The S-range

The new class of easy-to-configure, scalable Digital Panel Meters (DPM)

A series of 2000 count DPMs which can be ranged and linearly scaled to suit virtually any DC input signal.

■ Simple ranging:

All models feature a choice of ten DC voltage (0.2 to 300 V) and eight DC current (1 mA to 300 mA) measuring ranges. The range required for a particular application is selected via plug-in jumpers on the back of the unit.

■ Easy installation :

Measuring input and power supply connections are via standard (Phoenix type) plug-in connectors, which can be pre-wired before installation. Clip-on mounting brackets simplify panel mounting and mosaic mounting is available as an option.

■ Choice of models :

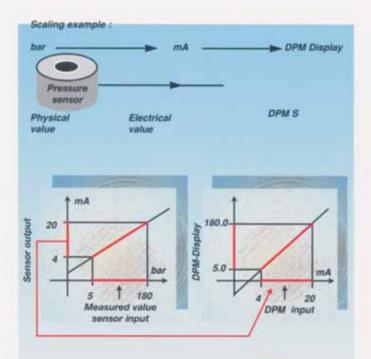
All models offer the same ranging and scaling facilities, but are offered with a choice of case size, digit height and power supply (S, SN or SNT). The "universal" world-wide power supply (SN) can operate with virtually any DC or AC voltage. Only Metrix covers such a wide range of features in just three basis types. This makes it possible to pre-stock these DPMs and configure them for individual applications, as required.

■ Extra features-all models: The front facia is sealed to IP 65 standards.

Display brightness is fully adjustable to suit any application, by a pre-set behind the facia window.

Plug-in links, also behind the facia window, set the decimal point position independent of the display scaling.

As an option, these DPM models can be factory scaled and calibrated to your requirements.



The sensor converts a physical value into an electrical value, wich is read by the DPM S and displayed as a physical value, e.g.:

- temperature
- m pressure
- rotational speed
- speed
- acceleration

■ Flexible scaling:

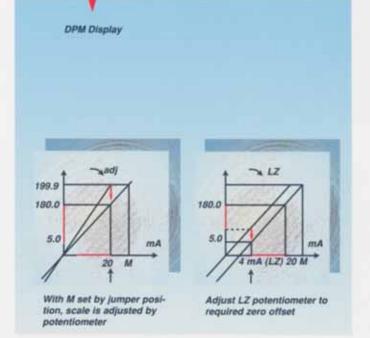
All S-range models have the same linear scaling facilities to provide a digital display in electrical or physical values, including for "live zero" inputs e.g. 4 to 20 mA.

After setting the prime measuring range (via rear link position) the scale slope can be adjusted by the precision potentiometer (Adj) behind the facia window. E.g. 20 mA input = 180.0 display.

If required, the zero offset can be enabled and independently adjusted by a second potentiometer (LZ: Live Zero).E.g. 4 mA input = 5.0 display. Stocked by Farnell

Model	Stock No.
DPM 24/2000 S	766-770
DPM 24/2000 SN	766-823
DPM 48/2000 SN13	766-835
DPM 48/2000 SN20	766-847
DPM 48/2000 SNT13 115V	766-793
DPM 48/2000 SNT13 230V	766-781
DPM 48/2000 SNT20 115V	766-811
DPM 48/2000 SNT20 230V	766-800

The diagram shows the two scaling possibilities, which are adjustable independently of each other. Note the display range covers from -1999 to +1999. Thus a wide measuring spectrum is available.



The complete S-range simple, flexible, adaptable, scaling features DIN Format, IP 65 sealed facia



DPM 24 / 2000 S Low profile, compact size DC supply.



DPM 24 / 2000 SN Low profile universal supply.



DPM 24 / 2000 S Red display.



DPM 24 / 2000 SN Red display.



DPM 48 / 2000 SN 13 Standard format, universal supply.



DPM 48 / 2000 SNT 13 Standard format, transformer supply

TECHNICAL DATA



DPM 48 / 2000 SN 20 Large display, universal supply.



DPM 48 / 2000 SNT 20 Large display, transformer supply



DPM 24: 2000 S Rear view.



DPM 48 / 2000 SN Rear view.

Options:

- rubber panel sealing gasket (only for DPM 48/2000 SN-SNT)
- snap-on mosaic mounting
- printing of any chosen units/captions
- scaling according to preset values
- green display (only for 13 mm high LEDs)

S range common specifications			
Resolution/display	± 1999 digits / 7 segment red LED		
Measuring rate/integration time	3 per sec/80ms		
Measuring ranges	0,2 300 VDC / 10 ranges		
	1 300 mADC / 8 ranges incl. 0/420		
Zero correction/offset	Automatic/up to + 25 % of range (for 4-20 mA, etc.)		
Precision (for factory calibration)	Voltage: 0.2% +/-1 digit		
	Current: 0.4% +/-1 digit		
Storage temperature	-40 to +80 degrees C		
Operating temperature	0 to +50 degrees C		
Enclosure protection-facia	IP 65		
Connector protection	IP 20		
Connector types Wire size	Screw terminal (supply-2way, input-4 way) 4 mm ² single core, 2.5 mm ² stranded wire		
Panel mounting	Mounting brackets (supplied)		

Optional for mosaic mounting

S range model specifications:

	DC	Mains		Universal		
Model	24 / 2000 S	48 / 2000 SNT 13	48 / 2000 SNT 20	24 / 2000 SN	48 / 2000 SN 13	48 / 2000 SN 20
Supply	5 VDC ± 5 % CM : 2 VDC	230 V, 115 V or 24 V AC ± 15 % 45-65 Hz		DC universal : 24 V 48 V ± 20 % AC universal : 24 V 230 V ± 15 % 40-70 Hz		
Power consumption	200 mA	6 VA		<4W		
Dimensions B x H (DIN) Mounting depth	in mm 96 x 24 80	in mm 96 x 48 151		in mm 96 x 24 151	in mm 96 x 48 151	
Panel Cut-out (DIN)	92 + 0.8 x 22.2 + 0,3 mm	92 + 0.8 × 45.5 + 0.6 mm		92 + 0.8 x 22,2 + 0.3 mm	92 + 0.8 x 45.5 + 0.8 mm	
Digit height	13 mm	13 mm	20 mm	13 n	nm	20 mm
Safety	IEC 1010, Class 1, Overvoltage Category II 264 V, Degree of pollution 2					
EMC	IEC 801 ; VDE 871, Class B					