



## BTU Meter : Series BTU 100

### Advantages :

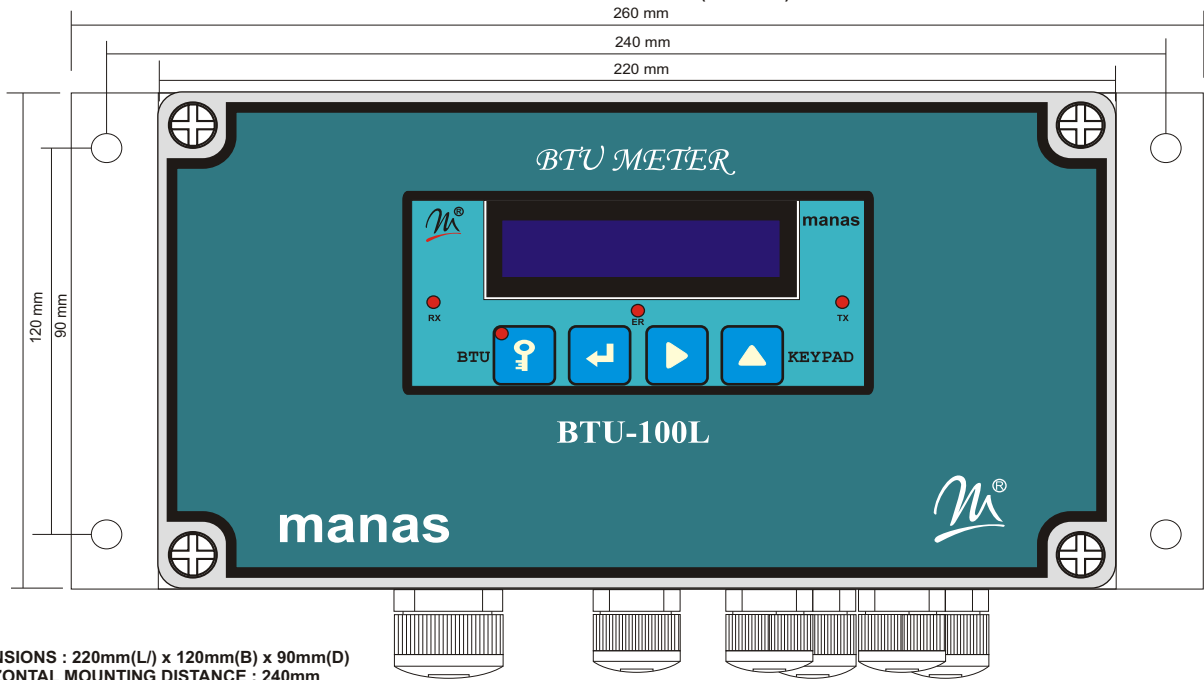
- Compact Wall mounting design with IP 65 Enclosure
- 16x2 LCD for total energy as well as instantaneous power.
- Display of chilled water flow, power temperature available.
- Choice of mounting either on inlet or on outlet as per site conditions.
- Choice of Engg. Units : KW or BTU
- Data storage up to 1 year with hourly storage facility with real time.
- Storage can be viewed by scrolling keys.
- Serial Interface with computer through MODBUS RTU.

BTU 100 L is a versatile compact energy totalizer, extremely useful for measurement of energy conversion. It measures the thermal energy required for air conditioning. It accepts 3 inputs, each one from a flow meter for chilled water, inlet temperature sensor and the outlet temperature sensor. From this it calculates the thermal power and energy consumed in maintaining the temperature at given level. 9 digits are available for total energy and four digits are available for instantaneous power reading. The engg. Unit can be selected by user, either as KW & KWHr Or BTU / Hr & BTU

### \*Technical Specifications :

Input	: a) 4 - 20 mA from flow meter b) RTD, PT - 100 (Inlet Temperature) c) RTD, PT - 100 (Outlet Temperature)
Output	: Isolated 4- 20 mA proportional to power output.
Display	: 16x2 LCD, 9 digits for total energy & 5 digits for instantaneous power.
Totaliser Backup	: Back up for total energy provided on power failure for 2½ years
Power Unit :	BTU/Hr or KW Configurable
Energy Unit	: BTU or KWHr Configurable
Key Board	: 4 no. of keys for programming of parameters.
Accuracy	: ± 0.25% of F.S. w.r.t. inputs.
Operating Temperature	: 0 to 50 °C.
Temperature Drift	: ± 0.015 % / °C
Relative Humidity	: 90% R.H.max. Non condensing.
Data Storage	: 4900 readings (Hourly Logging) as standard feature. 9800 readings as an optional feature.
Log View	: Possible by scrolling of keys.
Fault Condition	: Indicated by various error codes.
Comm. Port	: RS 232 or RS485 as per customer's choice with MODBUS RTU Protocol
Power Supply	: 85 Vac to 265 Vac, 50 Hz, single phase.
Construction	: Aluminum Die cast housing with IP65 Protection. (Wall Mounting)
Dimensions	: 220 mm (L) x 120 mm (H) x 90 mm (D)

FRONT VIEW AND MOUNTING DETAILS FOR BTU METER (BTU-100L) WITH WALL MOUNTING TRAY



**NOTES :**

- 1) DIMENSIONS : 220mm(L) x 120mm(B) x 90mm(D)
- 2) HORIZONTAL MOUNTING DISTANCE : 240mm
- 3) VERTICAL MOUNTING DISTANCE : 9mm
- 4) RECOMMENDED MOUNTING BOLT : M6

Note : "End Connections" EC-02 and EC-03 are available only with line sizes from 1" to 4" and with Body Materials, BM-02 and BM-03

**Ordering Information :**

**FLOW METER SIZE**

DN 25 : 1"	DN 80 : 3"
DN 32 : 1 1/4"	DN 100 : 4"
DN 40 : 1 1/2"	DN 150 : 6"
DN 50 : 2"	DN 200 : 8"
DN 65 : 2 1/2"	DN 250 : 10"

**BODY MATERIAL**

BM-01 : Mild Steel
BM-02 : SS304
BM-03 : SS316

**END CONNECTIONS**

EC-01 : Flanged-ANSI 150
EC-02 : SMS Union
EC-03 : Tri-clover Clamp
EC-04 : Wafer Style

**FLANGE MATERIAL**

FM -01 : Mild Steel/C.S.
FM-02 : SS 304
FM-03 : SS 316

**POWER SUPPLY**

01 : 110 VAC ± 10%, 50 Hz
02 : 230 VAC ± 10%, 50Hz

**BTU** DN 50 BM-01 EC-01 FM-01 PS-02 **SAMPLE ORDERING CODE**

\* Due to continuous development specifications are subject to change without prior notice.

**manas microsystems pvt. ltd.**

REGD. OFFICE : ROW HOUSE NO. 5, PARVATI PARK, DATTAWADI, PUNE 411 030  
 WORKS : EL 54 ELECTRONIC ZONE, M.I.D.C. BHOSARI, PUNE 411 026. (INDIA)  
 TEL. : 020-27127044, 27127047, 27127858 FAX : 020-27127045  
 E-MAIL : mktg@manasmicro.com, manasmicro@yahoo.com  
 WEBSITE : www.manasmicro.com, www.flowmeterindia.in

