



8 CHANNEL SCANNER AND MODBUS FACILITY

MSU-1248-M1

APPLICATIONS

Pharma & Chemical Industry application

Generator
Monitoring & Protection

Remote terminal unit (RTU) For SCADA

Compressor/Pump/DG set monitoring

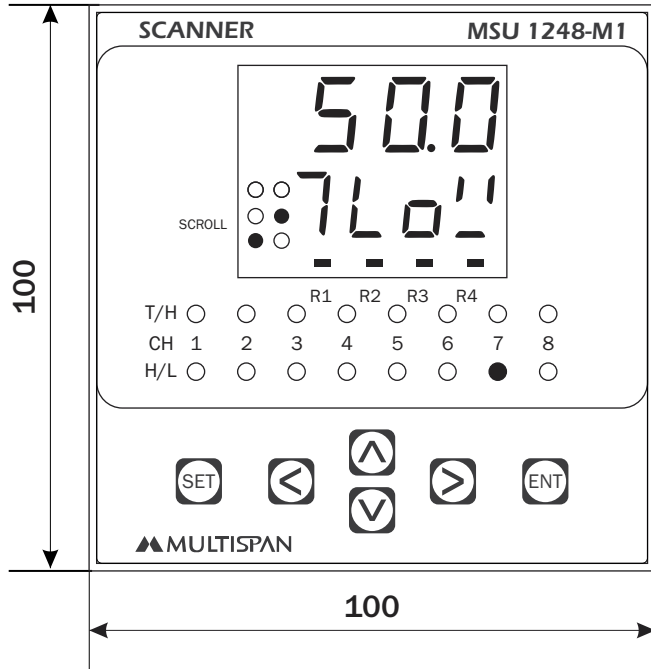
Machine Condition Monitoring

As a distributed I/O module
for interface with PLC/DCS/SCADA

Laboratory Equipment Monitoring

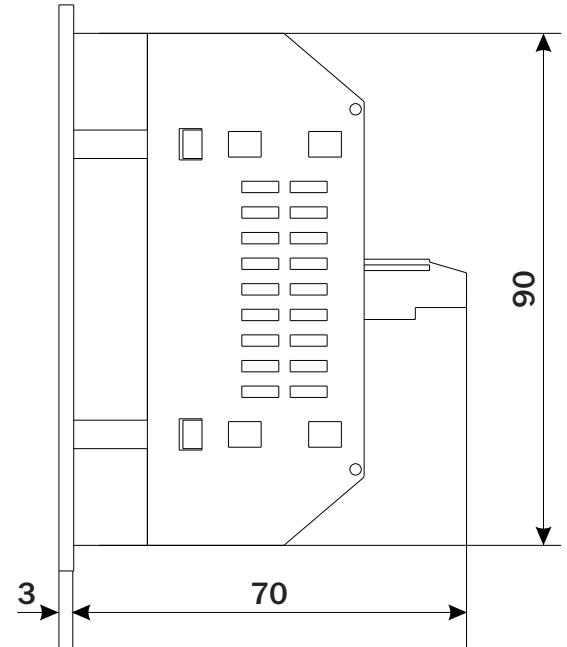
Mechanical Dimensions

Body Dimensions



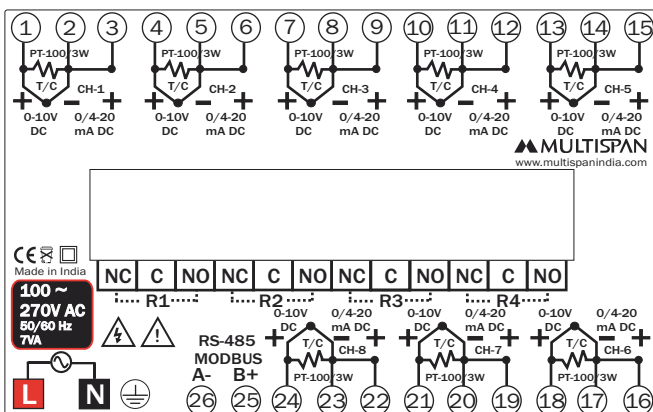
FRONT VIEW

All dimensions are in mm

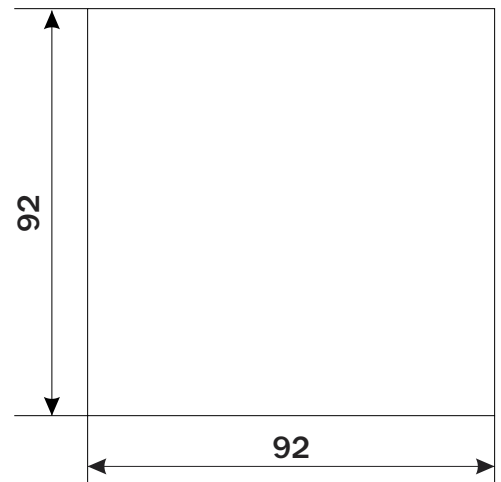


RIGHT SIDE VIEW

Connection Diagram



Panel Cutout



TECHNICAL DATA

Input	Thermocouple	J / K (Configurable)
	RTD	PT-100 3 Wire / 2 Wire (Configurable)
	Analog	0-10V DC/ 0-20mA DC/ 4-20mA DC (Configurable)
Range	Thermocouple	J: 0 to 600° C, K: 0 to 1200° C
	RTD	PT-100: -99° C to 400° C , PT.1: -99.9° C to 400.0° C
	Analog	-999 to 9999
Output	Output 1	4 Relay With Grouping Facility
	Output 2	RS 485 MODBUS Communication
Power Supply		100 to 270V AC , 50/60Hz, Approx 7VA
Accuracy		± 1 % FSD
Certification		

Input		
Input	Thermocouple	J / K
	RTD	PT 100/3W
	Analog	0 - 10V DC, 4 - 20mA DC 0 - 20mA DC
ADC Resolution		16 Bits
Display Resolution		Thermocouple : 1° C RTD : 1° C / 0.1° C Analog input : 0000/000.0/00.00 Decimal Point Selectable
Sampling Rate		250 mS/Channel
Accuracy		± 1 % FSD
