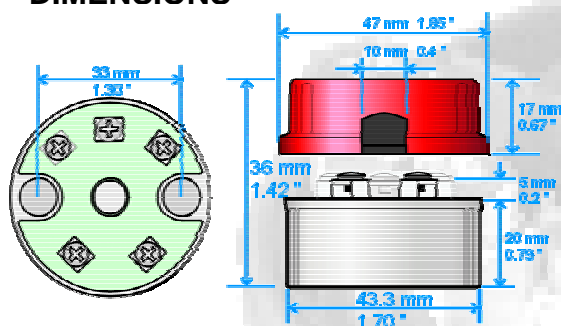




2-wire head-mounting transmitter Mp82800

- Microprocessor-based
- RTD (Pt100) and T/C input
- Fully linearized
- RFI / EMI protected
- High accuracy
- ATEX and FM approval available
- Optional plug-in readout & head
- 5 Year warranty

DIMENSIONS



The Mp82800 is an advanced 2-wire head-mounting microprocessor-based transmitter. It has been especially designed to provide you with an economic alternative to stocking different transmitters for each type of sensor. Fully scalable and fully linearized for Pt100 and types K,J,T,E and N thermocouples, the Mp82800 is quickly and easily programmed using your PC with our interface and software.

The Mp82800 mounts in a standard small connection head (B-form).

Features include: small minimum spans, selectable upscale / downscale for sensor break, selectable voltage or temperature linearity, RFI protected (DC to 1 GHz), high loop-drive capability, a five year warranty against failure and optional intrinsically safe. It even has an optional plug-in loop-powered readout and connection head with window.

Now, for the cost of a dedicated-input transmitter, you can have a single microprocessor-based transmitter that includes all common sensors in the industry. Easily programmed within less than a minute, the Mp82800 can be used for most common sensor and range requirements.

Order Information:

Model Mp82800

Options:

-D-EX-FM-CW-IF

Options:

- D = Plug-in Loop-powered Readout
- EX = Intrinsically safe version (ATEX Ex II 1 G EEx ia IIC T4...T6)
- FM = Intrinsically safe version (IS/I/1/ABCD/T6)
- CW = Connection Head with Window
- IF = Interface and software

Specifications Mp82800

Input RTD	Pt100
Input T/C	K,J,T,E,N
Minimum Span	See table below
Output	4..20 mA or 20..4 mA
Linearization	On / Off
Supply	10..40 VDC, Polarity Protected
Supply Effect	0.001%/V
Max. Ripple	10 V PP. Min Vbat=10 VDC
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 $\pm 0.01^{\circ}\text{C}/^{\circ}\text{C}$
Long Term Drift	$\pm 0.05\%/\text{Year}$
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	Vbat-10V / 20 mA
Startup Time	20 sec.
Warmup Time	5 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.
Housing Dimension with Read-Out	43mm Dia. x 36mm H.

SENSOR RANGES

Sensor type	Temp. Min. $^{\circ}\text{C}$	Temp. Max. $^{\circ}\text{C}$	Span Min. $^{\circ}\text{C}$
Pt100 IEC751	-200	850	25
K (NiCr-Ni)	-200	1370	50
J (Fe-CuNi)	-150	1200	50
T (Cu-CuNi)	-200	400	50
E (NiCr-CuNi)	-270	1000	50
N (NiCrSi-NiSiMg)	0	1300	50



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