TSM-160 Multi Channel Process Indicator

The TSM-160 is a process indicator with multiple inputs that is designed to display and monitor process variables such as temperature, pressure, level, flow, and other parameters in industrial processes.

It is often used in manufacturing, chemical processing, and other industrial applications to monitor and control critical process variables.

One of the key features of the TSM-160 is its ability to support multiple input types, including analog signals such as 4-20mA, 0-10V, and thermocouples. This makes it a versatile tool for measuring and displaying a wide range of process variables. The TSM-160 has a bright and clear LED display that provides real-time information about the process variable being monitored. Up to 8 or 16 inputs can be connected simultaneously and the auto-scanning display will rotate each PV for a configurable display interval.

It may also include additional features such as alarms, and communication protocols, such as Modbus if specified, that can allow it to integrate with other process control systems.
Overall, the TSM-160 is a reliable and flexible process indicator that can be used in a variety of industrial applications to monitor and control critical process variables.

- Dual 4-digit 7 segment LED display, 0.2% FS accuracy
- Programmable universal input: TC / RTD / mA / VDC
- Input channels no: 8 & 16
- Built in thermocouple automatic cold junction compensation
- Multi-channel auto scanning display
- Optional outputs: 4-20mA retransmission, relay, 24VDC Aux power
- Modbus RTU / Modbus TCP available

Accuracy	±(0.2%FS+1)digit
Sampling Time	1 second when fliter=0
Display Interval Time	1-240 seconds
Input Type	Thermocouple, RTD, mA, VDC
Isolation	Isolated input or not, optional
T.C. cold compensation	Built- in auto. Compensation
Filter	0-99, programmable
Offset	-99.9 to 9999, programmable
Retransmission output	4-20ma output, 2 wire
Relay output	NO, NC, NO+NC, 220VAC/0.8A
Alarm Type	HA, -HA, LA, -LA , up to 2 limits
Communication	RS485,RS232, standard Modbus-rtu
Baud rate	9600 default
Case material	ABS for case and bezel
Terminal	M5 screw terminal
Mounting	Panel mounting
Size / Net Weight	160 x 80 x 100mm (L x W x D) / 0.8kg

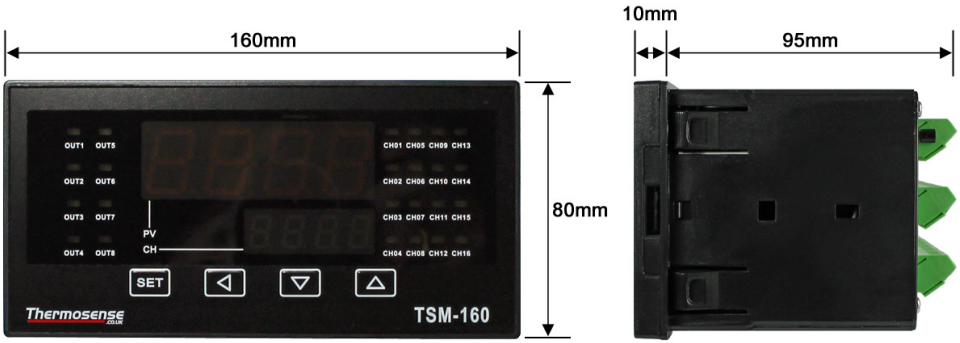
Power supply		100-240VAC; 24VDC
Power consumption		Max. 5W
Working ambient		T:0 to 50°C, H:10%-85%RH(No dew)

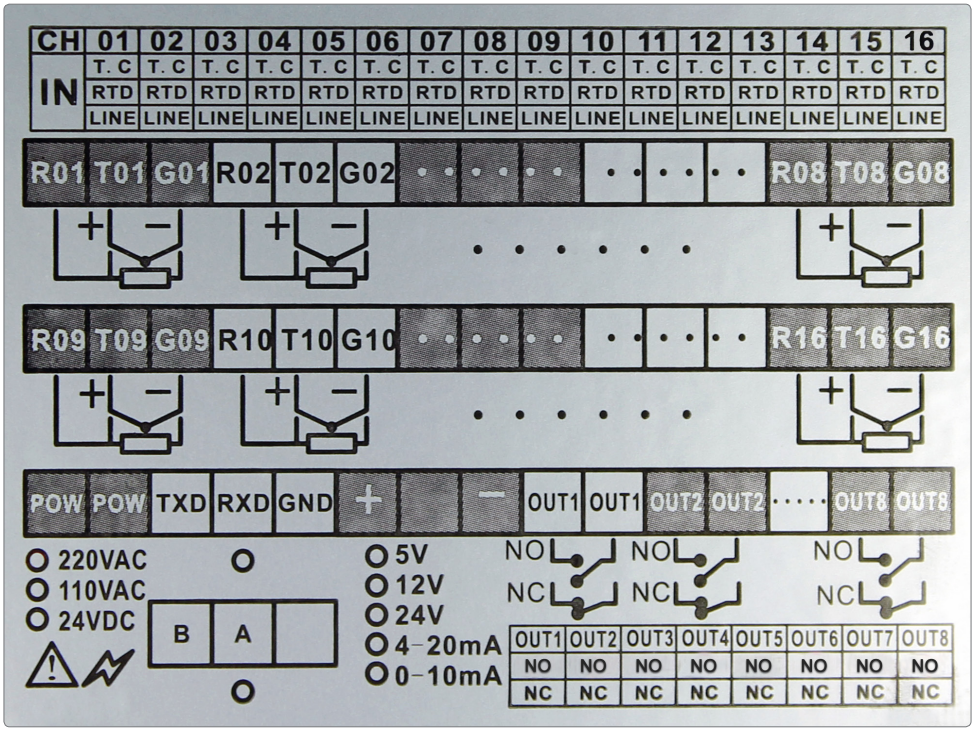
Input Type		Measured Range
RTD	**Pt100**	-200 to 600°C
CU50		-50 to150°C
Thermocouple	**B**	300 to 1800°C
	E	0 to 800°C
	J	0 to 1000°C
	K	-50 to 1300°C
	N	0 to 1300°C
	S	-50 to 1700°C
	T	-200 to 350°C
Analog	**4-20mA**	-999 to 9999
0-10mA		-999 to 9999
0-5VDC		-999 to 9999
1-5VDC		-999 to 9999

Panel Display

PV: Process value, 4 digits, 7 segments LED
CH: Channel no. display CH01...CH16
OUT1-OUT8: Output indicating light
CH01-CH16: Channel indicating light

UP: Up key
DOWN: Down key
MOVE: Move key
SET: Confirm key





Note: when using a 4-20mA input, please connect a 50ohm resistor in parallel connection in input terminals