



DPM02

Multifunction Signal Display Monitor



Application

〈 Feature 〉

- Measuring input type : DC current / DC voltage / Potentiometer / Linear Resistance / RTD / TC
- More output type — analogue output / relay / RS-485
- Extraction of square root — input : voltage, current
- Option RS-485 communication function can do 10-point linear calibration function
- Signal isolation, preventing noise, filtering function : provide safe and stable measuring
- Power supply : 85~253 VAC, 50~60Hz ; auxiliary supply output (18~26VDC / 50 mA) : use for 2-wire & 3-wire transmitter
- User-friendly, interactive operation interface.
- Panel installation, High light red LED display panel, 14.1mm height of character, 5 digits, -9.9.9.9~+9.9.9.9, 7-segment display
- Programmable, high safety & stability, fire-proof case, moisture-proof cover
- Field — Industry / Agriculture / Pottery & Glass / Chemical Industry / Transportation / Technology / Energy / Eco-friendly / Oil & Gas / Water Circulation System / Marine / Factory Automation / Metal & Steel / Cement / Pulp & Paper / Pharmaceuticals / Food & Beverage

Specification

Display

display readout	5 digits (-9.9.9.9 ... +9.9.9.9.9)
decimal point	0 ... 4 place, button
display	highlight red LED (brightness can be adjusted)
digit height	14.1 mm
accuracy	0.1 % F.S. \pm 1 digital
sampling time	4 cycle / sec
response time adjustment range	0.5 ... 60 sec
parameter setting mode	button

Input

input	voltage : 0 ... 10V, 2 ... 10V, 0 ... 1V, 0.2 ... 1V, 1 ... 5V
	current : 0 ... 20mA, 4 ... 20mA
	RTD : Pt10, Pt20, Pt50, Pt100, Pt200, Pt250, Pt300, Pt400, Pt500, Pt1000 2/3/4w
	TC : B, E, J, K, N, R, S, T, U (internal CJC function)
	Linear Resistance : 0 ... 10K Ohms
	Potentiometer : 10 ... 100K Ohms

Output

analog output	
	current : 0-20mA, 4-20mA, 20-0mA 20-4mA
	voltage : 0-1V, 0.2-1V, 0-5V, 1-5V, 0-10V, 2-10V, 1-0V, 1-0.2V, 5-0V, 5-1V, 10-0V, 10-2V
load resistance	current : $RL < 500 \Omega$; voltage $\geq 10 K \Omega$
analog output resolution	16 bit
signal error detection	yes

relays

alarm hysteresis	display value or 0~100%
ON and OFF delay	0~3600s
output signal error detection	yes
relay actuation direction	upper limit : HI, AL lower limit : LO, AL
relay capacity	Max current : 6A
	Max voltage : 277VAC / 30VDC
	Max power : 1500VA / 180W

communication

communication methods & protocol	RS-485 Modbus RTU , master or slave
RS-485 baud rate	9600, 19200, 38400, 57600, 115200 bps

Environment

operating environment	-10 to +60°C ; 0~95 % (non-cond.)
storage environment	-25 to +60°C

Electrical

power supply / voltage	85~253VAC, 50~60Hz
auxiliary power / output	18-26VDC/50mA
insulation voltage endurance	2KVac/1min
parameter memory type	FLASH
dissipated power	5W

Isolation

power supply / analogue input / analogue output / RS-485	
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Protect

Protection rating	IP65 (front panel)
electric protection	⊙polarity protection ⊙over-voltage

CE Certification

Emission EN 61326-1 : 2013	
	CISPR11:2009+A1:2010 Group 1 Class B
	EN 61000-3-2:2014
	EN 61000-3-3:2013
Immunity EN 61326-1 : 2013	IEC 61000-4-5:2014
	IEC 61000-4-2:2008
	IEC 61000-4-3:2006+A1:2007+A2:2010
	IEC 61000-4-4:2012
	IEC 61000-4-6:2013
	IEC 61000-4-8:2009
	IEC 61000-4-11:2004

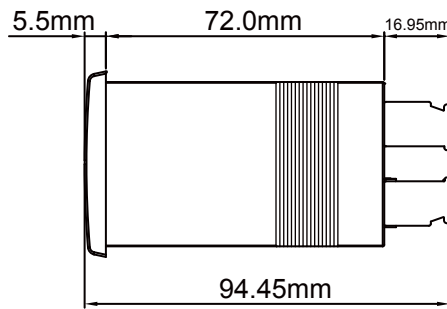
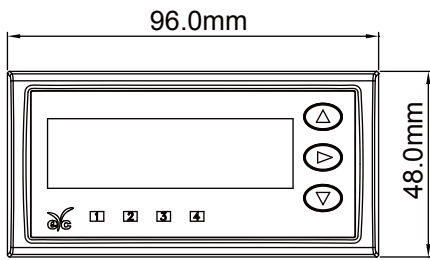
Material

case	ABS fire-proof class (UL94V-0)
dimensions (HxWxD)	48 x 96 x 94.45 mm
cut out dimensions	42.5 x 90.5 mm (+ 1 mm)
weight	about 230 g

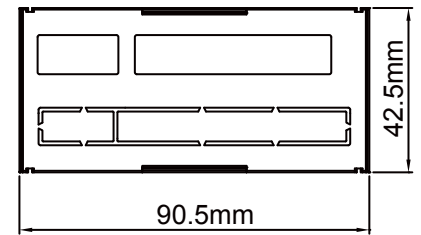
Ordering Guide

type	DPM02	—	B	
output	display	—	A	
	display+2 Relay	—	B	
	display+4 Relay	—	C	
	display+2 Relay+Analogue output+RS-485	—	D	
	display+4 Relay+Analogue output+RS-485	—	E	

