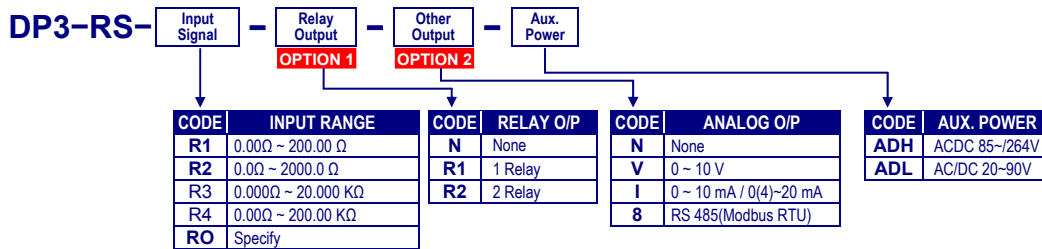


**▶ FEATURES**

- Measures resistance signals 0~200Ω/2000Ω/20.0KΩ/200.0KΩ (2 wire)
- Accuracy: ± 0.04%; Display range: -19999~29999
- Easily programmable via the front panel
- **Up to 2 relays available with latching and time delay programmable**
- Analogue output and RS 485 Modbus options
- **1 external control inputs for Reset, tare and hold functions**
- CE Approved

Note:- This product has many state of art functions. Please download our 'common functions' document from the customer portal for explanations

**▶ ORDER CODING****■ TECHNICAL SPECIFICATIONS**

Input	Measuring Range	Impedance
All Ranges		≥ 1M ohm

**Calibration:** Digital calibration by front key  
**A/D converter:** 16 bits resolution  
**Accuracy:** ≤ ± 0.04% of FS ± 1C;  
**Sampling rate:** 15 cycles/sec  
**Response time:** ≤ 100 msec.(when AvG = "1") as standard

**Input range:** Input High and Low programmable  
**Ai.Hi:** Settable range: 0.00~100.00% of input range  
**Ai.Lo:** Settable range: 0.00~100.00% of input range

**Display & Functions**

**LED:** Numeric: 5 digit, 0.4"(10.0mm)H red high-brightness LEDs  
**Relay output indication:** 2 square red LEDs  
**RS 485 communication:** 1 square orange LEDs  
**E.C.I. function indication:** 1 square green LEDs  
**Display range:** -19999~+29999;  
**Scaling function:** Lo.SC: Low Scale; Settable range: -19999~+29999  
 Hi.SC: High Scale; Settable range: -19999~+29999  
 Programmable from 0 / 0.0 / 0.00 / 0.000 / 0.0000  
**Decimal point:** ovFL, when input is over 20% of input range Hi  
**Over range indication:** -ovFL, when input is under 20% of input range Lo  
**Under range indication:** Maximum and Minimum value storage during power on.  
**Max / Mini recording:** **PV / Max(Mini) Hold / RS 485 programmable**  
**Display functions:** **Up key can be set to be a function as ECI.1**  
**Front key functions:** Settable range: -19999~29999 counts  
**Low cut:** Pv.Zro: Settable range: -19999~+29999  
**Digital fine adjust:** Pv.SPn: Settable range: -19999~+29999

**Reading Stability Function**

**Average:** Settable range: 1~99 times  
**Moving average:** Settable range: 1(None)~10 times  
**Digital Filter:** Settable range: 0(None)/1~99 times

**Control Functions**

**Control relay:** 2 Relays FORM-C, 1A/230Vac, 3A/115V  
**Relay energized mode:** Energized levels compare with set-points:  
*Hi / Lo / Hi.HLd / Lo.HLd programmable*  
**Energized by RS485 command of master: DO programmable**  
**Energized functions:** Start delay / Energized & De-energized delay / Hysteresis  
 Energized Latch  
**Start band**(Minimum level for Energizing): 0~9999counts  
**Start delay time:** 0.00.0~9(Minutes):59.9(Second)  
**Energized delay time:** 0.00.0~9(Minutes):59.9(Second)  
**De-energized delay time:** 0.00.0~9(Minutes):59.9(Second)  
 Hysteresis: 0~5000 counts

**External Control Inputs(ECI)**

**Input mode:** 1 ECI points, Contact or open collect input, Level trigger  
**Functions:** *Relative PV(Tare) / PV Hold / Reset for Max or Mini. Hold / DI / Reset for Relay latching*  
**Debounce time:** Settable range 5 ~255 x 8m seconds

**Analogue output(option)**

**Accuracy:** ≤± 0.1% of F.S.;  
**Ripple:** ≤± 0.1% of F.S.  
**Response time:** ≤100 msec. (10~90% of input)  
**Isolation:** AC 1.5 KV between input and output  
**Output range:** Specify either Voltage or Current output  
**Voltage:** 0~5V / 0~10V / 1~5V programmable  
**Current:** 0~10mA / 0~20mA / 4~20mA programmable  
**Output capability:** **Voltage: 0~10V: ≥ 1000Ω;**  
**Current: 4(0)~20mA: ≤ 600Ω max**

### Functions:

**Ao.HS (output range high):** Settable range: -19999~29999

**Ao.LS (output range Low):** Settable range: -19999~29999

**Ao.LMt (output High Limit):** 0.00~110.00% of output High

**Ao.Zro:** Settable range: -38011~+27524

**Ao.SPn:** Settable range: -38011~+27524

### Digital fine adjust:

### RS 485 communication(option)

**Protocol:** Modbus RTU mode  
 **Baud rate:** 1200/2400/4800/9600/19200/38400 programmable  
 **Data bits:** 8 bit  
 **Parity:** Even, odd or none (with 1 or 2 stop bit) programmable  
 **Device no:** 1 ~ 255 programmable  
 **Remote display:** to show the value from RS485 command of master  
 **Distance:** 1200M  
 **Terminate resistor:** 150Ω at last unit.

