DP3300 Series

- Monitors Flow/ Temperature, Flow/ Pressure, or Humidity/ Temperature
- Pulse Input Channel Monitors Count, Rate, RPM, or Frequency
- Programmable Scaling on Both Channels
- Auto/Manual Scanning of Channels
- 6 Counter Modes
- Works as Totalizer and Batch Counter
- Programmable Time Base for Rate
- Shows Channel Differentials (C1-C2, C2-C1)
- Displays Frequency in 0.01 Hz Resolution
- 3 Programmable Alphas for Engineering Units on Analog Channel
- Relay Status Indication on Front Panel
- 2 Alarm Relays for Each Channel (Optional)
- Min/Max Readings
- Built-In Alarm Buzzer
- Keeps Track of Process Run Time
- Password Security to Prevent Unauthorized Program Changes

The DP3300 comprises highly versatile dual-input meters that can monitor either 2 analog inputs or an analog input and a pulse input. On the analog channel, signals from thermocouples, RTDs, or thermistors are linearized and displayed in °C or °F. Voltage, current and millivolt inputs can be easily scaled. The pulse input on both channels can function as an up/down counter or as a rate, rpm, or frequency monitor. Scaling can easily be performed on the front-panel keypad (e.g., pulses from a flowmeter can yield the flow rate).

In counter mode, the DP3300 offers 3 presets along with built-in delay timers. As a rate indicator, it furnishes a programmable time base from 0.100 to 9999.999 seconds. In rpm mode, the channel counts incoming pulses and displays the data as revolutions per minute.

Options include 220 Vac and 15 Vdc power supplies, 4-relay or open-collector outputs.

**SPECIFICATIONS**

**Input for Channel 1 (Analog):**
- J, K, T, E, R, S, B thermocouples; thermistors; RTDs 4 to 20 mA loop current 0 to 10 Vdc 0 to 100 mV

**Alarms Relays (Optional):**
- 1 A @ 28 Vdc or 0.5 A @ 120 Vac, SPST
DC Driver: 5 Vdc @ 50 mA
Scale/Offset: Programmable from 1 to 30,000
Offset:
  Current: 0 to 20
  Voltage: 0 to 10
  Millivolt: 0 to 100
Decimal Point: Programmable; no decimal point, 10th, 100th and 1000th position
Input for Channel 2
  0 to 5 Vdc pulse or square-wave input (Schmitt trigger on the input)
Input Low: 0.0 Vdc minimum, 0.6 Vdc minimum
Input High: 2.5 Vdc minimum, 5.0 Vdc maximum
RPM Range: 1 to 999,999
Count Range: 1 to 9,999,999
Rate Range: Varies with time base—9,999,999 maximum
Time Base for Rate: 0.100 to 9999.999 s
High Frequency Range: 2 Hz to 2 MHz
Low Frequency Range: 2 to 500 Hz
Display: Red, 7-segment LED display, 10 mm (0.39") high
Power Options:
  120 Vac to 60 Hz, 220 Vac to 50 Hz (optional), 15 Vdc @ 900 mA (optional)
Accuracy:
  Temperature Resolution: 1°C/°F
  Current: 0.05% full scale
  Voltage: 0.05% full scale
Dimensions: 43 H x 91 W x 178 mm D
           (1.7 x 3.6 x 7")
Bezel Dimensions: 43 H x 91 mm W
                  (1.7 x 3.6")
Panel Cutout: 45 H x 92 mm D
              (1.77 x 3.66"); ½ DIN
Weight: 1.4 kg (3 lb)

INPUT RANGES

<table>
<thead>
<tr>
<th>TYPE</th>
<th>RANGE</th>
<th>ACCURACY</th>
</tr>
</thead>
<tbody>
<tr>
<td>J Iron-Constantan</td>
<td>-200 to 1190°C</td>
<td>±1°C ±1 count</td>
</tr>
<tr>
<td></td>
<td>-328 to 2174°F</td>
<td>±2°F ±1 count</td>
</tr>
<tr>
<td>K CHROMEGA®-ALOMEGA®</td>
<td>-170 to 1370°C</td>
<td>±1°C ±1 count</td>
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<td></td>
<td>-274 to 2500°F</td>
<td>±2°F ±1 count</td>
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<tr>
<td>T Copper-Constantan</td>
<td>-160 to 400°C</td>
<td>±1°C ±1 count</td>
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<tr>
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<td>-256 to 752°F</td>
<td>±2°F ±1 count</td>
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<tr>
<td>E CHROMEGA®-Constantan</td>
<td>-185 to 915°C</td>
<td>±1°C ±1 count</td>
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<tr>
<td></td>
<td>-300 to 1675°F</td>
<td>±2°F ±1 count</td>
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<tr>
<td>R Pt/13%Rh-Pt</td>
<td>0 to 1600°C</td>
<td>±3°C ±1 count</td>
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<tr>
<td></td>
<td>32 to 2900°F</td>
<td>±6°F ±1 count</td>
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<tr>
<td>S Pt/10%Rh-Pt</td>
<td>0 to 1600°C</td>
<td>±3°C ±1 count</td>
</tr>
<tr>
<td></td>
<td>32 to 2900°F</td>
<td>±6°F ±1 count</td>
</tr>
<tr>
<td>B Pt/30%Rh-Pt/6%Rh</td>
<td>470 to 1800°C</td>
<td>±3°C ±1 count</td>
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<td>900 to 3300°F</td>
<td>±6°F ±1 count</td>
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<tr>
<td>RTD 0.00385 (2-wire)</td>
<td>-200 to 800°C</td>
<td>±1°C ±1 count</td>
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<tr>
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<td>-328 to 1472°F</td>
<td>±2°F ±1 count</td>
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<tr>
<td>RTD 0.00392 (2-wire)</td>
<td>-100 to 450°C</td>
<td>±1°C ±1 count</td>
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<tr>
<td></td>
<td>-148 to 842°F</td>
<td>±2°F ±1 count</td>
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<tr>
<td>Thermistor 400 Series, 2252 Ω</td>
<td>-8.0 to 100.0°C</td>
<td>±0.5°C ±1 count</td>
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<tr>
<td></td>
<td>17.2 to 212.0°C</td>
<td>±1.0°F ±1 count</td>
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<tr>
<td>Current</td>
<td>4 to 20 mA</td>
<td>0.05% ±1 count</td>
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<tr>
<td>Millivolts</td>
<td>0 to 100 mV</td>
<td>0.05% ±1 count</td>
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<tr>
<td>Voltage</td>
<td>0 to 10 Vdc</td>
<td>0.05% ±1 count</td>
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<tr>
<td>Pulse (Second Channel)</td>
<td>0 to 5 Vdc or square wave</td>
<td></td>
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</tbody>
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To Order

ORDERING SUFFIX  DESCRIPTION
-1            220 Vac power
-2            15 Vdc power
-3            Six 1 A relay outputs
-4            Six open-collector outputs

POWER, OUTPUT, AND COMMUNICATIONS OPTIONS

ACCESSORY

MODEL NO.  DESCRIPTION
DPP-5       ½ DIN panel punch

OMEGACARE® extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order.

ORDERING Example: DP3300-TC-1-3, J, K, T or E thermocouple, 4 to 20 mA input channel 1, 0 to 10 Vdc pulse input channel 2, 220 Vac power and six 1 A relays. OCW-1, OMEGACARE® extends standard 2-year warranty to a total of 3 years for additional cost.