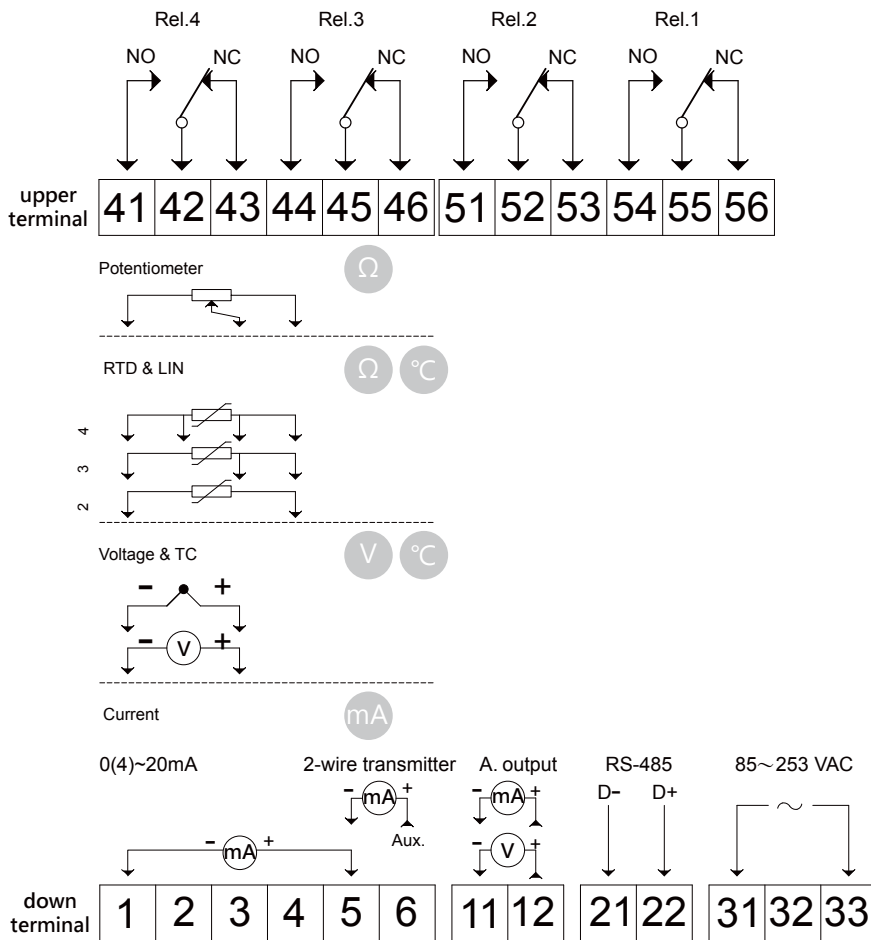
Dimension



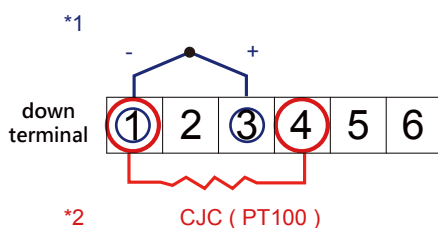
Installation Dimension



Diagram



Thermocouple Input (TC : J / K / T) Type Diagram



※ option

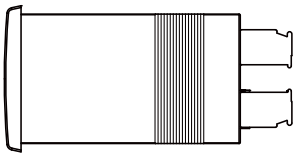
Name	External Cold Junction Compensation Resistor
Oder No.	8205001010
Product	

*1 : TC connecting way

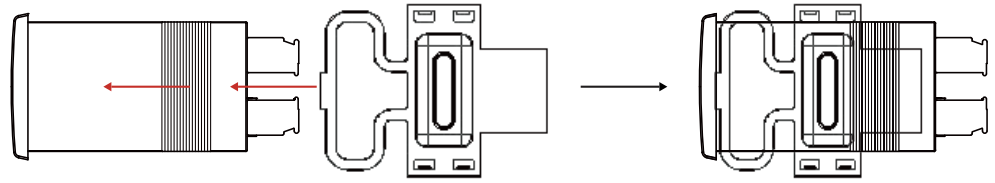
*2 : Option : Cold junction compensation (CJC) connecting way

Installation

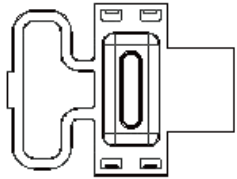
- Side



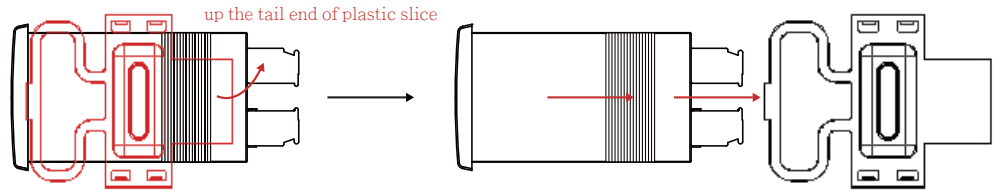
- Fixed way : pull plastic fixed slice via 180°C



- Plastic fixed slice



- Remove way : up the tail end of plastic slice, then pull it out



Programmable

- Tool : PC, USB to RS-485 converter & power supply
- Software : DPM UI
- Calibration Function : analogue output / DC voltage & DC current / linear adjustment / extraction of square root



PC



CR-8001
USB to RS-485
Converter



DPM02



DPM02



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Transmitter
(temp. & humidity/dew
point/air velocity/flow/
gas/pressure/differential
pressure and so on)

