1550 Series** provides a display of energy rate, temperature, energy total, or flow rate on an alphanumeric display with two lines of eight characters each. The energy rate may be displayed in kBtu/hr or kW, the energy total in Btu or kWh, and flow rate in gpm or lpm. The user programs the units from the four-button front panel by following a simple menu. A password lockout feature is included. A 100 ms pulse output for energy total is standard. A variety of pulse and analog outputs are optional.

### FEATURES

- *Field calibrated with simple menu-driven programming*
- *Energy rate, energy total, or flow rate display*
- *Password protection*
- *NEMA 4X wall or panel mount*
- *A variety of flow sensor inputs accepted*

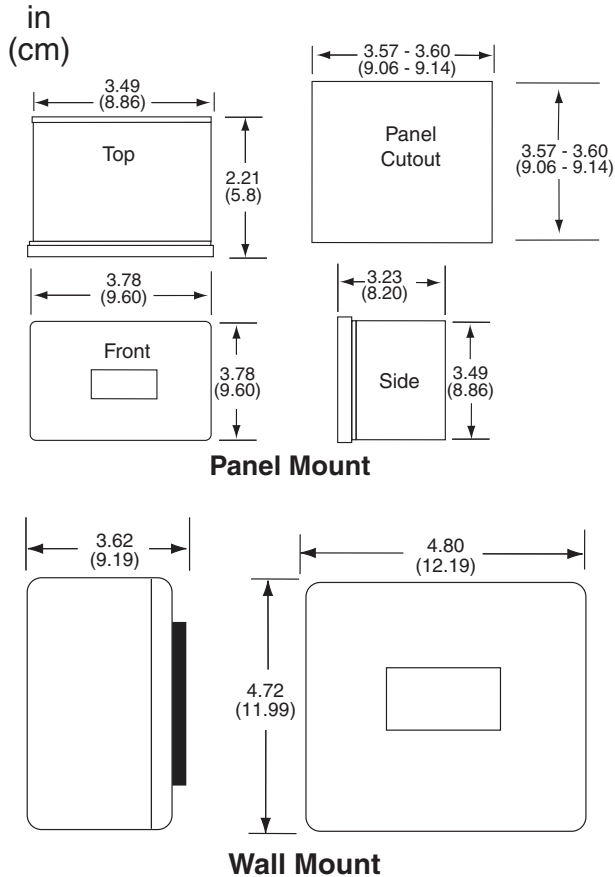


**1550-001 BTU monitor shown with 220B flow sensor and ST-U24B-XP temperature sensors (order separately)**

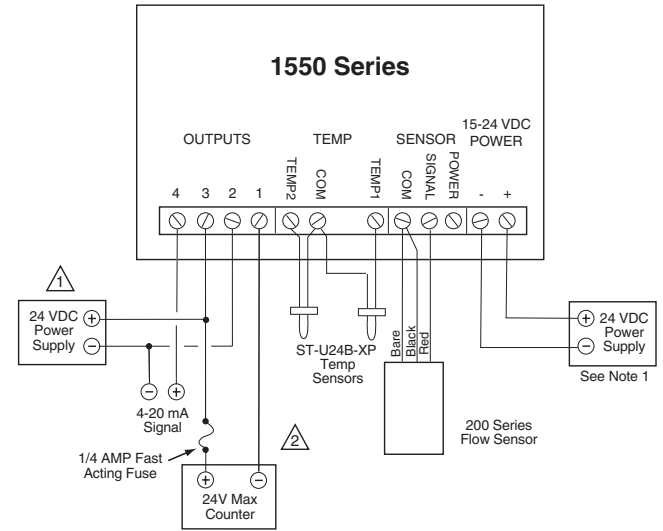
SPECIFICATIONS	
<b>Power supply</b>	15-24 VDC @ 60 mA (basic unit)
<b>Analog output option</b>	Add 30 mA
<b>Relay output option</b>	Add 40 mA
<b>Opto-isolated output</b>	Add 10 mA
<b>Display</b>	Eight characters by two lines, alphanumeric
<b>Operating temp</b>	-4° to 158°F (-20° to 70°C)
<b>Flow sensor</b>	Any <b>200, 4000 Series</b> or <b>SDI</b> flow sensor [Call Kele for application with other pulse or sine wave type flow sensors]
<b>Temp sensor</b>	Precon Type 24 thermistor, two required ( <b>XP</b> option recommended) (matched ±0.1°F)
<b>Totalizer range</b>	0.000001 to 9,999,999
<b>Pulse output (energy total)</b>	Open collector transistor pulse, user configurable to any units 100 ms pulse width
<b>Max sinking current</b>	150 mA @ 24 VDC
<b>Units of measure</b>	
<b>Energy total</b>	User selectable as kBtu or kWh with one pulse set to 0.000001 to 9,999,999 (rolls over to zero)
<b>Energy rate</b>	User selectable as Btu/Hr or kW
<b>Flow rate</b>	User selectable as GPM or LPM
<b>Temp</b>	User selectable as °F or °C
<b>Options</b>	
<b>Relay</b>	SPST 3.0A @ 250 VAC
<b>Analog</b>	4-20 mA; loop powered, 24 VDC nominal, 850Ω max impedance, 0-10 VDC; non-isolated
<b>Weight</b>	
<b>Panel mount</b>	0.5 lb (0.23 kg)
<b>Wall mount</b>	1.2 lb (0.54 kg)

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### DIMENSIONS



### WIRING



- 1 The same power supply may power the 1550 and the outputs.
- 2 Wiring shown is for open collector transistor pulse output (standard). An optional SPST relay pulse output is also available.

### ORDERING INFORMATION

MODEL	DESCRIPTION
1550	BTU monitor with display
<b>ANALOG OUTPUTS</b>	
0	No analog output
1	Isolated 4-20 mA loop
2	Nonisolated 0-10 VDC
<b>RELAY OUTPUTS</b>	
0	Standard open collector pulse
1	SPST relay pulse
<b>MOUNTING</b>	
0	Panel mount, NEMA 4X front panel
1	Wall mount, NEMA 4X

**Example:** 1550-1-1-0 BTU monitor with 4-20 mA output for BTU/Hr rate, SPST relay pulse output for BTU, and panel-mount housing with NEMA 4X front

**Order flow sensor and temperature sensors separately.**

**200/4000 Series**  
ST-U24B-XP  
ST-U24S-XP

### RELATED PRODUCTS

**Flow sensors**  
Temperature sensors, matched  $\pm 0.1^\circ\text{F}$ , brass wells  
Temperature sensors, matched  $\pm 0.1^\circ\text{F}$ , stainless wells