



2

Models Available**FPM965DCA** DIN96x48 DC Ammeter**FPM965DCV** DIN96x48 DC Voltmeter**Product Features**

- 4½ digit red LED display
- DIN 96x48mm size
- User adjustable scale and decimal point
- 4-20mA process monitor available
- Easy to wire screw type terminals

For dimensions see page 7

4½ Digit DC Ammeters & Voltmeters

DC digital ammeters and voltmeters are available in the DIN 96x48mm size, featuring a 4½ digit red LED display. The meters are panel mounting and offer a wide choice of input and display options making them suitable for a large range of industrial applications.

All DC digital panel meters can be powered by a large selection of self contained AC or DC auxiliary power supplies, which all offer isolation between the measured input signal and auxiliary supply voltage.

All DC digital panel meters are delivered fully calibrated, however adjustments to zero and span points can be made (see calibration data sheets). Optional terminal protection covers are also available.

For digital measurement of DC current, DC voltage and process signals

Specification**Accuracy:**

- 0.1% ± 1digit

Input Current, I_n :

- 0-100µA to 0-10A direct connected
- > 10A use shunt and mV voltmeter
- 4-20mA process signal

Input Voltage, U_n :

- 0-20mV to 0-800V direct connected
- 0-5V, 0-10V, 1-5V, 2-10V process signal

Overload:

- 2 x I_n or 1.2 x U_n continuous
- 10 x I_n or 2 x U_n for 5 seconds

Ammeter Voltage Drop:

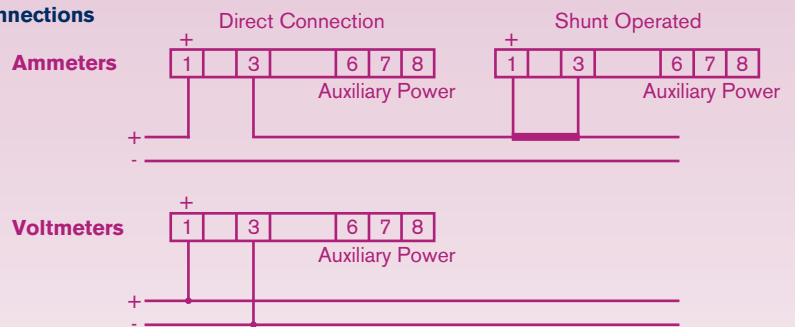
- 20mV (direct connected)

Impedance:

- Voltmeter 10kohm/Volt
- 4-20mA: 1ohm

Weight:

- 380g

Connections

For auxiliary power connections see page 7

Ordering information

Code	DIN Size & Meter Type	Input & Scaling	Auxiliary
FPM965DCA	96 x 48mm DC Ammeter	-	-
FPM965DCV	96 x 48mm DC Voltmeter	-	-
Specify	-	0-100µA to 0-10A direct	-
Specify	-	> 10A use shunt & 50, 60, 75mV Voltmeter	-
Specify	-	4-20mA (scaled as required)	-
Specify	-	0-20mV to 0-800V	-
110/230Vac	-	110/230Vac Dual Auxiliary	-
Specify	-	12Vac, 24Vac, 48Vac, 415Vac	-
10-60Vdc	-	10-60Vdc	-
Example	FPM965DCV	0-10Vdc / 0-100.0%	10-60Vdc

General Specification

Environmental

Operating Temperature: 0°C to 60°C (Calibration temperature 23°C)
 Storage Temperature: -10°C to 70°C
 Temperature Coefficient: < 100ppm/ °C
 Relative Humidity: 0 - 85% non-condensing
 Warm Up Time: 1 minute

Display

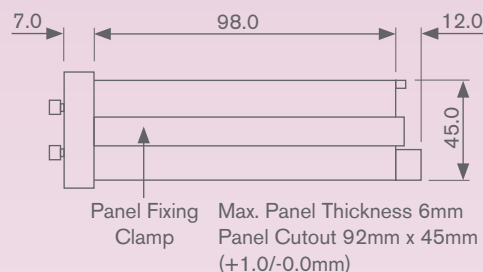
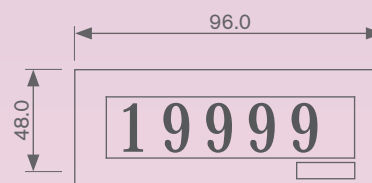
Digit & Display: 4½ digit (19999) red LED
 Digit Height: 14.2mm high
 Decimal Point: Internally selectable
 Sampling Time: 1 second
 Over Input Indication: '1'
 Polarity: Automatic with (-) indicating negative inputs
 Measuring Mode: Dual slope
 Input Mode: Floating
 Noise Elimination Ratio: CMRR over 86dB 50/60Hz

Enclosure

Enclosure: Flame retardant black ABS plastic case
 Enclosure Code: Case IP54 (IP65 with gasket optional) to IEC529
 Insulation Test: 2kV rms 50Hz 1min input/auxiliary (to IEC 414)
 4kV rms 50Hz 1min terminals/case
 Markings: CE marked

Specification subject to change without notice.

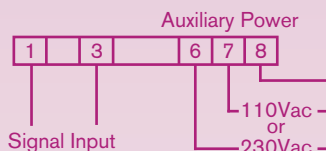
Dimensions



Auxiliary Power Connections

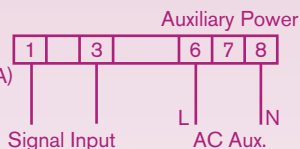
FPM965 Standard Dual AC Auxiliary Supply

110/230Vac ±20% (Burden < 3VA)



FPM965 Non Standard AC Auxiliary Supply

12Vac, 24Vac, 48Vac, 415Vac ±20% (Burden < 3VA)



FPM965 DC Auxiliary Supply

10-60Vdc (Burden < 2W)

