



# THN

## Digital & Analog Thermocouple connector conditioner

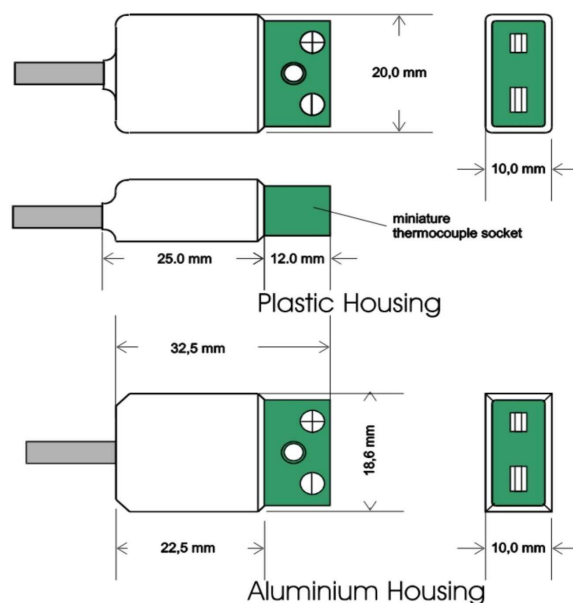
|                                   |                                          |
|-----------------------------------|------------------------------------------|
| <b>Range</b>                      | From -100 to +400 °C<br>To 0 to +1250 °C |
| <b>Type</b>                       | K, J, T...                               |
| <b>Cold error junction</b>        | ± 0.7 °C                                 |
| <b>Accuracy digital output</b>    | ± 0.5 °C                                 |
| <b>Accuracy analog output</b>     | ± 0.25 % FS                              |
| <b>Sensitivity</b>                | Linear,<br>See calibration table         |
| <b>Sampling frequency</b>         | 5 Hz                                     |
| <b>Supply voltage</b>             | 5 to 16V<br>12 to 33V                    |
| <b>Supply current</b>             | 3 mA                                     |
| <b>Output voltage</b>             | 0 – 5 V                                  |
| <b>Output impedance</b>           | 47 Ω                                     |
| <b>Plastic housing "P" type</b>   | 37x20x10 mm                              |
| <b>Aluminium housing "A" type</b> | 32.5x19x10 mm                            |
| <b>Weight (without cable)</b>     | 15 g                                     |
| <b>Operating temp</b>             | -40 to + 125 °C                          |
| <b>Storage temp</b>               | -40 to + 125 °C                          |

1 m cable of 4X26AWG FEP  
tinned copper braided cable 250V 200°C

**Red**  
**White**  
**Blue (or Black)**  
**Green\***

**Supply**  
**Signal**  
**0 V GND**  
**Serial Data**

\* Only with Texense USB-Connect



Calibration table (Example for 0-5V output)

| Target °C | -50 to +200<br>20mV/°C | -100 to +400<br>10mV/°C | 0 to 1250<br>4mV/°C |
|-----------|------------------------|-------------------------|---------------------|
| -100      |                        | 0.00                    |                     |
| -50       | 0.00                   | 0.50                    |                     |
| 0         | 1.00                   | 1.00                    | 0.00                |
| 50        | 2.00                   | 1.50                    | 0.20                |
| 100       | 3.00                   | 2.00                    | 0.40                |
| 150       | 4.00                   | 2.50                    | 0.60                |
| 200       | 5.00                   | 3.00                    | 0.80                |
| 300       |                        | 4.00                    | 1.20                |
| 400       |                        | 5.00                    | 1.60                |
| 600       |                        |                         | 2.40                |
| 800       |                        |                         | 3.20                |
| 1000      |                        |                         | 4.00                |
| 1250      |                        |                         | 5.00                |

|                                                |                                  |
|------------------------------------------------|----------------------------------|
| Ordering ref                                   | ex : THN-K-200-12-5-P            |
| THN - Type - Range - Supply - Output - Housing |                                  |
| K 200 +12                                      | 5 P                              |
| J 400 (5-16)                                   | 10 A                             |
| T 1250 +24                                     |                                  |
| ... (12-33)                                    |                                  |
|                                                | P : PET Plastic<br>A : Aluminium |

In the interest of continuous product improvement, we reserve the right to alter without prior notice the specifications and features described in this document.