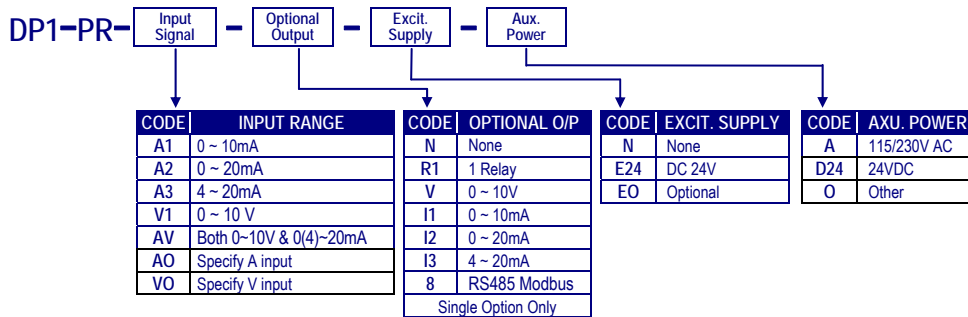


## FEATURES

- Measures: 0~10mA, 0~20mA, 4~20mA or 0~10V
- One meter can be programmed for any range and intermediates
- Accuracy: ± 0.04%; Display range: -19999~29999
- Easily programmable via the front panel
- 1 relay, 1 Analogue output or RS 485 communication
- CE Approved



## ORDER CODING



## SPECIFICATION

Measuring Range	Input Impedance	Measuring Range	Input Impedance
Voltage 0 ~ 10 V	≥ 1M ohm	Current 0(4)~20 mA	250 ohm

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

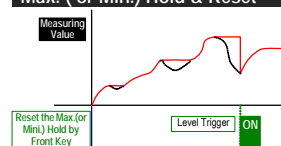
### Operation

Programming: 4 keys for Enter(Function) / Shift(Escape) / Up / Down  
 Up key: increases number / back to previous function  
 Down key: decreases number / go to next function  
 Shift/Escape key: moves the flashing digit position / Return to upper level  
 Enter/Fun key: enter the parameters set or Selects programming mode  
 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 digits password  
 Lock: 3 function group lock level for None/User Level/ Engineer Level / All(Engineer Level & User Level)

### Display functions

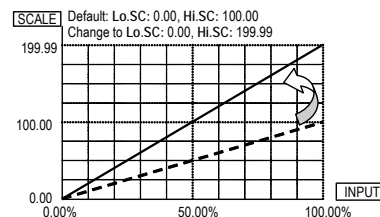
LED: Measuring value: 0.56" red high-brightness LED  
 Relay output indication: square red LED  
 RS 485 communication: square orange LED  
 Max. / Mini. Hold: square red LED  
 Low Cut function: Low.cut :Settable range: 000~5000 counts  
 Average function: AvG :Settable range: 1~99 times  
 Digital 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 Min.) Hold & Reset



### Scaling

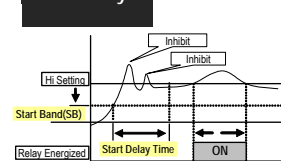
Scaling function: Hi.SC(High scale): -19999~29999  
 Lo.SC(Low scale): -19999~29999  
 Decimal point: Settable from 0 / 0.0 / 0.00 / 0.000 / 0.0000



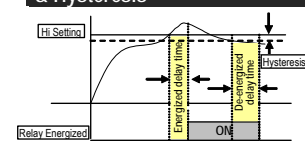
### Control functions(optional)

Relay: 1 Relay SPDT, 5A/230Vac, 10A/115V  
 Relay Output: Energized levels compare 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(Second)  
 Energized delay time: 9(Minutes):59.9(Second)  
 De-energized delay time: 9(Minutes):59.9(Second)  
 Hysteresis: 0~5000 counts

### Start Delay

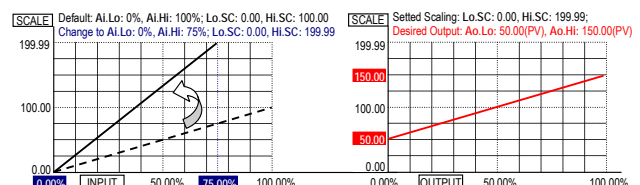


### Energized / De-energized Delay & Hysteresis



### 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 low): PV Low vs. output range Lo



# 4½ Digit 4~20mA with Alarm, A/O, RS485 Options

**DP1-PR**

## 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

Excitation Supply (loop): DC 24V ± 10%, 30mA  
 Power Supply: AC 115/230V ± 15%, 50/60Hz, DC 24V ± 10%,  
 Power consumption: 5VA  
 Back up memory: By EEPROM

## Environmental

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

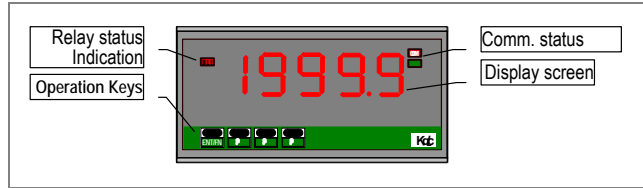
## Electrical safety

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

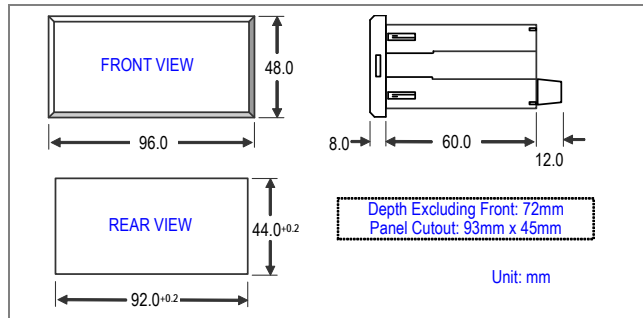
## Mechanical

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

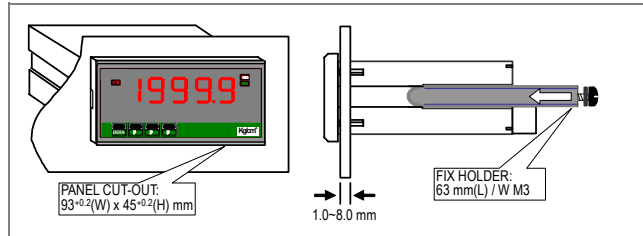
## FRONT PANEL



## DIMENSIONS



## INSTALLATION



## CONNECTION DIAGRAM

