

Wall-Mount Programmable Process Monitor

DPS3311



- ✓ Large 7-Segment, 7-Digit LED Display 20 mm (0.8") H
- ✓ Process Readings in Engineering Units
- ✓ Programmable Engineering Unit Labels—psi, ft, etc.
- ✓ Multiple Programmable Display Modes
- ✓ Frequently Used Math Functions
- ✓ Timer for Process Run Time
- ✓ Remote Hold/Tare
- ✓ Fully Programmable via Front Keys
- ✓ Scaling for Voltage, Current, and Millivolt Signals
- ✓ Alarm Status Indication on Front Panel
- ✓ Built-In Buzzer to Sound Alarm (Optional)
- ✓ 2 Programmable Timers, 4 Process Alarms (Optional)
- ✓ Power Line Filter for High Reliability
- ✓ Protection from Dust and Moisture
- ✓ Sealed Enclosure with Clear Plastic Front

Housed in a wall-mount, watertight plastic enclosure, the DPS3311 accepts a linear voltage, current, or millivolt signal at its input; converts this into desired engineering units; and then displays the result. In addition, the DPS3311 monitors a number of functions, such as high and low process readings, change in process value from any given point, process run time, and rate of process change.



DPS3311-P-3 shown smaller than actual size.

Input signals are displayed in engineering units that correspond to the process being monitored. For example, if measuring pressure, the input signal can be scaled to give the reading directly in psi. Scaling is done using the front keys and does not require tedious formulas. A tare function is included for weighing and similar applications.

For control and alarm functions, the monitor has 4 programmable limits. A built-in buzzer sounds an alarm whenever a limit is reached and any relay is activated (available with output option). Other features are process run-time indication and 2 (optional) timers with outputs. One of the process outputs can be configured as a process change alarm, another as a process rate alarm. The process change alarm activates when a process deviates by a programmed amount from a

reference point. The rate alarm activates when a preset rate is exceeded or not achieved.

The DPS3311 Series monitors can be programmed to indicate in 1 of 8 display modes:

1. Display Process
2. Display Rate of Change
3. Display Deviation
4. Display Max Reading
5. Scan All Parameters
6. Display Min Reading
7. Display Process Change
8. Display Elapsed Time

If scan mode is selected, all the above parameters are briefly displayed in a sequence.

Input, power, and output connections are conveniently located in a separate terminal compartment and are made through pluggable Euro-style screw terminals.

Specifications

Input Type:

Loop Current: 4 to 20 mA

Voltage: 0 to 10 Vdc

Millivolt: 0 to 100 mV

Other Inputs Available:

Consult Engineering

Accuracy:

Voltage: 0.05% FS

Current: 0.05% FS

Analog-to-Digital Conversion:

20,000 count A/D converter;

dual-slope integrating converter

Conversion Rate:

7 conversions per second (typical)

Display: Red 7-segment LED, 7-digit display, 20 mm (0.8") high; negative polarity and over-range indication

Display Test:

8.8.8.8.8.8.8. on power-up

Elapsed Time: Displayed in hours, minutes and seconds

Display Format: HH.MM.SS

Power Options:

120 Vac/60 Hz (standard)

220 Vac/50/60 Hz (optional)

8 to 15 Vdc @ 900 mA (optional)

Scale/Offset:

Scale:

Programmable from 1 to 30000

Offset: 0.00 to 20.00 (current)

0.000 to 10.000 (voltage)

0.00 to 100.00 (millivolt)

Decimal Point:

9999, 999.9, 99.99, 9.999

Relay/Open Collector:

Outputs programmable as normally open, normally closed, latching or non-latching

Output (Optional):

Relays: SPST; 1 A @ 28 Vdc or 0.5 A @ 120 Vac

Open-Collector Output: 50 mA maximum (internal 5 Vdc source)

Rate: Displayed as rate of process change/time base

Dimensions/Enclosure:

Case: 192 W x 160 H x 103 mm D (7.55 x 6.29 x 4.05")

Material: Polystyrene with crystal-clear polycarbonate lid

Ingress Protection: Up to IP65 (DIN standard)

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. OMEGACARE™ covers parts, labor and equivalent loaners.



To Order

Model No.	Description
DPS3311-(*)	Wall-mount process monitor

Note: Select 1 input code from table below.

Input Codes

Input Code*	Description
P	0 to 100 mV
V	0 to 10 Vdc
C	4 to 20 mA

Power Options

Ordering Suffix	Description
-1	240 Vac
-2	8 to 15 Vdc

Output Options

Ordering Suffix	Description
-3	6 relay outputs (4 alarms, 2 timers)
-4	6 open-collector outputs (4 alarms, 2 timers)

Accessories

Model No.	Description
RELAY-URM-400	Universal 15 A mechanical 4-relay module
RELAY-URM-800	Universal 15 A mechanical 8-relay module

Comes with watertight connectors (2) and complete operator's manual.

Ordering Example: DPS3311-V-1-3, wall-mount process monitor, 0 to 10 Vdc input, 240 Vac, with 6 relay outputs.