

RISH DPM 24/96 S



Operating Manual

The **RISH DPM 24/96 S** are digital panel instruments for measurement of DC current and DC voltage with 9 measuring ranges. 8 ranges for power supply are available.

Operation:

The measuring ranges and zero point are selectable using jumpers at the back. The choice of many factory pre-set measuring ranges is included, with user adjustments available for the zero and full scale values.

Technical data:

Display	Display range	1999	
	Decimal point position	selectable	
	Negative display indication	"_"	
	Digit height	14 mm / 7 segment digits	
	Overload indication	last 3 digits blank	
	Setting time	< 1 s (0 ... 99 %)	
Measuring ranges	Direct current	0 ... 1 mA	
	(voltage drop < 600 mV)	0... 20 mA	
		0 ... 200 mA	
	Direct voltage	0 ... 0.2 V (1 V)	
	(input current < 300 mA)	0 ... 1 V (5 V)	
		0 ... 5 V (25 V)	
		0... 25 V (100V)	
		0... 100 V (300 V)	
		0 ... 300 V	
		Range adjustment span	from 20 % to 100 %
	Zero offset (suppression)	up to -1000	
	Accuracy	< 0.2 % of range + 1 digit	
	Temperature coefficient	100 ppm/°C, plus	
	Zero point drift	100 ppm / °C	
Digital input Options	HOLD (option)	"0"	
	Brightness adjustment		
	Zero point adjustment		
	Hold input		
Power supply	Direct voltage DC	5 V DC (± 10%)	4 W approx.
		12 V DC (± 10 %)	4 W approx.
		21 ... 30 V DC	4 W approx.
		48 V DC (± 10 %)	5.5W approx.
		110 V DC (± 10 %)	5.5W approx.
		common mode voltage	-0,5 V... 1,5 V max.
	Alternating voltage AC	21 ... 30 V ±15 %	4,0 W approx.
	(47 - 60 Hz)	110 V +10 %, -15 %	2.0 W approx.
		230 V +10 %, -15 %	2.0 W approx.
Environmental conditions	Climatic class	Class 2 to VDE/ DIN 3540	
	Operating temperature	0... 50 °C	
	Storage temperature	40 °C ... +80 °C	
	Safety class	II to IEC 348/VDE 0411	
	Protection class	IIP 20 to IEC EN 60 529	
	Front	IP 54 (IP 65 on request)	
	Device safety	corresp. IEC EN 61 010	
	EMC immunity	corresp. DIN EN 61 000-4-1 to 4	
EMC radiated interference	corresp. DIN EN 50 081 class B		
Dimensions and weight	Front frame	24 mm x 96 mm to DIN 43 718	
	Panel cut-out	22.2 +0.3 mm x 92 +0.8 mm	
	Overall depth	72 mm	
	Weight	approx. 90 g (210 g if power supply >5 V DC)	
Sundry	Connections	Plug-in screw terminal blocks	

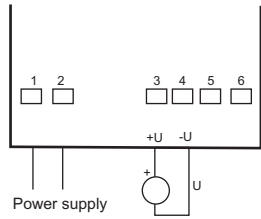
Connections

Rating plate

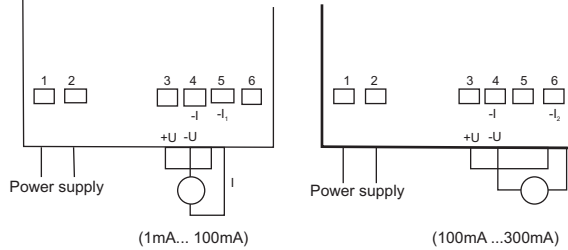
RISH DPM 24/96 S		Range : 0...20 mA														
		Display : 1999														
Sr. No.		U_i : Aux. Supply : 230 V AC +10 % / -15%														
Auto Zero	Input Voltage			Input Current												
	U _m : Voltage Range	Jumper	Input	I _m : Current Range	Jumper											
	0.2 1 V	2		1.0 4.0 mA	2											
	1 5 V	3		4.0 16.0 mA	3											
	5 25 V	4		16.0 64.0 mA	2, 8											
	25 100 V	5		64.0 300.0 mA	3, 8											
100 300 V	6	100.0 300.0 mA		2												
⚠ For Live Zero adjustment put jumper 1 and adjust pot 'LZ' at front ⚠ For FSD adjustment, use Pot 'Adj' at front																
Aux Supply		jumper			Input											
L	N	1	2	3	4	5	6	Decimal Point Selection	+U	-U	+I	+I				
U _i													3	4	5	6

