

4½ Digit *RESISTANCE* with Alarm, A/O, RS485 Options

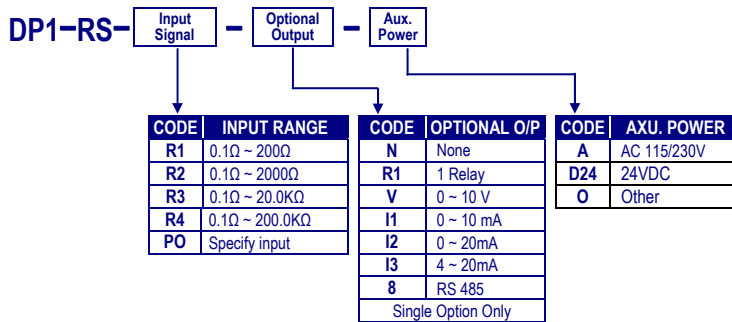
DP1-RS

▶ FEATURES

- Measures & Displays Resistance 0~200Ω / 2000Ω / 20.0KΩ / 200.0KΩ (2 wire)
- Accuracy: ± 0.04%; Display range: -19999~29999
- Easily programmable via the front panel
- *Field calibration capability*
- *1 Relay, 1 Analogue output or RS 485 communication*
- CE Approved



▶ ORDER CODING



▶ SPECIFICATION

Measuring Range	Input Impedance	Excitation Voltage
0 Ω ~ 200 Ω (2 wired)	≥ 1M ohm	About 0.2V
0 Ω ~ 2000 Ω (2 wired)	≥ 1M ohm	
0 Ω ~ 20.0 KΩ (2 wired)	≥ 1M ohm	About 0.8V
0 Ω ~ 200.0 KΩ (2 wired)	≥ 1M ohm	

Calibration: Calibration from front panel
Field calibration function: *Calibration with field signal input high & low, and field calibration reset possible without affecting factory calibration*

Accuracy: ≤ ± 0.04% of FS ± 1C;
Response time: ≤ 100 msec.(when the AvG = "1")

Operating Programming: 4 keys for Enter(Function) / Shift(Escape) / Up / Down
 Up key: increase the number / back to previous function
 Down key: decreases the number / go to next function
 Shift/Escape key: moves the flash digit position / Return back to upper level
 Enter/Fun key: enter the parameters you set or function select

Programmable key: Down key can be programmed to be Present Value (PV), PV Hold, / Max-Min value reset/ or Relay reset if alarm is configured as latching

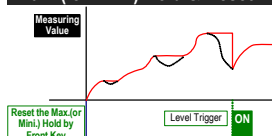
Security : 4 digit password
Lock: 3 security levels User / Master / None

Display functions

LED: Measuring value: 0.56" red high-brightness LED
 Relay output indication: square red LED
 RS 485 communication: square orange LED
 Max.(Mini.) Hold / PV Hold / Rel. PV: square red LED

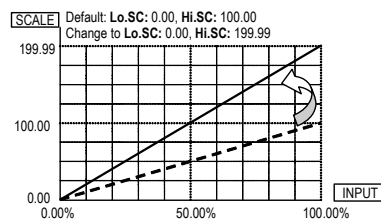
Low Cut function: Low.cut :Settable range: -19999~+19999 counts
Average function: AvG :Settable range: 1~99 times
Digital Filter function: D.FiLt : Settable range: 0(None)/1~99 times
Over range indication: ovFL, when input is over 120% of input range Hi
Under range indication: -ovFL, when input is under -120% of input range Lo
Display functions: *Present Value / Maximum Hold / Minimum Hold / Write to display by RS485 command*

Max. (or Mini.) Hold & Reset



Scaling

Scaling function: Hi.SC(High scale): -19999~29999
 Lo.SC(Low scale): -19999~29999

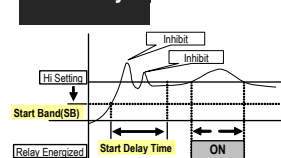


Decimal point: Settable from 0 / 0.0 / 0.00 / 0.000 / 0.0000

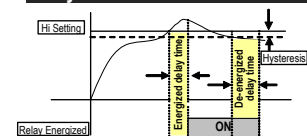
Control functions(optional)

