



16 CHANNEL SCANNER WITH USB DATA LOGGER & MODBUS

MS-5716RU-M1

APPLICATIONS

Motor Protection

Generator
Monitoring & Protection

Electrical Sub-station monitoring

Metal and Mining applications

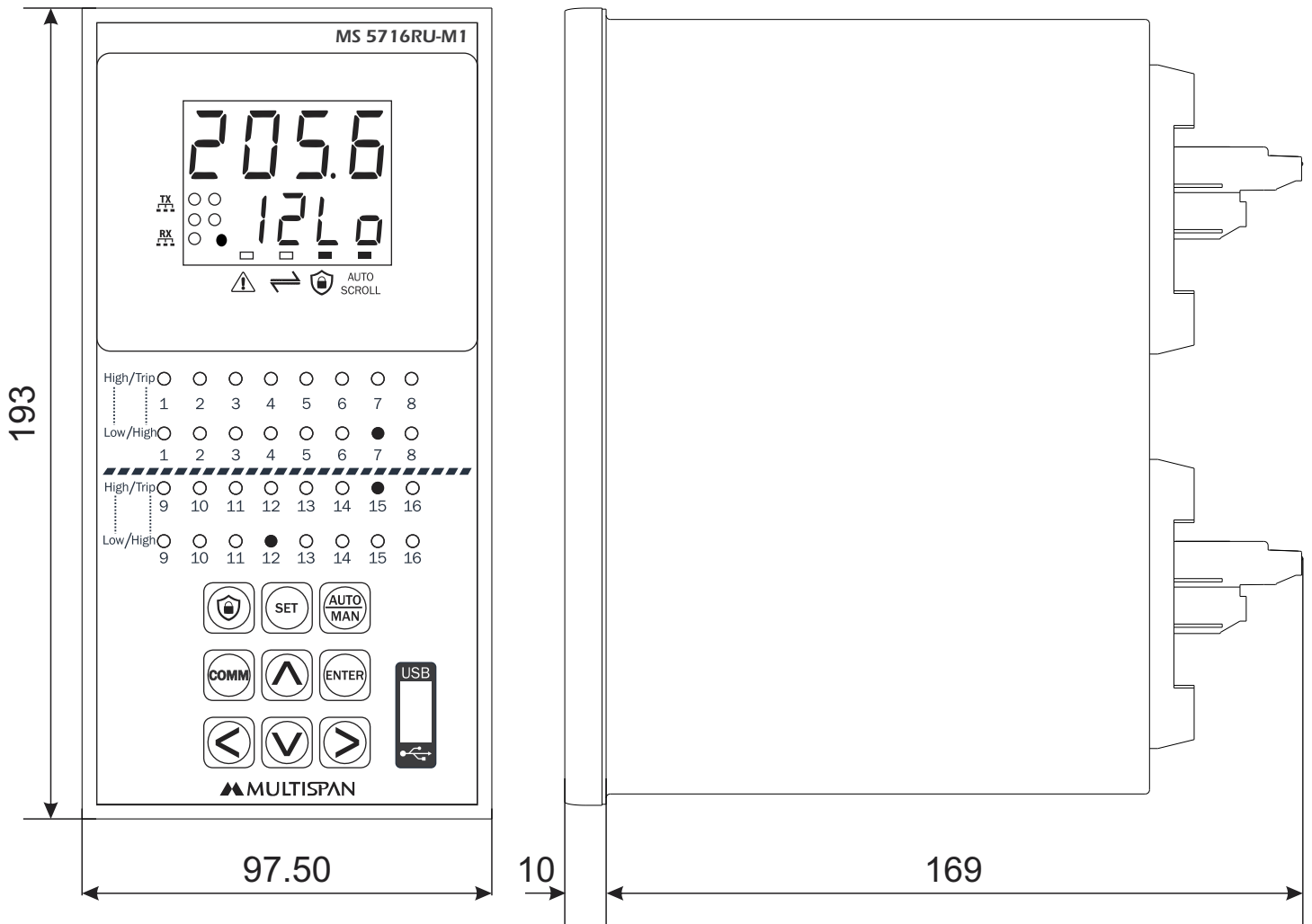
Machine Condition Monitoring

Gas Detection

Laboratory Equipment Monitoring

Mechanical Dimensions

Body Dimensions



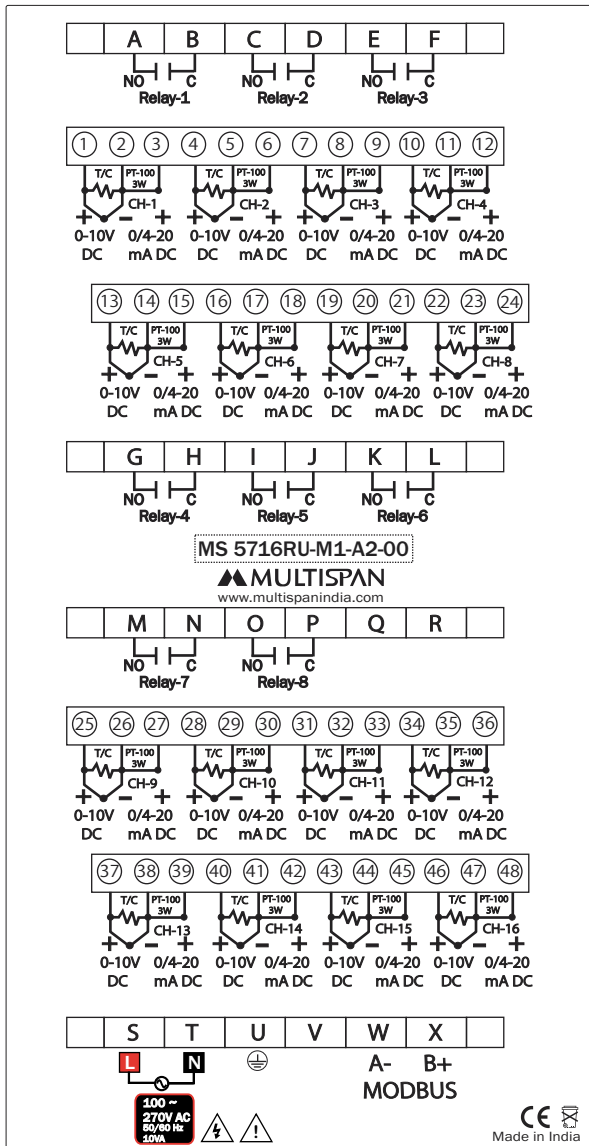
FRONT VIEW

All dimensions are in mm

RIGHT SIDE VIEW

Connection Diagram


Panel Cutout



189

92

TECHNICAL DATA

Input	Thermocouple	J / K
	RTD	PT-100 2 Wire / 3 Wire / Pt.1 (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: -99.0° C to 400.0° C
	Analog	-999 to 9999
Output	8 Relay with Data Logger & RS 485 Modbus	
Power Supply	100 to 270V AC (SMPS) ,50/60Hz, Approx 10VA	
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	
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

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

Power Supply	
Standard	100 - 270V AC @ 50/60Hz
Optional	24V DC
Consumption	10VA

Keys
9 controlling keys for configuration , operation and Controlling

Relay Output

No of Relay	8
Type	1 C/O (NO-C) Contact
Rating	5VA @ 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

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

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	193 x 97.5 x 169
Panel Cutout (HxW) mm	189 x 92
Material	Enclosure Front
	Mild Steel (Powder coated) ABS
Terminal Screw Size	M3.5
Screw Torque (N.m)	0.5
Wire Gauge (AWG)	26-14
Weight (Approx) gms	Unpacked : 1100 Packed : 1400
Accessories	1 Pair of Mounting Clamps