

RAIL MOUNTING TRANSMITTER

Mp87700

4-wire rail / wall mounting transmitter

Mp87700

- Microprocessor based
- RTD, T/C, mV and Ohm input
- Fully linearized
- Fully isolated
- High accuracy (Typical 0.1%)
- Choice of current & voltage outputs
- Optional built-in display
- 5 Year warranty



Specifications

Input RTD	Pt100, Pt250, Pt500, Pt1000, Ni100, Ni500, Ni1000, Cu10, Cu100
Input T/C	K, J, L, T, U, E, R, S, B, C, D, N
Other inputs	Ohm, mV
Minimum Span	See table below
Output DC	4...20 mA, 0...20 mA, 0...1 V and 0...10 V
Linearization	On / Off
Zero Drift	$\pm 0.01\%/^{\circ}\text{C}$ or $\pm 0.02^{\circ}\text{C}/^{\circ}\text{C}$
Span Drift	$\pm 0.005\%/^{\circ}\text{C}$ or $\pm 0.01^{\circ}\text{C}/^{\circ}\text{C}$
Cold Junction Drift	$\pm 0.01^{\circ}\text{C}/^{\circ}\text{C}$
Excitation Current, RTD	0.1 mA
Sensor Lead Resistance, RTD	500 Ohm max.
Sensor Lead Resistance Effect	0.001 $^{\circ}\text{C}/\text{Ohm}$
Sensor Lead Resistance, T/C	10,000 Ohm max.
Open Circuit Detection	Upscale / Downscale
Load Capability	500 Ohm
Startup Time	20 sec.
Warmup Time	5 Min.
Supply Voltage Effect	0.001%/V
Isolation	500 VDC / 1500 VAC
Ambient Operating Temp.	-10...+70 $^{\circ}\text{C}$
Storage Temperature	-40...+100 $^{\circ}\text{C}$
Ingress Protection	IP30
Housing Material	Makrolon
Housing Dimension W x H x D	55 x 75 x 110 mm (2.16" x 2.95" x 4.33")

Order information and options

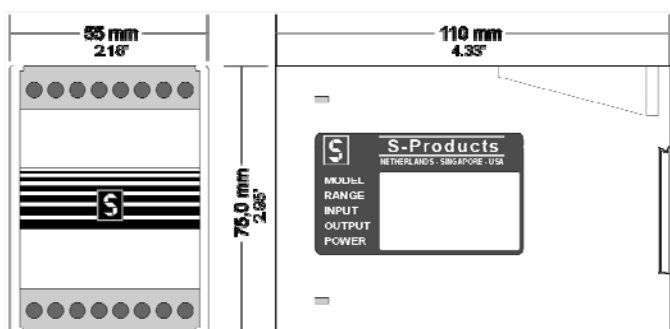
Example:

Model Mp87700 -D-IF-V*

Options:

- D = Built-in display for local temperature readout
- IF = Interface and software
- V* = Specify power supply (see table below for available power supplies)

Dimensions



Power supply

Order suffix	Power supply
V1	230 VAC $\pm 10\%$
V2	115 VAC $\pm 10\%$
V3	24 VDC Isolated
V4	24 VAC
V5	12 VDC Isolated
V6	12 VAC

Sensor ranges

Sensor type	Temp. Min. °C	Temp. Max. °C	Span Min. °C
K (NiCr-Ni)	-270	1370	50
J (Fe-CuNi)	-200	1200	50
L (DIN Fe-CuNi)	-200	900	50
T (Cu-CuNi)	-270	400	50
U (DIN Cu-CuNi)	-200	600	50
E (NiCr-CuNi)	-270	1000	50
S (Pt10%Rh-Pt)	-60	1760	250
R (Pt13%Rh-Pt)	-60	1760	250
B (Pt30%Rh-Pt6%Rh)	0	1820	600
Pt100 IEC751	-200	850	25
Pt250 IEC751	-200	850	25
Pt500 IEC751	-200	850	25
Pt1000 IEC751	-200	850	25
Ni100 IEC751	-60	250	25
Ni500 IEC751	-60	250	25
Ni1000 IEC751	-60	250	25
Cu10	-200	250	25
Cu100	-200	250	25
C (W5%Re-W26%Re)	0	2300	150
D (W3%Re-W25%Re)	0	2300	150
N (NiCrSi-NiSiMg)	-270	1300	50
mV	0	1000	10
Ohm	0	9999	100