



2-wire HART[®] protocol Head-mounting transmitter Mp82700-H

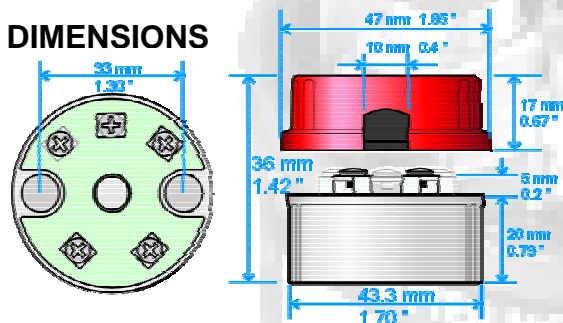
- Universal input
- Fully isolated
- Fully linearized
- High accuracy (0.1%)
- Optional plug-in readout & head
- Hart[®] communication
- 5 Year warranty



Same as the Mp82700 the Mp82700-H is the industry's most advanced 2-wire head-mounting μ P-based transmitter. Able to fit in a small, standard connection head, it is easily programmed via a personal computer with our "Point 'N Click" software. The Mp82700-H can also be set by HART[®]-communicator or other HART[®] related software.

It incorporates highly advanced microprocessor technology to provide the high accuracy. It is scalable over the entire range of 8 RTD's and 12 thermocouple types; as well as accepting millivolt and resistance inputs.

DIMENSIONS



Features include: small minimum spans, complete isolation, selectable upscale/downscale for sensorbreak, selectable voltage or temperature linearity, and HART[®] protocol. It even has an optional plug-in loop-powered readout and connection head with window.

You no longer have to stock several different transmitters when a single, high accuracy unit can meet all of your requirements. Easily programmed, the Mp82700-H can be used for all your different sensor and range requirements.

Order Information:

Model Mp82700

Options:

-H-D-CW-IF

Options:

- H = Hart[®] Protocol
- D = Plug-in Loop-powered Readout
- CW = Connection Head with Window
- IF = Interface and software

Specifications Mp82700-H

Input RTD	Pt100, Pt500, Pt1000, Ni100, Ni500, Ni1000, Cu10, Cu100
Input T/C	K, J, L, T, U, E, R, S, B, C, D, N
Input V	
Input Ohm	
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	± 0.01%/°C or ±0.02°C/°C
Span Drift	± 0.005%/°C or ±0.01°C/°C
Long Term Drift	± 0.05%/Year
Cold Junction Drift	± 0.01°C/°C
Excitation Current, RTD	0.1 mA
Sensor Lead Resistance, RTD	500 Ohm max.
Sensor Lead Resistance Effect	0.001°C/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.
Isolation	500 VDC
Ambient Operating Temp.	-40...+ 85°C.
Storage Temperature	-40...+100°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. °C	Temp. Max. °C	Span Min. °C
K (NiCr-Ni)	-200	1370	50
J (Fe-CuNi)	-150	1200	50
L (DIN Fe-CuNi)	-150	900	50
T (Cu-CuNi)	-200	400	50
U (DIN Cu-CuNi)	-100	600	50
E (NiCr-CuNi)	-270	1000	50
S (Pt10%Rh-Pt)	0	1765	250
R (Pt13%Rh-Pt)	0	1765	250
B (Pt30%Rh-Pt6%Rh)	0	1820	600
Pt100 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)	0	1300	50
mV	0	1000	10
Ohm	0	10000	100

S-Products' Temperature Transmitters with HART[®] protocol

Universal Commands

Command Number	Function	
0	Read unique identifier	
1	Read primary variable (PV)	
2	Read Current and Percent of Range	
3	Read Current and 4 dynamic variables	2 used
6	Write polling address	
11	Read unique identifier associated with tag	
12	Read message	
13	Read tag, descriptor, date	
14	Read PV sensor information	
15	Read output information	
16	Read final assembly number	
17	Write message	
18	Write tag, descriptor, date	
19	Write final assembly number	

Common-Practice Commands

Command Number	Function	
34	Write damping value	
35	Write range values	
40	Enter/exit fixed current mode	
49	Write PV sensor serial number	
59	Write number of response preambles	

Device-Specific Commands

Command Number	Function	
none		



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