

1/8 DIN Economical Digital Panel Meters For Process, Voltage, Current and Frequency

DP450
Starts at
\$167



Panel punches available, visit omega.com/panelpunches



DP450-VDC, \$167, shown smaller than actual size.

- ✓ 1/8 DIN Size
- ✓ 3 1/2 Digit Display
- ✓ Large 14.2 mm (0.56") LED Display
- ✓ Red Display
- ✓ Jumper-Selectable Ranges
- ✓ Engineering and Unit Labels Included: V, mV, μ A, Lbs, PSI, °C, A, mA, Hz, Kg, %, °F, Vdc, Vac, Amps, ppm, Ω , VA, W, kW, gal, gal/m, oz, Btu, K, %RH

Wide Range of Input Signals

- ✓ DC Voltage
- ✓ AC Voltage
- ✓ DC Current
- ✓ High DC Current
- ✓ High AC Current
- ✓ Scalable Process
- ✓ Frequency

Options

- ✓ 220 Vac Power
- ✓ 5 A Dual Alarm Relays—2 LED's Indicate "Hi" and "Lo" Alarms
- ✓ 10 Vdc Excitation Power Supply

The DP450 Series digital panel meters are suitable for a wide range of display applications. Designed as an economical solution, they offer ruggedness, reliability with 3 1/2-digit

resolution for many current, voltage, frequency and process applications. Supplied in a standard 1/8 DIN package, a full range of inputs can be measured simply by selecting the proper externally accessible terminals located at the rear of the unit. The resolution can be changed by moving the jumpers behind the detachable face plate. Bright red 14.2 mm H (0.56") LED characters are easy to read. Standard instrument power is 115 Vac. Optional 220 Vac is available. Dual alarm relays can be configured as one high and low. Engineering unit labels are supplied to indicate measured value. This series consists of seven models. They are DC voltage, AC voltage, DC current, high-AC current, high-DC current, scalable process and frequency. The DP450-HDCC model can be used with 60 mV, 100 mV or 150 mV shunts. The DP450-HACC can be used with one or 5 A current transformers such as the CT Series.

Specifications

Accuracy: 0.5% FS

Stability with Temperature: ± 100 ppm/°C maximum

Noise Rejection:

NMRR: <40 dB, 50/60 Hz

CMRR: <130 dB with 250 Ω unbalanced typical

Input Power Protection:

Fuseable resistors

Measuring Mode: Dual slope

Input Mode: Single-ended with auto-zero

Display: 3 1/2 digit, 7-segment red/orange LED, 14.2 mm H (0.56")

Optional Dual Alarm: Two 5 A @ 120 Vac (non-inductive) form "C" relays

Optional Excitation Power Supply: 10 Vdc ($\pm 5\%$), 30 mA

Environmental: 0 to 50°C, <85% RH non-condensing

Case Construction: One-piece black ABS plastic

Dimensions:

Case: 1/8 DIN; 4.0 x 9.0 x 10.9 cm (1.57 x 3.54 x 4.56")

Bezel: 4.8 x 9.6 cm (1.89 x 3.78")

Panel Cutout: 4.5 x 9.2 cm (1.77 x 3.62")

Weight: 454 g (1 lb)

Power: 115 Vac $\pm 10\%$, 50/60 Hz, 220 Vac $\pm 10\%$ (optional)

Warranty: 2 years

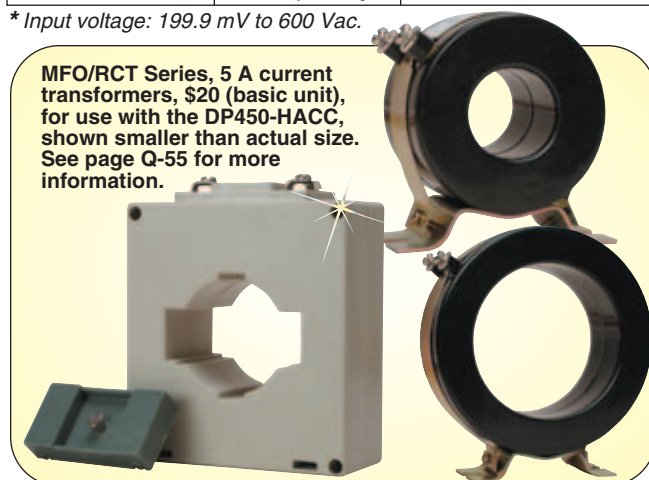


OMEGACARESM extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARESM covers parts, labor and equivalent loaners.