Control relay: 1 Relay SPDT, 5A/230Vac, 10A/115V
Relay Output: Energized levels are compared with set-points: Hi / Lo / Hi hold / Lo hold (latching) selectable
Functions: Start delay / Energized & De-energized delay / Hysteresis
 Start band: 0~9999 counts
 Start delay time: 0:00.0~9(Minutes):59.9(Seconds)
 Energized delay time: 9(Minutes):59.9(Seconds)
 De-energized delay time: 9(Minutes):59.9(Seconds)
 Hysteresis: 0~5000 counts

Start Delay



Energized / De-energized Delay & Hysteresis

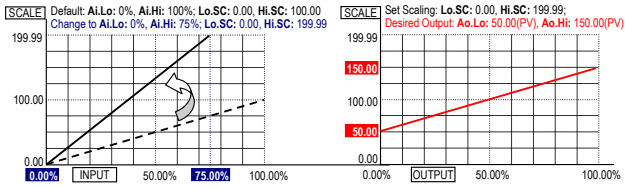


Analogue output(option)

Accuracy: ≤ ± 0.2% of F.S.;
Ripple: ≤ ± 0.1% of F.S.
Response time: ≤ 200 msec. (10~90% of input)
Isolation: AC 2.0 KV between input and output
Output range: Specify Voltage or Current
 Voltage: 0~5V / 0~10V / 1~5V selectable
 Current: 0~10mA / 0~20mA / 4~20mA selectable
Ao.Hi(output high): PV Hi vs. output range Hi
Ao.Lo(output range Low): PV Low vs. output range Lo

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DP1-RS



RS 485 communication(optional)

Protocol: Modbus RTU mode
Baud rate: Selectable 2400/4800/9600/19200/38400
Data bits: Selectable 7 or 8 bit
Parity: Selectable Even, odd or none (with 1 or 2 stop bit)
Device no: Settable 1 ~ 255
Write function: Write to display value from PC's RS485 command

Power

Power Supply: AC 115/230V ± 15%, 50/60Hz

Power consumption: 5.0VA
Back up memory: By EEPROM

Environmental

Operating temperature: 0~60 °C
Operating relative humidity: 20~95 %RH, Non-condensing
Temperature coefficient: ≤ 100 PPM/°C
Storage temperature: -10~70 °C
Enclosure: Front panel: IEC 549 (IP54)

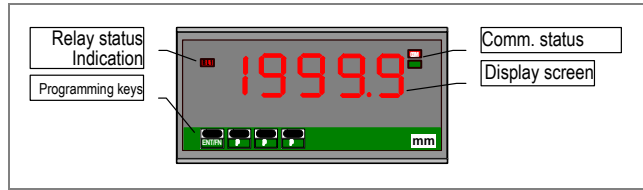
Electrical safety

Dielectric Strength: AC 2.0 KV for 1 min
 Between Power / Input / Output / Case
 ≥ 100M ohm at 500Vdc
Insulation resistance: Between Power / Input / Output
Isolation: EN61326
EMC: EN61010
Safety: EN61010

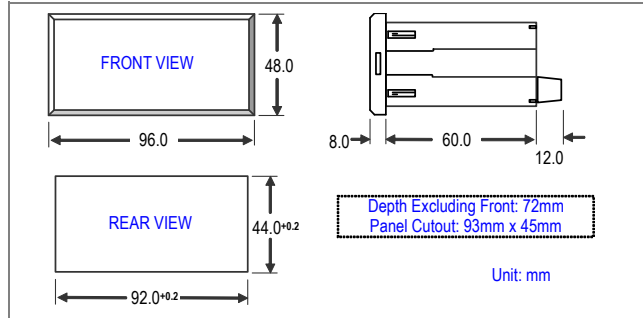
Mechanical

Dimensions: 96mm(W) x 48mm(H) x 72mm(D)
Panel cutout: 92mm(W) x 44mm(H)
Case Material: ABS fire-protection (UL 94V-0)
Mounting: Panel flush mounting
Terminal block: Plastic NYLON 66 (UL 94V-0)
 10A/300Vac, M2.6, 16~22AWG
Weight: About 350g

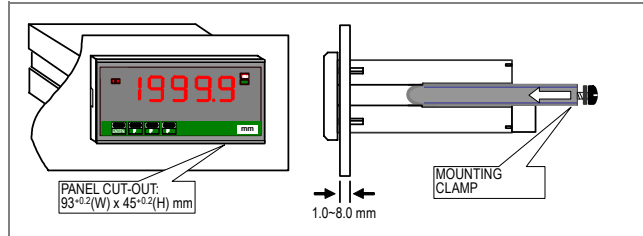
FRONT PANEL



DIMENSIONS



INSTALLATION



CONNECTION DIAGRAM

