Indicator (Model 408-2IN)

Masibus' large digit display Model 408-2IN accepts universal process inputs. From these inputs the display can be scaled to remotely read in engineering units. Unregulated transmitter power supply is provided as standard on AC supply models.

For industrial applications demanding large displays while subjected to outdoor elements, high ambient light areas, Masibus offers series of Large Display Indicators in various sizes, where the LED display is visible from a long distance.

Model 408-2IN is micro-controller based design which accepts major industry standard inputs like RTD, thermocouples, mA, V, etc.

Model 408-2IN large digit displays are your flexible solution when a display needs to be viewed over distances as long as 80 feet (25 m). A rule of thumb is that viewing distance in feet is 40 times the digit height in inches, or in metric terms, the viewing distance in meters is digit height in millimeters divided by 2.

Depending on the selected digit size and mounting location, a Model 408-2IN display with normal brightness LEDs can be read across an entire plant floor, keeping the workforce informed of important process values at their work areas, eliminating the need to view from a small computer screen or local control panel.

Model 408-2IN displays are complete functional units, with all the necessary signal conditioning, power supply and display circuitry. Just apply power 230 VAC, connect your input signal, and display your reading. This model is packaged in MS power coated enclosure of size 192(W) x 96(H) x 70(D) in mm which makes it unit rugged & reliable.

Features

- *Microprocessor based large display indicator*
- *High accuracy*
- *8 selectable input types*
- *4 digit LED display of 45mm (1.8") high*
- *Built-in Transmitter Power Supply*
- *192 x 96mm enclosure*
- *Excellent long-term stability*
- *Easy configuration from front keys*
- *Digital calibration*

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Indicator (Model 408-2IN)

HARDWARE SPECIFICATIONS	408-2IN
Measured Input Signal	
Number of Inputs	1
Input Type, Measurement Range & accuracy	As per table 1
Sampling Period	250 ms
Burn out detection	Available with TC, 1 to 5VDC, 4 to 20mA
Burn out current	0.5 μA
Measuring current (RTD)	0.1 mA
Input Impedance	TC /mV / V: 1M
Allowable lead-wire resistance	15 / wire or less Effect from allowable lead wire resistance: 0.66°C / 10 or less
Allowable Input Voltage	TC / RTD: ±10V DC DC voltage: ±20V DC
Noise Rejection Ratio	
Common Mode:	> 120 dB (50 Hz)
Normal Mode:	> 45 dB (50 Hz)
Reference junction compensation error	± 1.5 °C (20 to 45°C)
Applicable standard	ITS-90 or IPTS - 68
24V DC Loop Power Supply for sensor	24 VDC ±5 % @ 30 mA
Display Unit Specification	
Process Value display	4- digit 7- segment Red LED (1.8")
Display update rate	250 mS - TC, 400 mS - RTD
Construction/Installation/Wiiring	
Enclosure	General purpose
Body construction	MS Powder coated
Case color	Dark Grey
Weight	Approximately 1 kg
Dimensions	192W x 96H x 70D (all in mm)
Mounting	Panel mount / Grid mount compatible
Panel Cut-out	188(W) x 92(H) (all in mm)
Wiring	2.5 Sq. mm Terminal
Standard Accessories	2 mounting clamp, 250 resistor
Power supply/Isolation	
Power supply	230 VAC (-15% to +10%) @ 50Hz
Power consumption	Less than 10 VA
Isolation resistance	Between power supply terminal and ground terminal, 500V DC 50 M
Isolation Specifications	
Measured Input terminal	Isolated from other input terminals.
24V DC Supply for Transmitter	Isolated from other input terminals
Power supply terminal	Isolated from other input terminals and internal circuit.
Ground terminal	Isolated from other input terminals and internal circuit.
Environmental Conditions	
Normal Operating conditions	
Ambient Temperature	0 to 55 deg C
Ambient humidity	20 to 90% RH (non-condensing)
Warm up time	> 45 min

HARDWARE SPECIFICATIONS	408-2IN
Storage conditions	
Temperature	0 to 70 deg C
Humidity	20 to 90% RH (non-condensing)
Effect of operating conditions	
Effect of Ambient temperature	For T/C input, ± 0.1% of F.S./ °C or less For Voltage input, ± 0.05% of F.S./ °C or less For RTD input, ± 0.13% of F.S./ °C or less
Effect on power supply flucutation (within rated voltage range)	For anlog input, within ± 0.005 % of F.S./ 10V

TABLE 1		Range	Measurement Accuracy
Input Type			
Thermocouples	J	-100 to 1200 °C	± (0.25% of FS ± 1 count)
	K	-100 to 1372 °C	± (0.25% of FS ± 1 count)
	T	-100 to 400 °C	± (0.25% of FS ± 1 count)
	R	0 to 1768 °C	± (0.25% of FS ± 1 count)
	S	0 to 1768 °C	± (0.25% of FS ± 1 count)
TD	Pt-100	-199.9 to 850.0 °C	± (0.25% of FS ± 1 count)
DC Voltage	1-5V	-1999 to 9999	± (0.1% of FS ± 1 count)
	0-5V	-1999 to 9999	± (0.1% of FS ± 1 count)

ORDERING CODE

Model	Input Type		APS		Mounting	
408-2IN	X		XX		XX	
	2	J	A1	110Vac	P0	Panel
	3	K	A2	230Vac		
	4	T				
	6	R				
	7	S				
	9	Pt-100,3W				
	C	4-20mA				
	D	0-20mA				
	E	1-5Vdc				
	F	0-5Vdc				

X - Specify from table

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