Measuring input

Voltage measurement



Current measurement

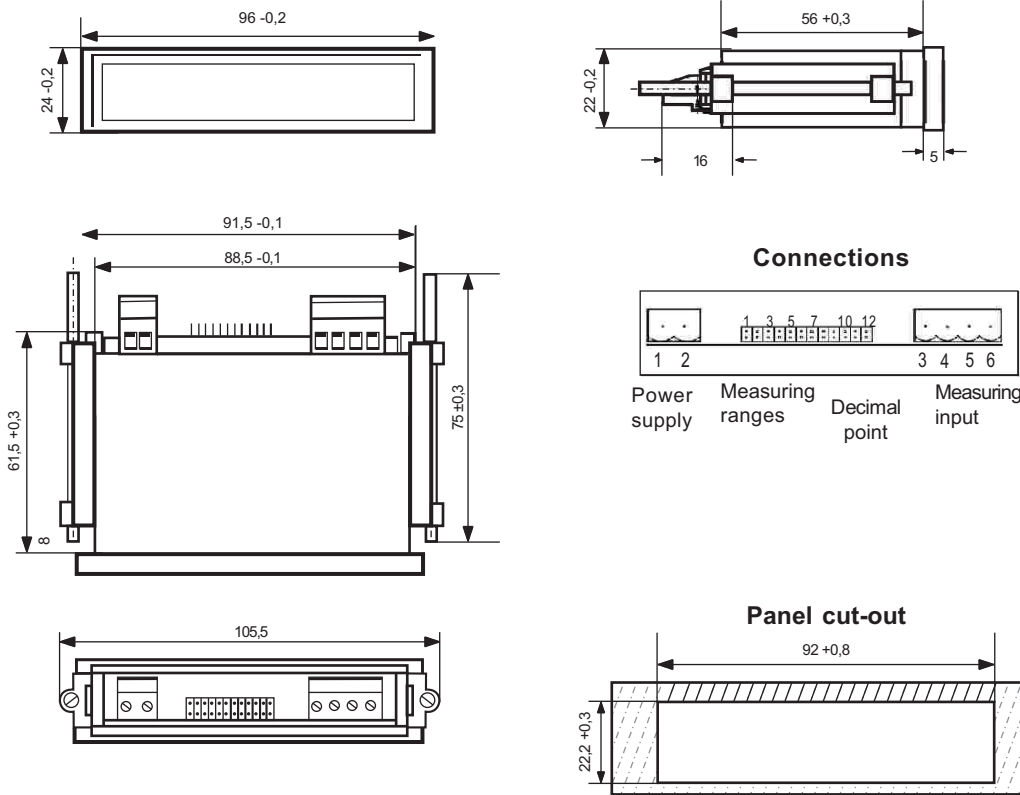


*) For current measurement, the user has to externally link terminals 3 (+U) and 5 (+I1), or terminals 3 (+U) and 6 (+I2).

Note:

- 1) In order to avoid errors or an unstable readout, the measuring circuits be shielded or at least twisted.
- 2) To set the basic range, first remove the safety cover over the pin connector at the rear of the instrument. "Ib set the basic range and decimal point, plug in jumpers according to the assignment table. A zero shift is possible up to 25 % of the full-scale range.

Design and installation



Subject to change without notice!

RISHABH INSTRUMENTS PVT. LTD.

F-31, MIDC, Satpur, Nasik - 422 007, India.

Tel : +91 253 2202202, 2202162

Fax : +91 253 2351064, 2202 302

E-mail: service@rishabh.co.in

Website: www.rishabh.co.in