

High Accuracy True -RMS Scalable Indicator For AC Sinusoidal and Non-Sinusoidal Signals

DP25-RMS Series

£283

Basic Unit

MANUFACTURED BY
NEWPORT
As seen at www.newportUS.com



- ✓ AC Voltage and Current Inputs
- ✓ High 0.1% of Reading Accuracy
- ✓ 4-Digit, 14 Segment LED Display, Red or Green
- ✓ Exceptional Noise Rejection
- ✓ Current or Voltage Inputs
- ✓ Peak and Valley Detection
- ✓ Front Panel Configuration
- ✓ Optional Dual 6 Amp Relays, Analogue Output, RS-232, RS-485



Shown Smaller Than Actual Size

The DP25-RMS Series digital panel meter features high accuracy, 4 digits, and ac and true-RMS scalable inputs. The 4 digit, 14-segment alphanumeric display ensures easy reading and reconfiguration. This meter uses an integrated circuit that computes the true root-mean-square value of complex input signals. ac voltage measurements with a frequency of up to 5 kHz can be measured.

The DP25-RMS has the capability to capture and display both peak and valley levels of input signals. A dual 6 amp relay is available and can be configured to provide on/off control. An isolated analogue output is available, which can be configured for 4-20 mA or 0-10 Vdc. RS-232 and RS-485 communication capability is also available. The true RMS AC input makes this meter an ideal instrument for use in power monitoring, piezoelectric sensors, signal conditioning, and many other applications.

Specifications

Accuracy

Max. Error, ac Coupling: ±(0.1% rdg + 10 counts) at 50 or 60 Hz ±(0.1% rdg + 40 counts) from 40 Hz to 3kHz

Max. Error, dc Coupling: ±(0.1% rdg + 10 counts) at 50 or 60 Hz ±(0.1% rdg + 30 counts) from 40 Hz to 3kHz

Input Range:

DP25-VRMS: 0-1 V, 0-10 V, 0-100 V, 0-750 V

DP25-CRMS: 0-1 mA, 0-10 mA, 0-100 mA, 0-1A, 0-5A

Display Type: 14 segment, red LED

Display Digits: 4 digit (-1999 to 9999)

Digit Height: 14.2 mm (0.56")

Conversion Rate: 3/second

Operating Temperature:

0 to 50°C (32 to 122°F)

Storage Temperature:
-40 to 85°C (-40 to 185°F)

Span Temperature Coefficient:
±200 ppm/°C typical

Warm-up Time: 1 hour

Humidity: Up to 90% non-condensing @ <40°C

Noise Rejection:

CMR: 100 dB

CMV: 1500 V peak

Input Connection: Screw terminals

Power Requirement:

115 Vac or 230 Vac ±15% between 49 and 100 Hz standard

Power Consumption: 10 W max

Bezel: 96 W x 48 H x 7 D mm (3.78 x 1.89 x .30")

Panel Cutout:

45 H x 92 W mm (1.77 x 3.62")

Weight: .56 kg (1.25 lb)

To Order (Specify Model Number)

Model number	Price	Input Range
DP25-VRMS-230	£283	0-1V, 0-10 V, 0-100 V, 0-750 V
DP25-CRMS-230	283	0-1 mA, 0-10 mA, 0-100 mA, 0-1 A, 0-5 A

Note: Individual ranges are DIP switch settable. The meter comes factory set at the highest range.

Ordering Example: DP25-VRMS-S2A-230, DP40-9SC2: DP25 unit for true-RMS voltage input, isolated analogue output, RS-232 communications, 230 Vac, and 9-pin serial connector.
£283 + 66 + 90 + 24.50 = £463.50.

Power and Display Options

Suffix Code	Price	Description
Control/Analogue Output (Not Field Installable)		
-GN	N/C	Green LED display
-115	N/C	230 Volt AC power (Also remove -230)
-R	£57	Dual 6 amp relays
-A	66	Scalable isolated analogue output
Computer Communications (Field Installable)		
-S2	£90	Isolated RS-232 serial output
-S4	90	Isolated RS-485 serial output

The "-S2" and "-S4" options include a 1.8m communications cable with phone plug termination. For proper termination to a computer 9-pin and 25-pin connectors are offered below.

Accessories

Model number	Price	Input Range
DP40-9SC2	£24.50	9-pin serial connector for RS-232
DP40-9SC4	24.50	9-pin serial connector for RS-485
DP40-25SC2	24.50	25-pin serial connector for RS-232
DP40-24SC4	24.50	25-pin serial connector for RS-485