

## Applications:

The digital panel meter **RISH DPM 48 x 96** have been designed for industrial applications, which frequently require precise, on-site adjustment of the display range.

It can be used in industrial automation and for laboratory uses.

It provides cost-effective solution for virtually all switchboard instruments.

## Features:

- **Multi-range versions**
- **DC or AC, Voltage or Current ranges**
- **Pt 100 temperature version**
- **Scaling adjustable over a wide range**

Highly adaptable DPMs suitable for a wide range of measuring applications.

Versions available for current or voltage inputs (DC and AC), or Pt 100 temperature sensors.

The chosen input range is user adjustable, from 10% to 100% of the full-scale value, for simple adaptation of the digital readout to the input value.

For example, the AC version can be scaled for standard 5A secondary current transformers.

96mm x 48mm DIN-standard housings.

## Specifications:

<b>Display</b>	Display range	: 1999
	Decimal point position	: selectable by rear jumper position
	Negative display indication	: “-”
	Digit height	: 14 mm / 7-segment digits
	Overload indication	: Last 3 digits blank

## Measuring ranges

[Max. Overload 120% of full-scale range value]

Version	A	B	C	F	AC	T
					[50...60 Hz]	°C or °F
Voltage				0...2 V	0...500 V	
Input current < 300 µA			0...75 mV	0...20 V		
			0...150 mV	0...200 V		
				0...500 V		
Current	0...20 mA	0...20 mA			0...1 A	
Voltage drop < 600 mV	0...2 mA	4...20 mA			0...5 A	
	0...200 mA					
Pt 100 sensors						-100...850°C
						-199.9...199.9°C
						2-, 3- or 4- wire
Range selection by	Input choice	Input choice	Input choice	Input choice	DIP switch/ Input choice	DIP switch

## Description

### RISH DPM 48 x 96

A	Current measurement, 3 ranges
B	Current measurement, 2 ranges
C	Voltage measurement, 2 ranges
AC	Voltage and Current measurement (AC), 3 ranges
F	Voltage measurement, 4 ranges
T	Temperature measurement with Pt100, 2 ranges

4 ranges for power supply are available

### Applicable Regulations and Standards

Protection class	IP 20 to IEC EN 60 529
front	IP 50 (IP 54 on request)
Climatic class	Class 2 VDE/DIN 3540
Safety class	II to IEC 348 / VDE 0411
Device safety	to IEC EN 61 010
EMC immunity	DIN EN 61 000-4-1 to 4
EMC radiated interference	DIN EN 50 081 class B

**Accuracy :**

Versions A, B, C:	Measuring Accuracy DC	< 0.1% + 1 digit
	Temperature coefficient	100 ppm/°C, plus
	Zero point drift	100 ppm/°C
	Range adjustment span	from 10% to 100% of range
Versions F :	Measuring Accuracy DC	< 0.2% + 1 digit
	Temperature coefficient	100 ppm/°C, plus
	Zero point drift	100 ppm/°C
	Range adjustment span	from 10% to 100% of range
Versions AC :	Measuring Accuracy Voltage (Input current<500mA)	< 0.5% + 1 digit
	Measuring Accuracy Current (Voltage drop<600mV)	< 0.5% + 1 digit
	Temperature coefficient	100 ppm/°C, plus
	Zero point drift	200 ppm/°C
	Range adjustment span	from 10% to 100% of range

Versions T :	Measuring Accuracy DC	< 0.2% + 1 digit
	Temperature coefficient	100 ppm/°C, plus
	Zero point drift	100 ppm/°C
	Range adjustment span	± 5%
	Max. Allowable line resistance	
	2L	10 W
	3L	< 50 W
	4L	< 50 W

Digital input HOLD [optional] "0" (not available for Versions AC, or T)

**Power supply**

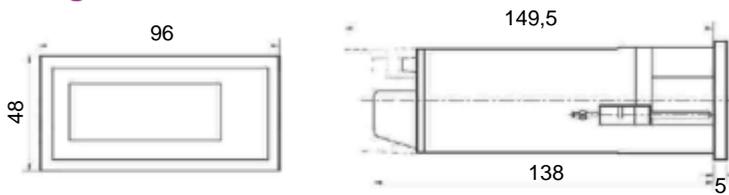
**RISH DPM 48x96 A, B, C, F, AC**

Universal	1) 45 - 450 V AC/DC (± 5%)	
	2) 45 - 300 V AC/DC (± 5%)	
Direct voltage DC	24V + 15%	4W approx.
	24V + 10% -15%	4W approx.
Alternating voltage AC	110V + 10% - 15%	4W approx.
	230V + 10% - 15%	4W approx.

**RISH DPM 48x96 T**

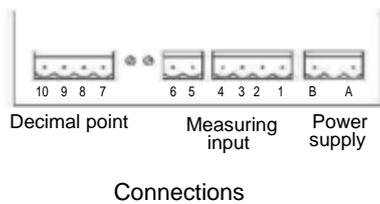
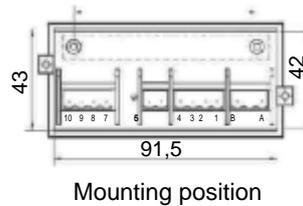
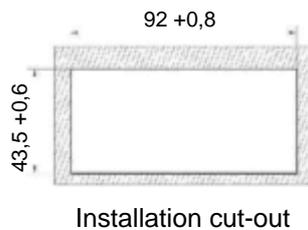
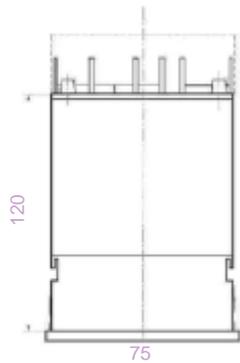
Direct voltage DC	24V + 15%	4W approx.
	24V + 10% -15%	4W approx.
Alternating voltage AC	110V + 10% - 15%	4W approx.
	230V + 10% - 15%	4W approx.

**Design and installation**



<b>Ambient conditions</b>	Operating temperature	0 ... 50°C
	Storage temperature	-40 ... 80°C

<b>Dimensions and Weights</b>	Bezel size	96 mm x 48 mm DIN 43 718
	Panel cut-out	92 <sup>+0.8</sup> mm x 43.5 <sup>+0.6</sup> mm
	Overall depth	138 mm
	Weight	500 g. approx.
<b>Sundry</b>	Connections	plug-in screw terminal block



**Order Details:**

Type	.....	RISH DPM 48x96 AC
Measuring input	.....	0... 1 A
Display	.....	0... 1000
Display caption	.....	
Options	.....	A
Supply Voltage	.....	24 V DC

**Example**



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