### Electrical Safety

**Dielectric strength:** AC 1.5 KV for 1 min, Between Power / Input / Output / Case  
 **Insulation resistance:** ≥ 100M ohm at 500Vdc, Between Power / Input / Output  
 **Isolation:** Between Power / Input / Relay / E.C.I./ Analogue or RS485  
 **EMC:** EN 55011:2002; EN 61326:2003  
 **Safety(LVD):** EN 61010-1:2001

### Environmental

**Operating temp.:** 0~60 °C  
 **Operating humi.(%RH):** 20~95 %RH, Non-condensing  
 **Temp. coefficient:** ≤100 PPM/°C  
 **Storage temperature:** -10~70 °C  
 **Enclosure:** Front panel: IEC 549 (IP54); Housing: IP20

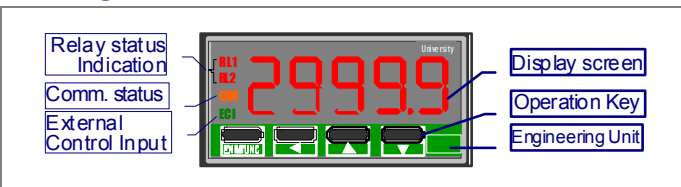
### Mechanical

**Dimensions:** 48mm(W) x 24mm(H) x 102mm(D)  
 **Panel cutout:** 45mm(W) x 22.5mm(H)  
 **Case materiel:** ABS fire-protection (UL 94V-0)  
 **Mounting:** Panel flush mounting  
 **Terminal block:** Plastic NYLON 66 (UL 94V-0)  
5A 300Vac, M2.0, 0.5~1.3mm<sup>2</sup>(22~16AWG)  
 **Weight:** About 110g

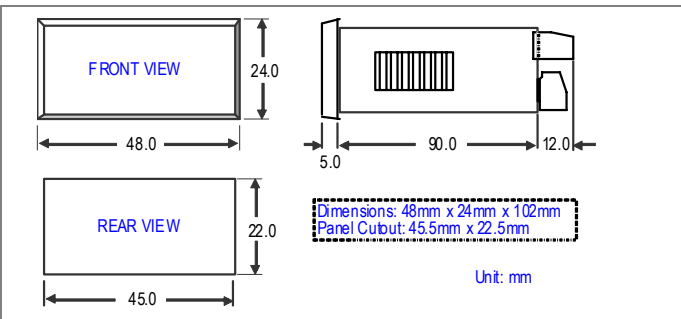
### Power

**Power supply:** AC/DC 85~264V or AC/DC 20~90V  
 **Excitation supply:** DC 24V, 30mA maximum in standard  
 **Power consumption:** 4.5VA max.  
 **Back up memory:** By EEPROM

## FRONT PANEL

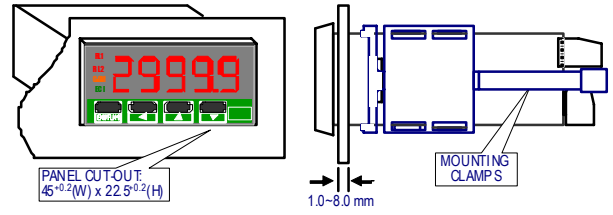


## DIMENSIONS

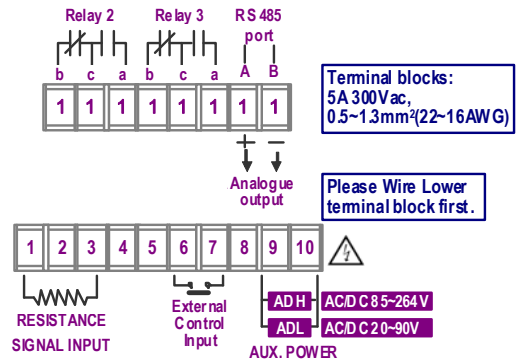


## INSTALLATION

The meter should be installed in a location that does not exceed the maximum operating temperature and provides good air circulation.

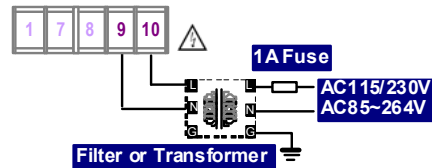


## CONNECTION DIAGRAM



Please check the voltage of power supplied first, and then connect to the specified terminals. It is recommended that power supplied to the meter be protected by a fuse or circuit breaker.

### Power Supply (Recommendation)



### RS485 Communication Port

