HTM

8500 PROGRAMMABLE INTEGRATING DIGITAL INDICATOR



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

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.



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 KW in electrical switchboard where KWH readings required. In addition. HTM 8500 are 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 HTM8500 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.

SPECIFICATIONS

Type: 8 Digit seven segment LED

Rate display: 0 – 50000 Total display: 0 – 9999999 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 Re-inforced Noryl™ GFN2SE

Enclosure: DIN43700

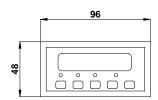
Power input terminal size: 2.5mm² cable

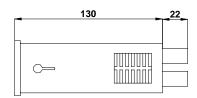
Operating temp.: 0 to 60°C

Relative humidity: 95% non-condensing Mounting: 2 fixing clamp for panel mount

Weight: 450g

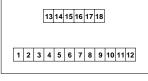
DIMENSIONS





All dimensions in mm

CONNECTIONS



Back view

```
10 - Analogue input -ve
        Power supply
2- L
                                       11 - Analogue input +ve
3 - +ve
        RS485
                                       12 - 24Vdc Tx power supply +ve
4 - -ve
                                       13 - NC
5--
        Totaliser pulse output
                                       14 - Com
                                                   Alarm relay 1
6- +
                                       15 - NO
7 - Reset
                 Reset input
                                       16 - NC
8 - Common
                                       17 - Com
                                                   Alarm relay 2
9 - Security link | Security link
                                       18 - NO
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Manufactured by:

HTM Instruments Sdn Bhd (Company No 687564-T)