CJC error		±3° C
Sensor Open		J / K / PT
T/C Burnout current		1.10uA
RTD excitation current		0.2mA
CMRR		> 120 db (Typical)
Input Impedance		> 1 M
Max Voltage		20V DC

Input Range	
Input Type	Range
J	0 to 600° C
K	0 to 1200° C
PT-100	-99 to 400° C
PT.1	-99.0 to 400° C
4-20 mA DC	-999 to 9999
0-20 mA DC	-999 to 9999
0-10 V DC	-999 to 9999

Power Supply	
Standard	100 - 270V AC @ 50/60Hz
Optional	24V DC
Consumption	7VA

Display	
Process Value	Upper : 0.70" 4 Digit Red LED 7 Segment Display
Channel No. and Relay Status	Lower : 0.50" 4 Digit Green LED 7 Segment Display
LED Indications	Status of each relay and Alarm

Keys

6 controlling keys for configuration and operation

Relay Output

No of Relay	4
Type	1 C/O , NO-C-NC
Rating	5A @ 230V AC/30V DC

Communication (Optional)

Type	RS 485
Protocol	MODBUS RTU
Baud Rate	4800, 9600, 19200 (Configurable)
Isolation	2500 V _{RMS} Isolation as per UL 1577

Environmental Characteristics

Working Temperature	0 to 55 °C
Storage Temperature	0 to 55 °C
Relative Humidity	95% RH Non-condensing
Ingress Protection	IP 65 (Front Side)

Mechanical Characteristics

Mounting Type	Panel Mount
Dimension (HxWxD) mm	100 x 100 x 70
Panel Cutout (HxW) mm	92 x 92
Material	Body Enclosure
	Polycarbonate (PC) ABS
Terminal Screw Size	M3.5
Screw Torque (N.m)	0.5
Wire Gauge (AWG)	28-12
Weight (Approx) gms	Unpacked : 320 Packed : 375
Accessories	1 Pair of Mounting Clamps