



408-M Digital Indicator

Model 408-M has a large LED display of 0.8" which facilitates plant operator to read process data very conveniently from far distance. Model 408-M is micro controller based indicator with high accuracy and has a multiple input selection capability which helps user to maintain common inventory. It is also equipped with field selectable inputs and field scalable ranges for flexible operations

Built-in transmitter power supply eliminates the need of additional power supply to excite field transmitter, which makes this model well equipped.

It is a low cost high performance indicator which offers high accuracy of $\pm 0.25\%$ of full scale. This model can be used for Pt 100, five different types of thermocouples and four types of linear inputs.

408-M is easy to operate and configuration is user friendly. CJC compensation for thermocouple input is done through software for higher accuracy.

The input is protected from reverse connection and over range inputs.

Features

- 4 digit 0.8" LED Display
- 8 selectable input types (TC, RTD, mA, V)
- Transmitter Power Supply
- Excellent longterm stability
- Easy configuration from front keys

Applications

- Temperature & process indication
- Plastics molding/extrusion temperature monitoring
- Heat treatment - furnace temperature monitoring
- Chillers
- Water heating boilers
- Oven control
- Pressure/ Level/ Flow Monitoring

Technical Specifications

Input	
Input Type	Thermocouple (J, K, T, R, S), RTD (Pt100), Current, Voltage
Display Range	Refer Table-1
Accuracy	±0.25% of FS ± 1Digit
ADC Resolution	16 bits
Display Resolution	0.1°C / 1 Count
Sampling Rate	5 Samples/Sec
CJC Error	±2.0 °C
Sensor open	All inputs except 0-5V, 0-20mA
Sensor Burnout current	0.25uA (Approx.)
RTD excitation current	0.166mA (Approx.)
NMRR	> 40 dB
CMRR	> 120 dB
Temp-co	< 100ppm for Input to Display
Input Impedance	> 1MΩ
Max Voltage	20VDC

Display & Keys	
Process Value	0.8", four-digit Seven segment Red LED
Keys	Enter, Increase, Decrease

Output	
Transmitter Power Supply	24VDC (±10%) @26mA

Power Supply	
Standard	85-265VAC/ 125-300VDC
Optional	18 to 36VDC
Power Consumption	<5VA

Isolation (Withstanding voltage)

- Between primary terminals* and secondary terminals**: At least 1500 V AC for 1 minute
- * Primary terminals indicate power terminals
- ** Secondary terminals indicate analog input signal

Physical	
Dimensions(in mm)	96(W) x 48(H) x85(D)
Depth Behind Panel(in mm)	75
Panel Cutout(in mm)	92 x 46
Mounting	Panel Mount
Weight	260 g (Approx.)
Enclosure material	ABS Plastic
Enclosure Protection	IP20
Terminal Cable Size	2.5 mm ²
Standard Accessories	2 Nos. Clamp,

Environmental	
Operating temperature	0-55 °C
Storage temperature	0-80 °C
Humidity	20-95 % RH non-condensing

Table-1: Display Range		
	Input Type	Range
Thermocouples	J	-200 to 1200°C
	K	-200 to 1372°C
	T	-200 to 400°C
	R	0 to 1768°C
	S	0 to 1768°C
RTD	Pt-100	-199.9 to 850.0°C
Linear	0/1-5V	-1999 to 9999
	0/4 to 20mA(Ext. 250Ω)	
	0-10V	

Ordering Code

Model	Input		Auxiliary Power Supply	
408-M	1	J	U1	85-265VAC / 125-300VDC
	2	K	U2	18-36VDC
	3	T		
	4	R		
	5	S		
	6	Pt-100		
	C	4-20mA		
	D	0-20mA		
	E	1-5V		
	F	0-5V		
	G	0-10V		

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All specifications are subject to change without notice due to continuous improvements.
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