



406 408-M Digital Indicator

Masibus' Digital Indicator, Model 406 and 408-M is a micro-controller based 4 digit process indicator, designed to accept multiple input types. Model 406 has 0.56" display size and model 408-M has 0.8" display size which facilitates plant operator to read process data very conveniently from a far distance.

Both models are 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 Pt100, five different types of thermocouples and four types of linear inputs.

It 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 digits, 0.56" or 0.8" LED Display
- Universal input (TC, RTD, Volts, mA)
- 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		Physical		
Input Type	Thermocouple (J, K, T, R, S), RTD (Pt100), Current, Voltage	Dimensions (in mm)	96(W) x 48(H) x 85(D)	
Display Range	Refer Table-1	Depth Behind Panel (in mm)	75	
Accuracy	±0.25% of Full Span + 1°C for T/C and RTD input ±0.1% of Full Span + 1 count for Linear input	Panel Cutout (in mm)	92(W) x 46(H)	
ADC Resolution	16 bits	Mounting	Panel Mount	
Display Resolution	0.1°C / 1 °C	Weight	260 g (Approx.)	
Sampling Rate	5 Samples/Sec	Enclosure material	ABS Plastic	
CJC Error	+/-3°C	Enclosure Protection	IP20	
Sensor open	All inputs except 0-5V, 0-10V	Terminal Cable Size	2.5 mm ²	
Sensor Burnout current	0.25uA	Standard Accessories	2 Nos. Clamp	
RTD excitation current	0.166mA (Approx)	Environmental		
NMRR	> 40 dB	Operating temperature	0-55 °C	
CMRR	> 120 dB	Storage temperature	0-80 °C	
Temp-co	< 100ppm for Input to Display	Humidity	20-95% RH non-condensing	
Input Impedance	> 1MΩ for Voltage Input 250Ω for Current Input	Table-1: Display Range		
Max Voltage	20V DC	Input Type	Range	
Display & Keys		Thermocouples	J	-200 to 1200°C
Model	406		K	-200 to 1372°C
PV Display	0.56", 4-Digits, 7-segment Red LED	T	-200 to 400°C	
Keys	Enter, Increase, Decrease	R	0 to 1768°C	
		S	0 to 1768°C	
		RTD	Pt100	-199.9 to 850.0°C
		Linear	0/1-5V	
			0/4 to 20mA (Ext. 250Ω)	-1999 to 9999
			0-10V	
Output				
Transmitter Power Supply	24VDC (±10%) @26mA			
Power Supply				
Standard	85-265VAC/ 100-300VDC			
Optional	18 to 36VDC			
Power Consumption	<3 VA			
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				

Ordering Code

Model	Input Type	Auxiliary Power Supply
406	2 J	U1 85-265VAC / 100-300VDC
408-M	3 K	U2 18-36VDC
	4 T	
	6 R	
	7 S	
	9 Pt100	
	C 4-20mA	
	D 0-20mA	
	E 1-5V	
	F 0-5V	
	G 0-10V	