**Inputs**
- Thermocouple
- RTD
- Process (DC Voltage and Current)
- Strain Gage

**Options**
- Relay Output with Adjustable Deadband
- Isolated or Non-Isolated Analog Output
- Totally Programmable Color Display
- Low-Voltage Power Options

**Panel Meters/Controllers**
The OMEGA® DP25B Series meters have the biggest, brightest display of any 1⁄8 DIN panel meter. The user can select the display color: RED, AMBER, or GREEN.

Along with the 4-digit, 9-segment display, these low-cost panel meters/controllers provide unparalleled accuracy in signal conditioning. Additional features include microprocessor-based operation; dual 5 A SPDT relays (optional); and isolated or non-isolated analog output in ranges of 0 to 10 Vdc, 0 to 20 mA, or 4 to 20 mA, which can be used for retransmission of the display value or as a proportional control output. The DP25 Series includes models with inputs for process (DC voltage and current), strain gages, thermocouples, and RTDs.

**Thermocouple and RTD Models**
These models combine versatility with ease of programming. The DP25B-TC is selectable for J, K, T, or J DIN thermocouples. The DP25B-RTD accepts 100 Ω Pt (0.00385 curve) RTDs.

**SPECIFICATIONS**
Display: 4-digit, 9-segment, 21 mm (0.83") high red, amber or green LED (programmable)
Analog-to-Digital Technique: Dual slope
Internal Resolution: 15-bit
Polarity: Automatic
Read Rate: 3/s
Step Response: 2 s
Relay Outputs (Optional): 2 form “C” (SPDT) relays rated 5 A 250 Vac, programmable for active high/low alarms with latching/non-latching relays

**THERMOCOUPLE METER SPECIFICATIONS**
Input: T/C types J, K, T and J DIN
Relay Hysteresis: Programmable from 0 to 9999
Accuracy: ±0.5°C (0.9°F) after 30 min warm-up
Temperature Coefficient: ±50 ppm/°C
Input Resistance: 100 MΩ
**STRAIN, PROCESS, AND TEMPERATURE METERS**

**Process and Strain Models**

Because they accept a wide range of DC voltage and current inputs, the DP25-B-E strain meters can handle most process and strain applications. Features include easy front-panel scaling to virtually any engineering units, a remote tare function for weighing applications, and a hardware lockout to prevent unauthorized changes in setup. In addition, the DP25B-E meters feature built-in excitation in 4 user-selectable voltages, which makes them compatible with most transducers and transmitters.

**DP25B-RTD (RTD)**

<table>
<thead>
<tr>
<th>INPUT TYPE</th>
<th>RANGE</th>
<th>ACCURACY</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTD, 100 Ω Pt, 2-, 3-, 4-wire</td>
<td>-200 to 850°C (-328 to 1562°F)</td>
<td>±0.5°C (0.9°F) after 30 min warm-up</td>
</tr>
</tbody>
</table>

**SPECIFICATIONS (RTD Temperature Meter/Controller)**

- **Input**: RTD 100 Ω Pt (0.00385 curves); 2-, 3- and 4-wire selectable
- **Accuracy**: ±0.5°C (0.9°F) after 30 min warm-up
- **Temperature Coefficient**: ±50 ppm/°C
- **Input Resistance**: 100 MΩ

**SPECIFICATIONS (Process and Strain Meters/Controllers)**

<table>
<thead>
<tr>
<th>INPUT TYPE</th>
<th>RANGE</th>
<th>ACCURACY</th>
</tr>
</thead>
<tbody>
<tr>
<td>mV, V, mA</td>
<td>0 to 100 mV, ±50 mV, 0 to 10 V, ±5 V, 0 to 20 mA, 4 to 20 mA</td>
<td>0.02% rdg</td>
</tr>
</tbody>
</table>

**PROCESS AND STRAIN METERS**

- **DP25B-E (Process)/DP25B-S (Strain)**

**Totally Programmable Color Displays**

The OMEGA® DP25B Series meters and controllers have totally programmable color displays—for RED, AMBER, or GREEN.
CUSTOM CONFIGURATIONS

Custom firmware and hardware available in quantity.

CUSTOM COLORS

Custom-color bezels and enclosures are available for original equipment manufacturers.

Consult the OMEGA® OEM GROUP at 1-856-467-4200

The following LVD (Low Voltage Directive/Safety) requirements have been met to comply with EN 61010-1, 1993 (Electrical equipment for measurement, control and laboratory use)

1. Pollution Degree 2
2. Installation Category II
3. Double Insulation

DP25/DP26/PHCN-37/ORCN-37/OPCN-37 complies with the following EMC Immunity Standards as tested per EN 50082-2, 1995 (Industrial environment)

- Phenomena: Frequency Range Limits
- Radiated Emission: 30 - 230 MHz 30 dB, V/m at 1 m
- Conducted Emission: 0.15-0.5 MHz 56-56 dB, V peak

DP25/DP26/PHCN-37/ORCN-37/OPCN-37 comply with the following EMC Emission Standards as tested per EN 50081-1, 1997 (Residential, Commercial and Light Industrial)

- Phenomena: Frequency Range Limits
- Radiated Emission: 30 - 230 MHz 30 dB, V/m at 1 m
- Conducted Emission: 0.15-0.5 MHz 56-56 dB, V peak

To Order (Specify Model Number)

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP25B-TC</td>
<td>Thermocouple</td>
</tr>
<tr>
<td>DP25B-RTD</td>
<td>RTD</td>
</tr>
<tr>
<td>DP25B-E</td>
<td>Process (DC voltage and current)</td>
</tr>
<tr>
<td>DP25B-S</td>
<td>Strain input</td>
</tr>
</tbody>
</table>

POWER OPTIONS*

<table>
<thead>
<tr>
<th>ORDER SUFFIX</th>
<th>POWER</th>
</tr>
</thead>
<tbody>
<tr>
<td>-230</td>
<td>230 Vac</td>
</tr>
<tr>
<td>-DC10/32</td>
<td>10 to 32 Vdc</td>
</tr>
<tr>
<td>-DC26/56</td>
<td>26 to 56 Vdc</td>
</tr>
</tbody>
</table>

OUTPUT OPTIONS*

<table>
<thead>
<tr>
<th>ORDER SUFFIX</th>
<th>POWER</th>
</tr>
</thead>
<tbody>
<tr>
<td>-A</td>
<td>Analog output</td>
</tr>
<tr>
<td>-AI-R</td>
<td>Isolated analog output</td>
</tr>
<tr>
<td>-R</td>
<td>Dual 5 A relays</td>
</tr>
<tr>
<td>-AR</td>
<td>Analog and relay options</td>
</tr>
</tbody>
</table>

ACCESSORY

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE-2683</td>
<td>Reference Book: Microcontroller Based Temperature Monitoring and Control</td>
</tr>
</tbody>
</table>

* Not field installable. For “-AI” option, the “-R” option is required. Comes with complete operator’s manual.

Ordering Examples: DP25B-TC-DC10/32-AR, thermocouple indicator for J, K, T or J DIN input, low-voltage power, analog output and dual 5 A relays

DP25B-E, process meter.
More than 100,000 Products Available!

- **Temperature**

- **Flow and Level**
  Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

- **pH and Conductivity**
  Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

- **Data Acquisition**
  Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485, Ethernet and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

- **Pressure, Strain and Force**
  Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Pressure Transmitters, Strain Gauges, Torque Transducers, Valves

- **Heaters**