

Digital Temperature / Process Scanner

(Product Code 7.1)



Model Wise Description:

Sr. No	Model	Description (XX = No. of channel)	Size (mm.)
7.1	MSI-8-XX	Digital Temperature/Process Scanner (XX = 04,06,08 points)	96 x 96 x 120

Description:

Libratherm offers Digital Temperature / process Scanner Model MSI-8 which is suitable for continuous monitoring of temperature or process values at different locations using single instrument, thereby eliminates the need for number of individual temperature or process indicators and hence saves on cost and panel space. MSI-8 accepts all inputs of the same type and displays the process value sequentially along with the respective channel number. The scan interval is adjustable from 2 to 20 seconds. The facility is also provided to manually pause the scanning and increment the channel manually in HOLD mode.

Other than inputs from temperature sensors this Model can also accept (4-20)mA or (0-5) or (0-10) Volt signals to monitor other process variables like pressure, flow, pH, ORP, AC voltage, AC current, etc.

Features:

- ❖ Available in standard ¼ DIN sizes.
- ❖ Highly accurate and sturdy in operation.
- ❖ Elegant looks and Very easy to operate.
- ❖ Accepts standard inputs like thermocouple, RTD - Pt-100 2 or 3-wire input, etc.
- ❖ Models with 4, 6, & 8 inputs are available.

Application:

- ◆ Heat treatment plants, Large tunnel Furnace / Oven
- ◆ Transformer oil temperature
- ◆ Power plant
- ◆ Food processing ovens
- ◆ Laboratory equipment.etc.

Technical Specifications:

No of channels	4, 6, 8
Input	J, K, thermocouple or RTD(Pt-100)/2 or 3 wire or 0-5V, 0-10V, or 4-20mA. (Refer table given below)
Range	Standard ranges as per the table given below – or user can specify the desired range.
Accuracy	Better than +/- 0.5 to 1.0 % of the specified range.
CJC	Automatic for thermocouple input.
Display	3.5 digit 0.5" 7-segment Red LED for Process Value and single digit for channel number - Indication
Open Sensor Indication	Display shows (1) MSD.
Scan Time	2 to 20 Seconds adjustable using front panel potentiometer
Channel Scan / Hold/Advance	Selectable using front panel membrane switch.
Supply	230VAC or 110 VAC ± 10% (5VA), 50/60Hz OR 24VDC @ 100mA
Size / Panel cut out	96 x 96 x 120 mm / 92 x 92 mm.
Enclosure	Metallic with ABS bezel and polycarbonate front fascia

Input and Range Selection Table:

Code	Input	Range
A1	-----	-----
A2	J type : Fe/Con thermocouple	0 to 400 °C
A3	K type : Cr/Al thermocouple	0 to 1000 °C
A4	T type : Cu/Con thermocouple	0 to 350 °C
A5	E type : NiCr/CuNi thermocouple	0 to 900 °C
A6	N type : Ni-Cr-Si/Ni-Si-Mg	0 to 1000 °C
A7	Pt-100 (Alpha = 0.00385) DIN 43760	0.0 to 199.9 °C
A8	Pt-100 (Alpha = 0.00385) DIN 43760	-100.0 to 100.0 °C
A9	4-20mA	0 to 1999 unit
A10	4-20mA	-100.0 to +100.0 UOM
A11	0-5VDC	0 to 1999 UOM
A12	0 -10VDC	0 to 1999 UOM
(*) UOM – Unit of Measurement – such as Kg/Cm ² , PSI, pH, A, V, % etc...		

Ordering Information:

Model	A- Channel Input (Use above table)	B- Supply
MSI-8-04	A2 to A12	B1-(230 VAC)
MSI-8-06	A2 to A12	B2-(110 VAC)
MSI-8-08	A2 to A12	B3-(24 VDC)

Examples:

Model	A- Channel Input	B- Supply
MSI-8-04	A10	B3-(24 VDC)
MSI-8-06	A2	B1-(230 VAC)
MSI-8-08	A6	B2-(110 VAC)

Example	Ordering Code	Description
1	MSI-8-04-A10-B3	This is 4 channel temperature scanner accepting 4-20mA as input with calibration range of -100.0 to +100.0 UOM and operating on 24VDC. (UOM – Unit of Measurement – such as Kg/Cm ² , PSI, pH, A, V, % etc...)
2	MSI-8-06-A2-B1	This is 6 channel temperature scanner accepting K type thermocouple as input with calibration range of 0 to 1000 °C and operating on 230VAC.
3	MSI-8-08-A6-B2	This is 8 channel temperature scanner accepting RTD Pt-100 as the input with calibration range of and operating on 110VAC.

REMARK :