**DP18 Series**

**Model DP18-RC**

**Thermocouple Input Temperature Indicator**

**INSTRUCTION SHEET**

**M2111/1294**

**TEMPERATURE METER FOR THERMOCOUPLES “R” (Pt vs. Pt-13Rhodium)**

Digital panel meter for thermocouple type “R” provided with built-in cold-junction compensation and linearization for direct reading in degrees Centigrade. Accepts additional boards for analog outputs and upper boards for communications or control outputs.

**SPECIFICATIONS**

- **Displays**: 3½ digits, 7 segment, red LED
- **Height**: 0.56” (14.2 mm.)
- **Symbols**: ± 1.8.8.8
- **Decimal Points**: Selectable by jumpers

**Input Configuration**: Bipolar single

**Span Adjustment**: ± 5%

**Converter**: Dual-slope, average value

**Polarity**: Automatic ±

**Signal/Integration/Period**: 80 ms.

**Ranges**: See table selection fig. 3

**Hold**: Optional

**Noise Rejection NMR**: 50 dB, 50/60 Hz.

**Accuracy**: See table selection fig. 3

**Span Tempco**: 150 ppm

**Zero Tempco**: 2.5 µV/°C.

**Operating Temperature**: 0 to 50 °C (32 to 122 °F)

**Storage Temperature**: -40 to 80 °C (-40 to 176 °F)

**Power**: 115 Vac. ± 10%, 50/60 Hz.

**Power Consumption**: 5.5 VA for AC.

**Electrical Connections**: Push-in cable connectors

**Burn-in**: 24 h.

**Fig. 1**

**Fig. 2**

**Fig. 3**

**Fig. 3**

<table>
<thead>
<tr>
<th>Model</th>
<th>Thermocouple</th>
<th>Accuracy (± 1 Count)</th>
<th>Resolution</th>
<th>Ambient Temp. Compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP18-RC</td>
<td>R</td>
<td>± 2% from +250 to +500°C</td>
<td>1 °C</td>
<td>0 to +50 °C</td>
</tr>
</tbody>
</table>
WARRANTY/DISCLAIMER

OMEGA warrants this unit to be free of defects in materials and workmanship and to give satisfactory service for a period of 13 months from date of purchase. OMEGA Warranty adds an additional one (1) month grace period to the normal one (1) year product warranty to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product. If the unit should malfunction, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective it will be repaired or replaced at no charge. However, this WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of being damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components which wear or which are damaged by misuse are not warranted. These include contact points, bushings and traces.

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FOR WARRANTY RETURN, please have the following information available before contacting OMEGA:
1. P.O. number under which the product was purchased.
2. Model and serial number of the product under warranty.
3. Repair instructions and/or specific problems relative to the product.

FOR NON-WARRANTY REPAIRS, consult OMEGA for current repair charges. Have the following information available before contacting OMEGA:
1. P.O. number to cover the COST of the repair.
2. Model and serial number of product, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

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