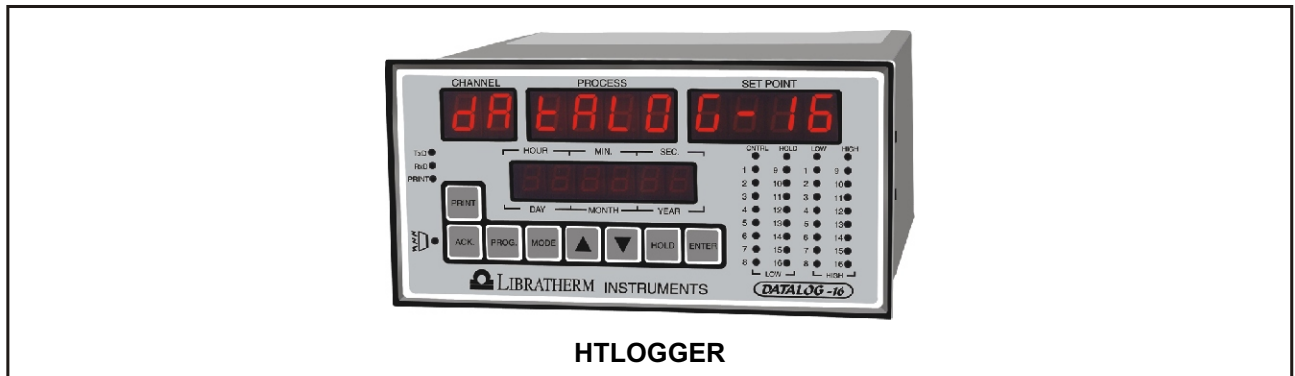


(H5) MICROPROCESSOR BASED TEMPERATURE / HUMIDITY DATALOGGER



MODEL WISE DESCRIPTIONS :

SR.NO.	MODEL	DESCRIPTION
9.9	HTLOGGER/X	Microprocessor based Temperature & %RH Data Logger / Scanner with Printer port, RS-485/RS-232 Serial port and Extra 128KB memory bank for Validation process (X=2,4,8,12, 16) channels 1+1 to max 8+8 .

DESCRIPTION :

Libratherm offers Microprocessor based Temperature and Humidity Scanner / Data logger Model HTLOGGER, designed for monitoring temperature and humidity at various locations or at various points in the stability chamber or in the walk in chamber or other identical systems.

HTLOGGER is 16 channel data logger and it can accept 8-Temperature and 8-Humidity input from the std. RTD (Pt-100) temperature sensor and from the capacitive type RH sensor. The instrument displays the temperature in the range 0.0-100.0 °C and humidity in the range of 0.0 - 100.0 % RH on 4 digit 7-segment Red LED display with respect to the channel number along with the respective unit of measurement.

In addition to this the HTLOGGER has many other

useful features such as Separate display to indicate Real time clock / calendar. In-built storage facility, which can be retrieved on demand or can be down loaded on to a computer or on a printer for hard copy via the printer port in both off line and on line mode. The data storage capacity depends on the logging time and the number of channels. Internal 128KB of memory allows 3000 records of storage.

This instrument is provided with a Serial communication port RS 232 / RS 485 for interfacing to a computer for data logging and storage. Specially designed window based software does the on line data logging and plot the graph with respect to the time on the PC. Special 2 level Pass Word protection (operator & supervisory) for unauthorized tempering of the parameters is also provided.

FEATURES :

- ◆ Microprocessor based design.
- ◆ Separate display for Temperature/RH, process point and Channel and real time clock.
- ◆ Easy front panel keyboard programmable.
- ◆ Channel Hold/Scan facility.
- ◆ Programmable scan time.

APPLICATION:

- ▶ Validation of process
- ▶ Environmental Test Chambers
- ▶ Walk In Chambers
- ▶ BOD Incubator etc

TECHNICAL SPECIFICATIONS:

No. Of Inputs	2, 4, 8, 12, 16 (Max. 8 Temperature and 8 Humidity).
Input	Temperature and %RH sensor / Transmitter (Pt-100 / Capacitance based).
Range	-80.0 to 100.0 °C or 200.0 °C and 0.0 to 100.0 %RH.
Resolution	0.1 °C or %RH
Accuracy	Better than $\pm 0.1\%$ for temperature and linear to the %RH input
Display	2 digit 0.5" Red 7-segment LED display for channel no. 4 digit 0.5" Red 7-segment LED display for process parameter. 4 digit 0.5" Red 7-segment LED display for process value. 6 digit 0.3" Red 7-segment LED display for Real Time Clock / Calander
Open Sensor Indication	Display shows FI-1 or FI-2 and relays will be turned OFF.
Settings	Using front panel membrane keyboard to set the various parameters, to configure the channel and to manually scan and hold the channel number.
Memory Backup	Retention of PID and set values in the non-volatile memory in the event of power failure.
Alarm Outputs	2 Extra Relay outputs, which can be used as High/Low Alarms (Relay changeover contacts rated for 5A @ 230VAC). Open collector output per input (optional)
Data Logging	Real Time with programmable log and storage time.
Data Storage	2K to 128K-memory bank. (Duration of storage depends on log interval)
Interface	Serial (RS232/RS485) for PC interface with Window based software on Modbus ASCII Protocol.
Supply	230VAC / 110 VAC $\pm 10\%$ (10VA), 50/60Hz or 24VDC @ 500mA.
Size	192 x 96 x 200 mm
Panel cut out	188 x 92 mm +/- 0.5 mm.
Enclosure	Metal Powder coated with ABS front and polycarbonate graphic.

ORDERING INFORMATION :

MODEL	NO. OF CHAN. (A)	INPUT (°C) (B)	RANGE (°C) (C)	INPUT %RH (D)	RANGE %RH (E)	ALARM OUTPUTS (F)	COMM. PORT (G)	SUPPLY (H)
Htlogger	2 (1+1) (A1)	(0-1)VDC (B1)	0.0 to 65.0 (C1)	(0-1)VDC (D1)	0.0 to 100.0(E1)	High/Low Alarm(F1)	RS 485(G1)	230VAC (H1)
/X	4 (2+2) (A2)	Pt-100 (B2)	0.0 to 100.0(C2)	(1-3)VDC (D2)	0.0 to 99.9 (E2)	Open Collector (F2)	Printer (G2)	110VAC (H2)
X = 2, 4, 8,	8 (4+4) (A3)	(4-20) mA(B3)	0.0 to 60.0 (C3)	(4-20) mA (D3)	Other (E3)	Both (F3)	Both (G3)	
12, 16	12 (6+6) (A4)	Other (B4)	Other (C4)	(1-4)VDC (D4)		None (F4)	None (G4)	
	16 (8+8) (A5)			Other (D5)				

EXAMPLE:

MODEL	A	B	C	D	E	F	G	H
HTLOGGER/16	A 3	B 2	C 1	D 1	E 1	F 1	G3	H1

This is 16 channel (8-Temperature and 8-Humidity) Temperature / Humidity Data logger with Pt-100 input for temperature having range (0.0-65.0)°C and (0-1)DC input for %RH having range (0.0-100.0)%RH and High/Low Alarm Relay common for all the channels with Printer port for 80 column dot matrix printer & RS 485 port for PC interface. Operating on 230VAC supply.