

masibus®

A Sonepar Company



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 K T R S -200 to 1200°C -200 to 1372°C -200 to 400°C 0 to 1768°C 0 to 1768°C
Model	406	RTD	Pt100 0/1-5V -199.9 to 850.0°C
PV Display	0.56", 4-Digits, 7-segment Red LED	Linear	0/4 to 20mA (Ext. 250Ω) 0-10V -1999 to 9999
Keys	Enter, Increase, Decrease		
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	