

# Resistance Transducer

**USPR-2**


- ⊙ Standard output with 0 - 1 mAdc;  
Option on request
- ⊙ Dual isolated output eliminating ground loops effect
- ⊙ AC 1800V input / output / isolation meets power series requirement
- ⊙ Meets IEEE SWC test
- ⊙ Three wires configuration eliminating wire resistance

## Specification

**1. Accuracy** 0.25% RO / 23 ± 3°C

### 2. Input ( each element )

Range 0 - 50 / 0 - 100 / 0 - 200 / 0 - 500 / 0 - 1K / 0 - 2K / 0 - 5K / 0 - 10K /  
0 - 20 Kohm ... range / order on request

Configuration Three wires

Sensing DC constant current

Protection Full protection for SURGE, EMI & RFI

### 3. Output ( isolated with input )

Dual output / isolated each other ( 600Vdc )

Range 0 - 1 / 0 - 5 / 0 - 10 / 0 - 20 / 4 - 20 / 0 - 50 / 10 - 50 mA

0 - 1 / 0 - 5 / 1 - 5 / 0 - 10 / 2 - 10V

Standard calibration 0 - 1mA vs required input range

Option calibration under required range

Drive ability Maximum 10Kohm for 0 - 1mA standard output

> 10V for current output mode

> 10mA for voltage output mode

Output impedance > 30 Mega ohm

Response time < 400 ms from 0 - 99% RO at operating

Ripple < 0.5% P - P RO

Long term stability < 0.5% RO per year

Temperature stability < 0.015% per degree C, from 0 - 55°C

Adjustment Span, zero ± 5% RO minimum

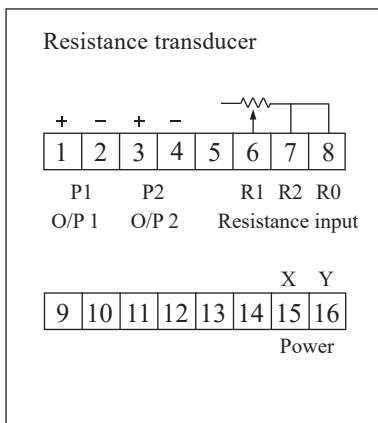
Protection No damage ... open or short; full protection of SURGE, EMI, RFI

Magnetic effecton < 0.04% at center 400 A - T / M

#### 4. Operation condition

Environment	
Temperature	-5 - 60°C
Humidity	20 - 99% RH non condensed
Elevation	Under 3000 meters
Magnetic field	500 A - T / M
Dielectric strength	4KV AC rms 1 minute between input / output / power / case IEC 688
Impulse test	ANSI C37.90/1989, IEEE 587/1983, IEC 255-3, 6KV ( 1.2 x 50 us ), 3KA ( 8 x 20 us ) ...current only
Surge test ( ring wave)	IEEE 587/1983 ( 3KV-0.5us / 100KHz ) IEC 255-3 ( 2.5KV - 0.25ms / 1MHz)
Power supply	LO: DC 24 - 60V ± 20% HI : AC 80 - 260V @40 - 70Hz / DC 80 - 330V Dissipation Max. 12VA for AC / 10W for DC

#### Terminal Connection



Standard connection three wires  
If for two wires application, short terminal 7 & 8

DC power for terminal X (+), Y (-)

#### Dimension

