

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.

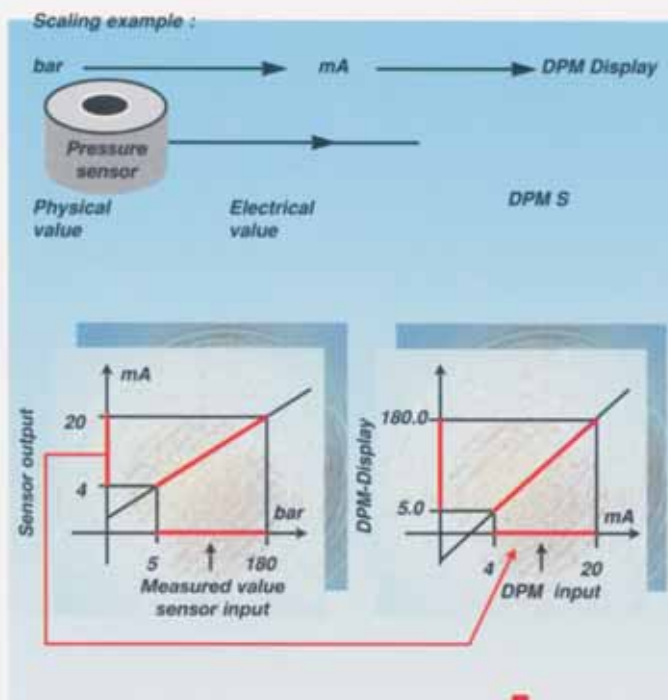
■ Choice of models :

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 fascia is sealed to IP 65 standards. Display brightness is fully adjustable to suit any application, by a pre-set behind the fascia window. Plug-in links, also behind the fascia 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, which is read by the DPM S and displayed as a physical value, e.g. :

- temperature
- pressure
- rotational speed
- speed
- acceleration

■ Flexible scaling :

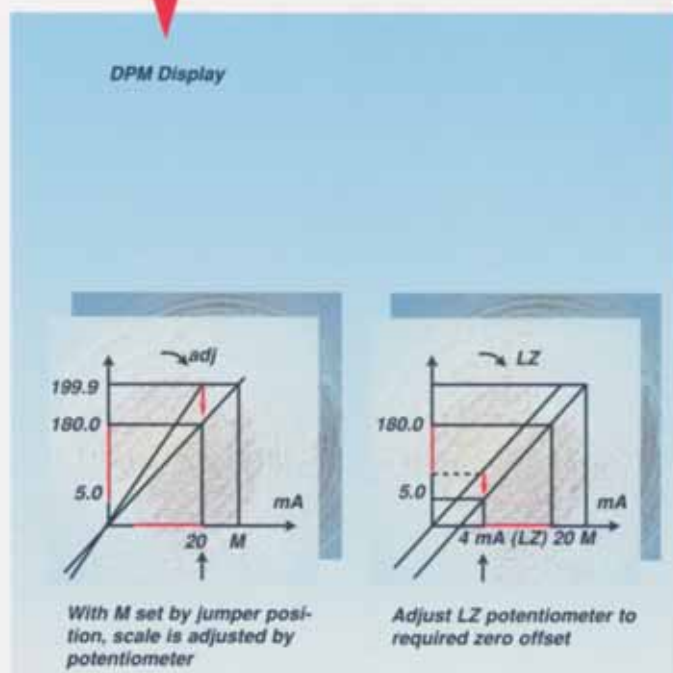
All S-range models have the same linear scaling facilities to provide a digital display in electrical or physical values, including for "live zero" inputs e.g. 4 to 20 mA.

After setting the prime measuring range (via rear link position) the scale slope can be adjusted by the precision potentiometer (Adj) behind the fascia 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 RS Components

Model	RS Stock No.
DPM 24/2000 S	269-007
DPM 24/2000 SN	260-202
DPM 48/2000 SN13	260-218
DPM 48/2000 SN20	260-224
DPM 48/2000 SNT13 115V	269-013
DPM 48/2000 SNT13 230V	260-189
DPM 48/2000 SNT20 115V	269-029
DPM 48/2000 SNT20 230V	260-195

The diagram shows the two scaling possibilities, which are adjustable independently of each other. Note the display range covers from -199.9 to +199.9. 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



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 pre-set values
- green display (only for 13 mm high LEDs)

TECHNICAL DATA

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. 0/4...20
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	Screw terminal (supply-2way, input-4 way)
Wire size	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	in mm	in mm		in mm	in mm	
B x H (DIN)	96 x 24	96 x 48		96 x 24	96 x 48	
Mounting depth	80	151		151	151	
Panel Cut-out (DIN)	92 + 0.8 x 22.2 + 0.3 mm	92 + 0.8 x 45.5 + 0.6 mm		92 + 0.8 x 22.2 + 0.3 mm	92 + 0.8 x 45.5 + 0.6 mm	
Digit height	13 mm	13 mm	20 mm	13 mm		20 mm
Safety	IEC 1010, Class 1, Overvoltage Category II 264 V, Degree of pollution 2					
EMC	IEC 801 : VDE 871, Class B					

CE

