DUAL-CHANNEL PROCESS MONITOR ¹/₈ **DIN** PROGRAMMABLE INPUTS ACCEPT THERMOCOUPLES, THERMISTORS, RTDs, VOLTAGE, CURRENT, AND PULSE OR SQUARE-WAVE SIGNALS

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



DP3300-S, shown larger than actual size.



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 frontpanel 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

1/8 DIN DUAL-CHANNEL PROCESS MONITOR

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 maximum 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 Voltage: 0.05% full scale Current: 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"); 1/2 DIN Weight: 1.4 kg (3 lb)



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

ACCESSORY				
	MODEL NO.	DESCRIPTION		
	DPP-5	% DIN panel punch		

INPUT RANGES

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

To Order				
MODEL NO.	DESCRIPTION			
DP3300-TC	J, K, T, E, 4 to 20 mA, 0 to 10 Vdc, 0 to 5 Vdc pulse			
DP3300-R	R, 4 to 20 mA, 0 to 10 Vdc, 0 to 5 Vdc pulse			
DP3300-S	S, 4 to 20 mA, 0 to 10 Vdc, 0 to 5 Vdc pulse			
DP3300-B	B, 4 to 20 mA, 0 to 10 Vdc, 0 to 5 Vdc pulse			
DP3300-MV	100 mV, 4 to 20 mA, 0 to 10 Vdc, 0 to 5 Vdc pulse			
DP3300-TH	Thermistor (400 Series) and 4 to 20 mA, 0 to 10 Vdc, 0 to 5 Vdc pulse			
DP3300-RTD	100 Ω platinum RTD and 4 to 20 mA, 0 to 10 Vdc, 0 to 5 Vdc pulse			

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.

POWER, OUTPUT, AND COMMUNICATIONS OPTIONS

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