DP450 Inputs and Ranges

| Model Number | Input | Range | Accuracy | Resolution |
|---|-----------------|------------------------|----------|------------------------|
| DP450-VDC | DC Volts | 0 to ±199.9 mV | 0.5% | 0.1 mV |
| | | 0 to ±1.999V | 0.5% | 1 mV |
| | | 0 to ±19.99V | 0.5% | 10 mV |
| | | 0 to ±199.9V | 0.5% | 0.1V |
| | | 0 to ±600V | 0.5% | 1V |
| DP450-VAC | AC Volts | 0 to 199.9 mV | 0.5% | 0.1 mV |
| | | 0 to 1.999V | 0.5% | 1 mV |
| | | 0 to 19.99V | 0.5% | 10 mV |
| | | 0 to 199.9V | 0.5% | 0.1V |
| | | 0 to 600V | 0.5% | 1V |
| DP450-DCC | DC Current | 0 to ±1.999 mA | 0.5% | 1 µA |
| | | 0 to ±19.99 mA | 0.5% | 10 µA |
| | | 0 to ±199.9 mA | 0.5% | 100 µA |
| | | 0 to ±1.999 A | 0.5% | 1 mA |
| | | 0 to ±5.000 A | 0.5% | 10 mA |
| DP450-HDCC (Works with 60 mV, 100 mV, 150 mV; shunts sold separately) | High DC Current | 0 to ±50 A | 0.5% | 0.1 A |
| | | 0 to ±100 A | 0.5% | 0.1 A |
| | | 0 to ±200 A | 0.5% | 0.1 A |
| | | 0 to ±500 A | 0.5% | 1 A |
| | | 0 to ±1000 A | 0.5% | 1 A |
| | | 0 to ±1500 A | 0.5% | 1 A |
| | | 0 to ±2000 A | 0.5% | 1 A |
| DP450-HACC (Works with 1 or 5 A current transformers, sold separately) | High AC Current | 0 to 50 A | 0.5% | 0.1 A |
| | | 0 to 100 A | 0.5% | 0.1 A |
| | | 0 to 200 A | 0.5% | 0.1 A |
| | | 0 to 500 A | 0.5% | 1 A |
| | | 0 to 1000 A | 0.5% | 1 A |
| | | 0 to 1500 A | 0.5% | 1 A |
| DP450-E | Process | 0 to 20 mA, 4 to 20 mA | 0.5% | 1 count of 1999 counts |
| | | 0 to 5 Vdc, 1 to 5 Vdc | 0.5% | |
| | | 0 to 10 Vdc | 0.5% | |
| DP450-F* | Frequency | 0 to 1 kHz | 0.5% | 1 Hz |

* Input voltage: 199.9 mV to 600 Vac.



MFO/RCT Series, 5 A current transformers, \$20 (basic unit), for use with the DP450-HACC, shown smaller than actual size. See page Q-55 for more information.

Accessory

| Model No. | Price | Description |
|-----------|-------|---------------------|
| DPP-5 | \$525 | 1/8 DIN panel punch |

Recommended Reference Book:
Standard Handbook for Electrical Engineers,
EE-0401, \$195. See Section Y for Additional Books.



MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)

| Model Number | Price | Description |
|--------------|-------|-----------------------|
| DP450-VDC | \$167 | DC volt meter |
| DP450-VAC | 178 | AC volt meter |
| DP450-DCC | 167 | DC current meter |
| DP450-E | 178 | Process meter |
| DP450-HACC | 209 | High AC current meter |
| DP450-HDCC | 198 | High DC current meter |
| DP450-F | 178 | Frequency meter |

Alarm and Power Options

| Order Suffix | Price | Description |
|--------------|-------|--------------------------------|
| -A2 | \$99 | 5 A dual alarm output |
| -XPS | 30 | 10 Vdc excitation power supply |
| -220VAC | N/C | 220 Vac power |

Comes complete with operator's manual.

Ordering Examples: DP450-E-A2-220VAC, process meter with red display, dual relay output and 220 Vac power, \$178 + 99 = \$277.

OCW-3 OMEGACARESM extends standard 2-year warranty to a total of 5 years (\$69), \$277 + 69 = \$346.

DP450-F, frequency meter with red display, \$178.



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• 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

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• 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, Strain Gages, Torque Transducers, Valves

• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters