Temperature/Process Meters with Alarm Outputs

**DPi-AL Series**

- Universal Inputs
- High Accuracy
- 2 Relay Alarm Outputs
- Totally Programmable Color Displays (Visual Alarms)
- User-Friendly, Simple to Configure
- Built-In Excitation
- AC or DC Powered Units
- Front Removable and Plug Connectors
- Programmable Digital Filter

Standard features include a built-in 24 Vdc excitation source for transmitters or other devices and a universal power supply that accepts 90 to 240 Vac. A low power option is available that supports 24 Vac or 12 to 36 Vdc.

**Specifications**

- **Input Types:** Thermocouple, RTD, analog voltage, analog current
- **Accuracy:** ±0.5°C temperature; 0.03% rdg
- **Temperature Stability:**
  - RTD: 0.04°C/°C
  - Thermocouple @ 25°C (77°F): 0.05°C/°C, cold junction compensation
  - Process: 50 ppm/°C
- **Reading Rate:** 3 samples/s
- **Display:**
  - ¼ DIN: Single 4-digit 9-segment LED 21 mm (0.83”)
  - ½, ⅛ DIN: 10.2 mm (0.40”)
- **Thermocouple Types (ITS 90):** J, K, T, E, R, S, B, C, N, L (J DIN)
- **Thermocouple Lead Resistance:** 100 Ω maximum
- **RTD Input (ITS 68):** 100/500/1000 Ω Pt sensor, 2-, 3- or 4-wire; 0.00385 or 0.00392 curve
- **Voltage Input:** 0 to 100 mV, 0 to 1V, 0 to 10 Vdc
- **Input Impedance:**
  - 10 MΩ for 100 mV
  - 1 MΩ for 1 or 10 Vdc
- **Current Input:** 0 to 20 mA (5 Ω shunt)
- **Excitation:**
  - Voltage Excitation: 24 Vdc @ 25 mA (not available with low power option)
- **Alarm 1 and 2 Outputs**
  - Relay: SPDT, 250 Vac or 30 Vdc @ 3 A (resistive load)
- **Operation:** High/low, above/below, band, latch/unlatch, normally open/normally closed and process/deviation; front panel configurations

**General**

- **Power:** 90 to 240 Vac ±10%, 50 to 400 Hz, 110 to 300 Vdc, equivalent voltage
- **Low Voltage Power Option:** 24 Vac, 12 to 36 Vdc; external power source must meet safety agency approvals
- **Operating Temperature:** 0 to 55°C (32 to 131°F); 90% RH non-condensing
- **Protection:**
  - ¼ DIN: NEMA 1/Type 1 front bezel
  - ½, ⅛ DIN: NEMA 4X/Type 4 (IP65) front bezel
- **Dimensions:**
  - ¼ DIN: 48 H x 96 W x 127 mm D (1.89 x 3.78 x 5”)
  - ½, ⅛ DIN: 48 H x 48 W x 127 mm D (1.89 x 1.89 x 5”)
  - ⅛ DIN: 25.4 H x 48 W x 127 mm D (1.0 x 1.89 x 5”)

**To Order**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPI8-AL</td>
<td>¼ DIN meter with alarm, 2 relays, 90 to 240 Vac power</td>
</tr>
<tr>
<td>DPI16-AL</td>
<td>⅛ DIN meter with alarm, 2 relays, 90 to 240 Vac power</td>
</tr>
<tr>
<td>DPI32-AL</td>
<td>½ DIN meter with alarm, 2 relays, 90 to 240 Vac power</td>
</tr>
<tr>
<td>DPI8-AL-DC</td>
<td>¼ DIN meter with alarm, 2 relays, 12 to 36 Vdc power</td>
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<td>DPI16-AL-DC</td>
<td>¼ DIN meter with alarm, 2 relays, 12 to 36 Vdc power</td>
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<tr>
<td>DPI32-AL-DC</td>
<td>½ DIN meter with alarm, 2 relays, 12 to 36 Vdc power</td>
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</tbody>
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**Ordering Example:** DPI32-AL, ½ DIN meter with alarm, two relay outputs, 90 to 240 Vac.