AN ISO 9001 : 2008 CERTIFIED COMPANY

CBRO™

BTU METER-Series BTU 250

ELECTROMAGNETIC BTU METER

DN15 to DN1600

- NO MOVING PARTS
- NO MAINTENANCE
- HIGH ACCURACY

INTRODUCTION

CBRO make Electromagnetic BTU meter [BTU-250] is designed to accurately measure the heat or cold energy of a water heating/cooling circuit. It is consisted of three parts, an electromagnetic flow sensor, a pair of temperature sensors and a main unit. The main unit is a powerful console which combines high accuracy flow measurement, temperature measurement and BTU calculation.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 4 digits Are available for instantaneous power reading. The engg. unit can be easily selectable by user, either as KW & KWH or BTU / HR & BTU

APPLICATIONS

- Chilled Water HVAC
- Hot Water HVAC
- Condensate And Heating Water Circuits
- Boiler Feed Water
- Thermal Storage, Geothermal System, Solar Hot-water System
- District Energy Management And Billing
- Commercial Building Tenant Billing
- Leed / Green Building Verification, Green Credit Application
- Energy Consulting
- Power Plant Efficiency Monitoring
- Facility Management In Shopping Malls, Campus, Industrial Parks, Hospitals, Commercial Buildings,
- Government Buildings, Airports And More

MEMBER OF MULTILATERAL RECOGNITION ARRANGEMENT IAF

SNAS
Reg. No. 305/Q-050

FIG 1. ELECTROMAGNETIC FLOW METER

FIG 2. TEMPERATURE SENSOR RTD PT100

FIG 3. BTU UNIT

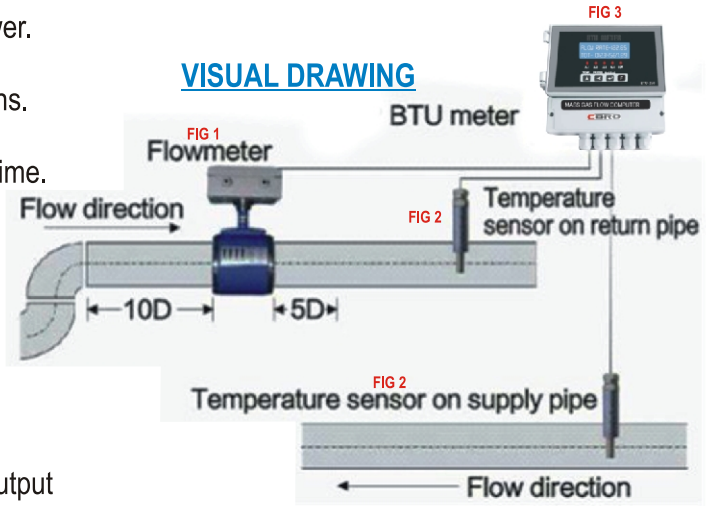
BTU-250 Heat Meter is consisted of an electromagnetic flow sensor, a pair of PT1000 temperature sensors and a BTU unit. The microprocessor-based BTU unit controls the Flow sensor to transmit and receive precise flow measurement. It also has electronics dedicated to the Pt100 sensor to measure the temperature in the supply pipe as well as the return pipe. The BTU unit calculates the heat energy based on the flow rate and the temperature difference between the supply and the return.

CBRO make Electromagnetic Heat Meter stands out among the competition due to its unique reflector-free sensor design. It is able to work reliably even when the water is dirty, which could be the case in the HVAC loop after many years' operation.

ADVANTAGES

- Compact Wall Mounting Design with IP 65 Enclosure.
- 16 X 2 LCD Display For Total Energy As Well Instantaneous Power.
- Display of Chilled Water Flow, Power Temperature Available.
- Choice of Mounting Either on Inlet or Outlet As Per Site Conditions.
- Choice of Engineering Units : KW or BU
- Data Storage Upto 1 year With Hourly Storage facility With Realtime.
- Storage Can Be Viewed By Scrolling Keys.
- Serial Interface With Computer Through MODBUS RTU

VISUAL DRAWING



SPECIFICATIONS

Input	: a) 4-20mA from Flow meter b) RTD, PT-100 (Inet Temperature) c) RTD, PT-100 (Outlet Temperature)
Output	: Isolated 4-20mA proportional to power output
Display	: 16 x 2 LCD, 9 Digits for Total Energy & 5 Digits for Instantaneous Totaliser Power
Totaliser Backup	: Backup for Total Energy provide on power failure for 21/2 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	: ± 0.5% of F. S. w. r. t inputs
Operating Temperature	: 0-50° C
Temperature Drift	: 90% R. H. Max Non condensing
Relative Humidity	: 4900 readings (Hourly Logging) as standard feature.
Data storage	9800 readings as a optional feature
Log View	: Possible by scrolling of keys
Falt Condition	: Indicated by various error codes
Communication Port	: RS 232 or RS 485 as per customers choice with MODBUS RTU protocol
Power Supply	: 85 V AC to 265 VAC, 50Hz, Single phase
Construction	: Aluminum Die cast housing IP65 Protection. (Wall Mounting)
Dimensions	: 220mm(L)x12m(H)x90mm(D)

Users : INDIA, SAUDI ARABIA, SINGAPORE, UAE, USA, INDONESIA, MALAYSIA

Manufactured by :
CBRO INCORPORATION
Reg. Corr. Address : B-204, Princeton Tower, Hiranandani Estate, G. B. Road, Dist - Thane - (W) - 400607, INDIA.
Telefax : +91 251 2271336, Cell : +91 9321727262
www.cbroindia.com