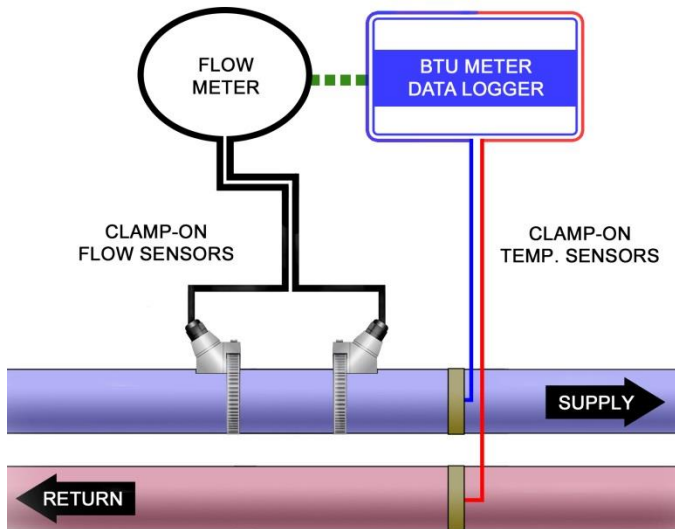


BTU Meter Data Logger



The Noncontact Meters BTUM series is a microprocessor based instrument designed to measure and log the energy consumption for heating and cooling installations. Additionally it provides the current energy and flow rates and temperatures on the supply and return lines.

The two temperature inputs are 3-wire 100Ω RTD's. The flow sensor can accommodate any flow meter 4-20 mA output. The 24VDC/120 mA output is available on-board to power the flow meter. Output includes a pulse output based on energy or flow consumption.

Data can be logged on on-board micro-SD card in .CSV format. Alternatively the data can be read and logged by using Windows based software via USB port.

The BTUM-A1 unit is a complete Kit and comes with a 120 Vac line cord, (2) strap-on RTD's temperature sensors with mounting tape, thermo couplant, 4/20mA input signal cable, USB cable, manual and free software download. It comes calibrated and ready for you to field program for your application.

FEATURES

- Digital filtering of temperature and flow readings.
- Temperature sensors calibrated as a match pair
- Field programmable, sample rates and more
- Non-volatile memory to store configuration and totals data
- Clamp-on RTDs with mounting kit
- 25 million data points
- Compact NEMA IP65 enclosure.
- Multiple units for temperature, flow and energy rates and totals.

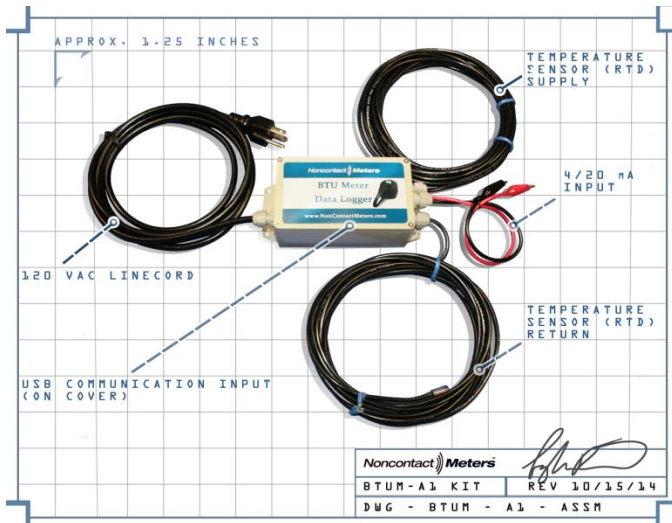
PROGRAMMING

Programming is very easy and can be done using Windows based software or from a configuration file written to the onboard SD card. RTD's calibration is made using the PC software.

Data logging sample rate can be easily set using the on-board DIP switch or the PC configuration software.

The unit is factory tested and calibrated for optimum performance. The user can field program data logger start, stop and sample rate and scale the 4-20mA input from the flow meter.

If you need any assistance just contact our support department..



SPECIFICATIONS

Part Number: BTUM-A1

Power supply

110VAC or (optional) 24VDC

Power failure detection to save data

Logger operating temperature (not RTDs)

-4°F to +140°F (-20°C to +60°C)

Storage temperature

-22°F to +140°F (-30°C to +60°C)

Dimensions

5.12" x 2.91" x 1.97" (130mm x 74mm x 50mm)

Wall mount NEMA 4, IP65 enclosure

Weight

3 lbs

Operating modes

Heating or Cooling

Temperature Inputs

Two 3-wire platinum 100 Ω RTD, Strap-on

Units of measure: °F and °C

Range: 32°F to 212°F (0°C to 100°C)

Resolution: 0.1°C (0.18°F)

Accuracy: ±1°C with matched RTD's

Calibration: 2 points individually for each RTD

Offset: on-site calibration

Flow Meter input

4-20 mA

24VDC/120mA power available

Units of measure: GPM, Gal/hr, Gal/sec, l/sec, l/min, l/hr, m3/hr

Energy Rate units

BTU/hr, kBtu/hr, kW, MW, Ton, Kton, Mton, J/sec

Energy Total

Units: kBtu, kWh, MWh, Ton*hr, Kton*hr, Mton*hr, MJ
Resetting using PC software via USB port

Flow Total units

GPM, Gal/hr, Gal/sec, l/sec, l/min, l/hr, m3/hr

USB communication

USB Type B receptacle (cable included)

Proprietary protocol, may need to install the USB driver

Functions: Configuration, calibration, data collection and logging

Data logging

Micro-SD card in .CSV format

SD card formatting on the PC computer using supplied configuration software.

Sample rates set using the on-board DIP switch or the PC configuration software.

Stored data points on 2GB micro-SD card: 25,000,000 data points

Pulse output

NPN open collector (Pulse output)

Max. Voltage: 24VDC, Max load 20 mA

Configurable as Energy or Flow totalizer

Rate: 1 pulse per number of currently used units

Pulse duration: 1ms to 10 seconds

Data Sheet BTUM-A1 Rev 1.13.2015

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