

# TRANSPAK™ T280 MODEL

CE

## Benefits

- Universal Input Capabilities Reduce the Required Inventory Levels.
- Eliminates Ground Loops with 1000VDC Input to Output Isolation.
- Low Profile Enclosure Design for Easier Mounting and Wiring.
- Hinged Cover over Zero & Span Pots for Applications in Dirty Environments.
- Custom Embedded Terminals for Physical Rigidity and Reliability.



## Isolated, Universal 2-Wire Transmitter for Thermocouple, Pt-100 RTD & mV

Miniature, Thermal-Head Mounted, 1000VDC Input to Output Isolation

### DESCRIPTION

The model T280 is an isolated, 2-wire temperature and mV input transmitter designed to fit in a standard industrial thermal-head. The unit supports both Pt-100 RTD and thermocouple inputs as well as voltages up to 100mV. Thermocouples supported include B, E, J, K, L, N, R, S and T. If thermal-head mounting is not required, the T280 can be either mounted directly on a bulkhead or DIN rail with the included DIN rail clip.

There are three different series of models in the family. The -1xxx units are for Pt-100 RTD. The default from the factory is 3-wire, but the units can be easily reconfigured for 2-wire, as explained in the installation instructions. The -2xxx units are thermocouple input devices. And finally, the -3xxx units are set-up for millivolt input.

The list of model numbers in the MODELS section is only a partial listing. If you do not see the model you need, contact the Technical Services Group at the number listed in the FACTORY ASSISTANCE section.

  
**ACTION  
INSTRUMENTS**

*Protecting the  
Integrity of  
Industrial  
Process Signals*

  
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## SPECIFICATIONS

<b>Input</b>	Thermocouple: B, E, J, K, L, N, R, S, T RTD: Pt-100, 2- or 3-wire mV: 100mV max.
<b>Input Span</b>	Thermocouple: 5mV min. span RTD: 20°C min. 500°C max. mV: 5mV min span
<b>Adjustability</b>	±15% for both zero & span
<b>Output Span</b>	4-20mA, limiting @ <28mA
<b>Burnout Detection</b>	Upscale
<b>Linearity</b>	Thermocouple/mV: Better than ±0.1% of span, linear to mV input level

### Stability

RTD: Better than ±0.1% of span, linear to temperature

Thermocouple/mV: 0.02% of span/°C (25mV input)

RTD: 0.02% of span/°C (100°C span)

### T/C CJC

<0.05°C/°C of ambient temperature

### Isolation

1000VDC

### Supply Voltage

10 to 40VDC polarity protected

### Maximum Load

$R_{max} = (V_{supply} - 10V)/20mA$

### Operating temperature

-20°C to +70°C

### Humidity

0 to 95% RH, non-condensing

### Agency Approvals

CE Compliance per EMC directive 89/36 EEC

## MODELS

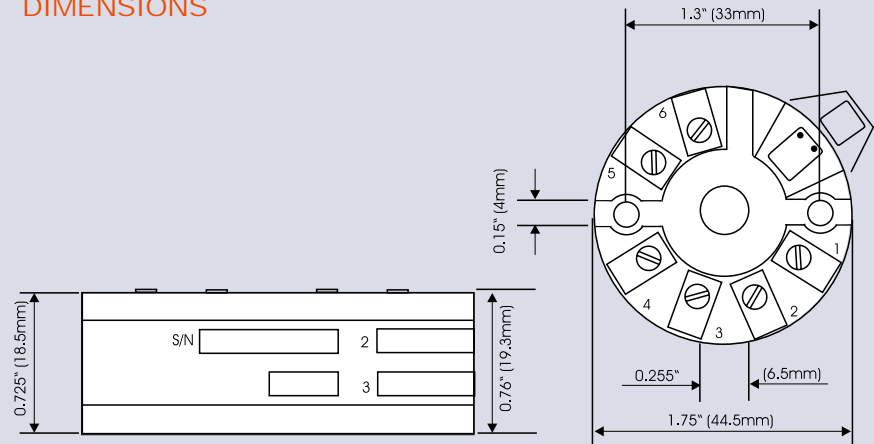
### RTD Models

T280-1000-C	0 to 100°C
T280-1001-C	0 to 150°C
T280-1002-C	0 to 200°C
T280-1003-C	0 to 300°C
T280-1004-C	0 to 500°C
T280-1005-F	0 to 200°F
T280-1006-F	0 to 300°F
T280-1007-F	0 to 400°F
T280-1008-F	0 to 500°F
T280-1009-F	0 to 900°F
T280-1010-F	0 to 100°F
T280-1011-F	0 to 250°F
T280-1012-C	0 to 50°C

### Thermocouple Models

T280-2000-JC	0 to 500°C
T280-2001-JC	0 to 760°C
T280-2002-JC	-200 to 600°C
T280-2003-JF	0 to 1000°F
T280-2004-JF	0 to 1400°F
T280-2005-JF	-350 to 1100°F
T280-2006-KC	0 to 500°C
T280-2007-KC	0 to 1000°C
T280-2008-KC	0 to 1200°C
T280-2009-KC	-270 to 500°C
T280-2010-KF	0 to 1000°F
T280-2011-KF	0 to 2000°F
T280-2012-KF	0 to 2500°F
T280-2013-KF	-450 to 1000°F
T280-2014-TC	0 to 250°C
T280-2015-TC	0 to 400°C
T280-2016-TC	-270 to 400°C
T280-2017-TF	0 to 500°F
T280-2018-TF	0 to 750°F
T280-2019-TF	-450 to 750°F
T280-2020-JC	0 to 400°C
T280-2021-JF	0 to 500°F
T280-2022-KF	0 to 500°F

## DIMENSIONS



### mV Models

T280-3000	0 to 20mV
T280-3001	0 to 50mV
T280-3002	0 to 100mV

## MODELS & ACCESSORIES

### Ordering Information

Specify:

Model: **T280-1xxx-C(F)** for RTD Input, or

Model: **T280-2xxx-[tc type]C(F)** for thermocouple, or

Model: **T280-3xxx** for mV input.

### Accessories

<b>T25H-0000</b>	Head Mount Enclosure - ½ NPT for Thermowell and Conduit
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## HEAD MOUNT ENCLOSURE



大连爱克新仪器有限公司

[www.actionio.com.cn](http://www.actionio.com.cn)

地址:辽宁省大连市中山区七七街23号海鹰大厦403室

电话: 0411-82650498 82650478

传真: 0411-82650478 邮编: 116001

E-mail: [sales@actionio.com.cn](mailto:sales@actionio.com.cn)  
[support@actionio.com.cn](mailto:support@actionio.com.cn)



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