FEATURES

- Microprocessor based
- Linear or Square root input
- Display Rate and integrating Total
- Built-in Transmitter power supply
- DIN Standard Dimensions
- 5 digit Rate and 8 digit Totaliser readouts
- Super Bright 9.14mm LED digits
- Programmable Totaliser rate
- Totaliser pulse output
- 2 built-in programmable alarm relays
- 115/230Vac or 24Vdc/ac power supply
- RS485 and Infra-Red Communications
- 4 User defined Access Control

APPLICATIONS

HTM 8500 Microprocessor based Integrating digital indicators are suitable for the display of any instrument data using 4-20mA signal. e.g. flow, level, pressure, pH, A, V, PF, KW etc. It is particularly useful for the display of flow data where the totaliser readings are essential. Similarly, it is also suitable for the display of flow data in electrical switchboard where KWH readings are required. In addition, HTM 8500 Microprocessor based Integrating digital indicators can be used as Flow or Batch Controllers, Level or pressure alarm relays and any other applications which require data display and alarm relay outputs at the same time.

The Infra-red port of the HTM 8500 Microprocessor based Integrating digital indicators are particularly useful in applications where the totaliser values and instrument data in the indicators are to be collected regularly. By pointing a handheld PDA towards the Infra-red port, all data, including totaliser values and calibration details of the indicator can be collected and downloaded to personal computer for further data manipulations.

When the RS485 port of HTM 8500 Microprocessor based Integrating digital indicators are connected to a Multi-drop loop, the data of up to 256 indicators can be monitored online. With the same configurations, the indicator settings can be changed online by using a host computer.

INTRODUCTION

HTM 8500 Microprocessor based Integrating digital indicators are specially designed for direct interfacing to flow instruments such as magnetic flowmeters and differential pressure flow transmitters where linear and square laws are used. The indicators display flow rate directly in engineering units and at the same time calculate the Total flow against time at programmable rates. The change in totaliser readings are available as pulse output at the wiring terminals.

In standard configuration, the indicators are housed in 96X48mm DIN sized casings with front of panel keypads and Infra-red communication port. The indicators are equipped with back of panel RS485 port and dual programmable alarm relays.

All the indicator settings can be programmed through the front of panel keypads or downloaded from Handheld PDA via the Infra-red port. Data in the indicator can also be down or uploaded into personal computer through the RS485 port.
**SPECIFICATIONS**

Type: 8 Digit seven segment LED  
Rate display: 0 – 50000  
Total display: 0 – 99999999  
Decimal: programmable  
Status display: Display & alarm status  
Totaliser scaling factor: 0.001, 0.01, 0.1, 1, 10, 100, 1000  
Input: 0/4-20mA, 0/1-5V  
Input Impedance: 22 Ohms (current)  
1 Mohms (voltage)  
Input signal type: Linear or Square root law  
Communications: Infra-Red and RS485  
Accuracy: +/-0.05%  
Repeatability: +/- 0.05% of span  
Resolution: 0.01%  
Linearity: 0.05%  
Temperature coefficient: <=5 ppm/°C  
LED Colour: Super red  
Numerical height: 9.14mm  
Pulse output: NPN O/C transistor switch  
Pulse output scaling: One pulse per integer change  
Pulse width: Minimum 60msec  
Max. pulse rate: 15 pps  
Relay output: 2 DPDT relay programmable as High or low alarm for rate or total rated 1A@230Vac  
Power supply: (+15/-10%)  
VDC: 24  
VAC: 24, 110, 220, 240  
Power consumption: DC - 6W Max.  
AC - 6VA Max.  
Transmitter power supply: 24Vdc 25mA  
Dielectric strength: AC 1.5kV for 1 minute  
Setup retention: 100 years  
Casing: Black flame retarded glass fibre reinforced Noryl™ GFN2SE  
Enclosure: DIN43700  
Power input terminal size: 2.5mm² cable  
Operating temp.: 0 to 60°C  
Relative humidity: 95% non-condensing  
Mounting: 2 fixing clamp for panel mount  
Weight: 450g

**DIMENSIONS**

All dimensions in mm

**CONNECTIONS**

![Connections Diagram]

1 - N  
2 - L  
3 - +ve  
4 - -ve  
5 - Totaliser pulse output  
6 - +  
7 - Reset  
8 - Common  
9 - Security link  
10 - Analogue input -ve  
11 - Analogue input +ve  
12 - 24Vdc Tx power supply +ve  
13 - NC  
14 - Com  
15 - NO  
16 - NC  
17 - Com  
18 - NO

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