

# MSU-1244U-M1

4 Channel  
Temperature Scanner  
With Modbus Facility.



## TECH SPECS

Dimension (H x W x D)mm		96 x 96 x 66
Panel Cutout (H x W)mm		92 x 92
Input	Thermocouple	J / K
	RTD	PT-100 3 Wire / 2 Wire
	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
	Output 3	USB Port With Data logging Facility
Accuracy	± 1 % FSD	
Certification		

## 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

# Technical Specifications

## Input

ADC Resolution	12 bit
Display Resolution	Thermocouple : 1 °C RTD : 1 °C / 0.1 °C Analog input : 0000/000.0/00.00/0.000 Decimal Point selectable
Sampling Rate	250 mS/Channel
J , K , PT-100 , PT.1 , 4-20mA DC, 0-20mA DC, 0-10V DC	± 1 % FSD
CJC error	±3 °C
T/C Burnout current	1.10uA
RTD excitation current	0.2mA
CMRR	> 120 db ( Typical )
Input Impedance	> 1 M
Max Voltage	20V DC

## Input Table 1

Input Type	Range
J	0 to 600 °C
K	0 to 1200 °C
PT-100	-99 to 400 °C
PT.1	-99.9 to 400.0 °C
4-20 mA DC	-999 to 9999
0-20mA DC	-999 to 9999
0-10 V DC	-999 to 9999

## Power Supply

Standard	100 - 250V AC @ 50/60 Hz
Optional	24V DC
Consumption	4VA

## Relay Output

No of Relay	4
Type	1 C/O
Rating	5A @ 230V AC / 30V DC (Resistive Load)

## Display & Keys

Process Value	Upper : 0.70" 4 Digit Red LED 7 Segment Display
Channel No. & Relay Status	Lower : 0.5" 4 Digit Green LED 7 Segment Display
LED Indications	Status of each relay and Alarm
6 controlling keys for configuration and operation Set, Ent, Up, Down +2	

## Environmental

Operating Temperature	0 to 55 °C
Storage Temperature	0 to 70 °C
Humidity	95% RH Non-condensing

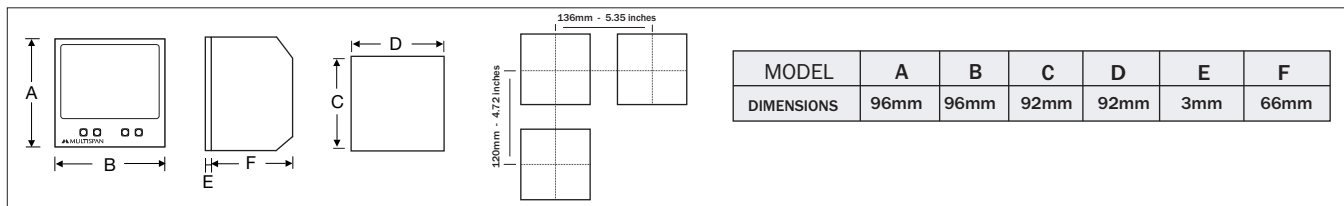
## Physical

Enclosure	Molded ABS
Weight (gm)	215
Color	Black
Front Bezel (mm)	96 x 96
Panel cutout (mm)	92 x 92
Depth behind panel (mm)	66
Accessories	1 pair of Mounting clamp

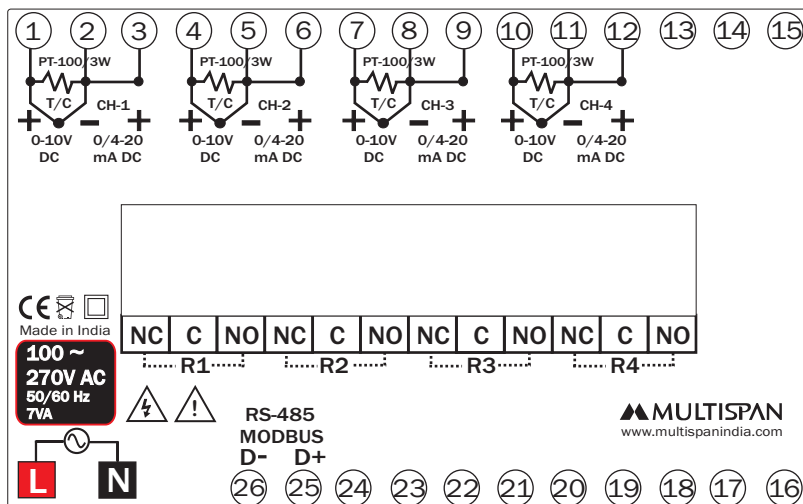
## Data Logging(Optional)

Memory Type	Non Volatile ( 2mb )
Data logging type	Periodic
RTC time format	DD/MM/YY HH:MM:SS
Sampling Time	1 Sec minimum ( Programmable)
USB Port	1 ( USB 2.0 ) Mass Storage
USB Function	For retrieving logged data only
Storage device format	FAT 32
Data fetch file format	.csv ( Microsoft Excel )
Data retrieving option	Full data fetch
Periodic logging sample numbers	8000 max.
Alarm indication for memory full	After 75% memory occupied

## Mechanical Dimension



## Connection Diagram



We reserve the right to change specifications without prior notice. Printing and typographical errors reserved.  
Product improvement and upgrade is a constant procedure. So for more updated operating information & support contact us.