

## HEAD MOUNTING TRANSMITTER

# Mp82810

### 2-wire head mounting transmitter

#### Mp82810

- Microprocessor based
- RTD, T/C, mV and Ohm input
- Fully linearized
- RFI / EMI protected
- High accuracy (Typical 0.1%)
- Optional plug-in readout & head
- 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	<b>See table below</b>
Output	4...20 mA or 20...4 mA
Linearization	On / Off
Supply	5...40 VDC, Polarity Protected
Supply Effect	0.001%/V
Zero Drift	$\pm 0.01\%/^{\circ}\text{C}$ or $\pm 0.02^{\circ}\text{C}/^{\circ}\text{C}$
Span Drift	$\pm 0.01\%/^{\circ}\text{C}$ or $\pm 0.01^{\circ}\text{C}/^{\circ}\text{C}$
Long Term Drift	$\pm 0.05\%/\text{Year}$
Cold Junction Drift	$\pm 0.03^{\circ}\text{C}/^{\circ}\text{C}$
Excitation Current, RTD	0.1 mA
Sensor Lead Resistance, RTD	500 Ohm max.
Sensor Lead Resistance Effect	0.005 $^{\circ}\text{C}/\text{Ohm}$
Sensor Lead Resistance, T/C	10,000 Ohm max.
Open Circuit Detection	Upscale / Downscale
Load Capability	Vbat-5V / 20 mA
Startup Time	10 sec.
Warmup Time	2 Min.
Ambient Operating Temp.	-40...+ 85 $^{\circ}\text{C}$
Ingress Protection	IP30
Storage Temperature	-40...+100 $^{\circ}\text{C}$
Housing Material	Zinc Alloy (ZAMAK 5) epoxy coated
Housing Dimension	43mm Dia. x 27mm H. (1.70" x 0.99")
Housing Dimension with Read-Out	47mm Dia. x 36mm H. (1.85" x 1.42")

## Order information and options

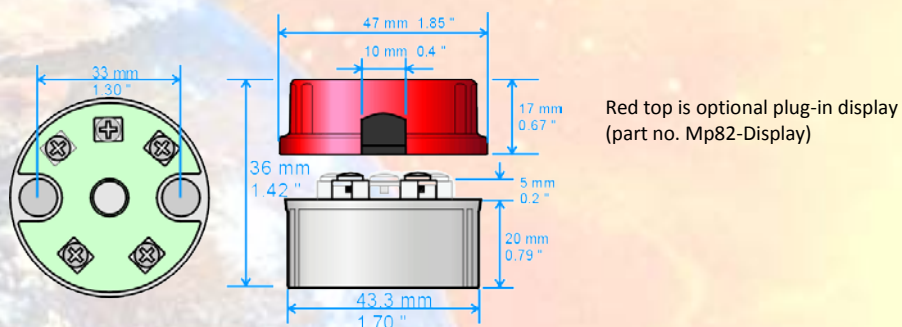
### Example:

Model Mp82810 -D-CW-IF

Options:

- D = Plug-in Loop-powered Readout
- CW = DAN type connection head with window
- IF = Interface and software

## Dimensions



## 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