

# TMP-100DC

## DC Powered Digital Pyrometer

The TMP-100DC™ monitors the temperature of any 18 points in any process or system such as engines, factories, and mills.

**2-Year  
Warranty**

### FEATURES

- Digital readout with 1° resolution.
- Heavily gold plated selector switch for long life, trouble-free operation.
- Fits existing cutouts and mounting holes of other popular pyrometers.
- No compensation for lead lengths or lead resistances required. Use inexpensive small gauge thermocouple extension wire to save cost and space.
- Fully gasketed; rugged construction.
- Readout unaffected by power line noise and spikes.
- Continuous readout.



### SPECIFICATIONS

**Display:** 3-1/2 digit (-1999 to +1999), 0.5" high digits, liquid crystal display, 1° increments. Brightness increases with ambient light (no outdoors fadeout).

**Environment:** 0°F to +165°F (-18°C to +74°C); 0.25% maximum effect on readout.

**Selector Switch:** Two-pole, 18-position, double gold plating of contacts.

**Sensor:** Must be grounded if dc supply is grounded.

- *Thermocouples:* Integral cold junction compensation. Thermocouple extension wire resistance of up to 100Ω introduces less than 1° error. Open sensor indicated by a number 1 in the thousands column, all other digits blanked.
- *RTDs:* Accepts 2-wire RTDs only. Use with heavy copper extension leads to minimize error, i.e., 16 AWG for up to 50 feet, 14 AWG to 100 feet.

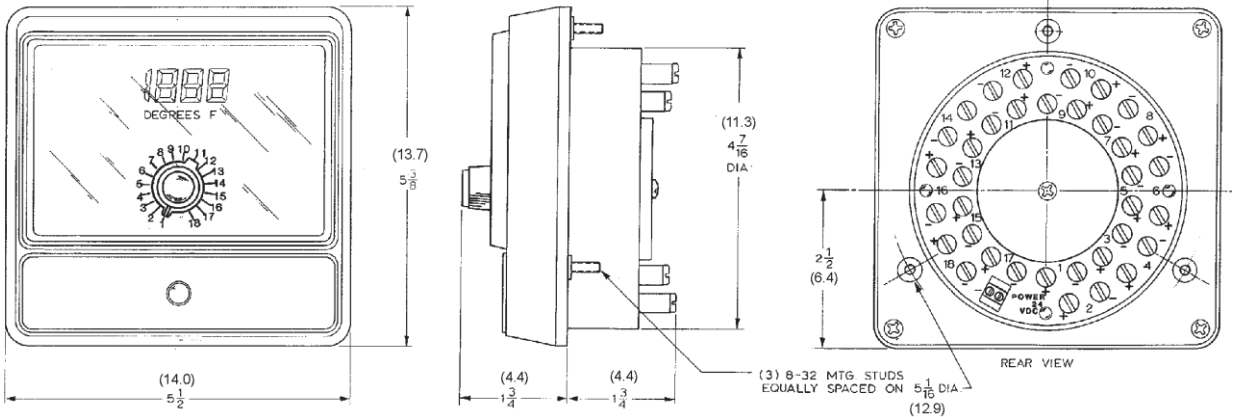
**Power:** 24 Volt dc systems; 6 mA dc typical, 10 mA maximum.

**Weight:** 1.75 lbs.

**NOTE**  
**For the TMP-100DC, thermocouples used must be ungrounded if the dc supply is grounded.**

| <b>PART NUMBERS AND RANGES</b> |                 |                        |
|--------------------------------|-----------------|------------------------|
| <b>P/N</b>                     | <b>RANGE</b>    | <b>SENSOR TYPE</b>     |
| TMP-100DC-11                   | -50° to +1500°F | J (Iron-Constantan)    |
| TMP-100DC-12                   | -45° to +815°C  | J (Iron-Constantan)    |
| TMP-100DC-13                   | -50° to +1800°F | K (Iron-Alumel)        |
| TMP-100DC-14                   | -45° to +980°C  | K (Iron-Alumel)        |
| TMP-100DC-15                   | 0° to +500°F    | T (Copper-Constantan)  |
| TMP-100DC-16                   | -20° to +260°C  | T (Copper-Constantan)  |
| TMP-100DC-17                   | 0° to +500°F    | E (Chromel-Constantan) |
| TMP-100DC-18                   | -20° to +260°C  | E (Chromel-Constantan) |
| TMP-100DC-19                   | -300° to +800°F | 100 Ohm Pt RTD         |
| TMP-100DC-20                   | -185° to +425°C | 100 Ohm Pt RTD         |

**OUTLINE AND CONNECTION DRAWING**



*Dimensions in inches (cm)*