

# SPT-XXR Series

## Rosemount Transmitter Various Models / Electronic Surge Suppressor



Shown here is the SPR-01R Series. See back page for other models

---

### Features:

- ▶ Easy, fast installation inside Rosemount Various Models . See back page for details
- ▶ Exceeds severity level 4 of IEC/EN 61000-4-4 (provides 2.5kA / Line of surge protection).
- ▶ Mounts on existing terminal block inside the Rosemount Transmitter.
- ▶ Sub nanosecond response time stops failures due to lightning, spikes and over voltage surges while minimizing other electrical noise.
- ▶ Superior protection at an affordable price.
- ▶ Space efficient protector is conformal coated
- ▶ to protect from environmental contaminants, solvents, abrasives, and humidity providing a moisture proof seal to ensure operating stability for the transmitter.
- ▶ Unique multi-stage design provides the most effective suppression available.
- ▶ Automatic reset and fail safe design requires no maintenance. Eliminates “Out of Service” downtime and repair/replacement costs caused by damaging electrical surges.

---

### Applications:

The SPT-XX R Series is designed to protect the Rosemount Transmitters from lightning induced transients, over voltages and electrical spikes.

Select the Surge Suppressor model according to the Rosemount transmitter model number indicated on the reverse side of this data sheet.

Select the SPT-10R Series for the new version of transmitters with the standardized terminal head.

---

### Typical Installation:

The SPT-XX R Series installs on the existing terminal block inside the Rosemount transmitter utilizing a standard blade screwdriver. Mount the protector as illustrated in the installation instructions, using the hardware provided. Although maintenance is not required, the instrument zero should be checked after installation.

## Surge Control Suppressor Part Numbers for the indicated Rosemount Transmitter

SPT-01R Series



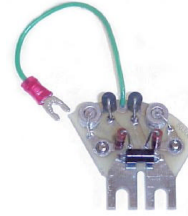
Models 2008,2088,2090P and 2090F ) 2 wire Transmitters)

SPT-03R Series



Model 2088 low power (3 wire) Transmitters

SPT-05R Series



Model 3051 Standard and Smart Series (2 wire) Transmitters

SPT-02R Series



Models 444,1144,1151 Standard and Smart (2 wire ) Transmitters

SPT-04R Series



Models 2024 Transmitter both 'A' and 'M' output (2 or 3 wire versions)

SPT-06R Series



Model 1151 lower power (3 wire) Transmitter

SPT-07R Series



Models 444, 444LL, and 444LM Temperature Transmitters

**Operating specifications** for surge suppressor model number listed above are very similar to the SPT-01R Series (see below). Consult CCI for specific model number, for dimensions, installation instructions, and for other operating conditions or specifications. All specifications at 25 degrees Celsius.

### SPT-01R Series Operating Specifications:

Specifications	SPT-01R14	SPT-01R25	SPT-01R28	SPT-01R36
Operating Voltage	12 Volts	24 Volts	28 Volts	36 Volts
Maximum Operating Voltage	14 Volts	27 Volts	30 Volts	38 Volts
Maximum Operating Current	200 mA	200 mA	200 mA	200 mA
Clamping Action Turn-On	14.3 Volts	28.5 Volts	31.4 Volts	40.9 Volts
Maximum Clamping at 2 kA (8 x 20 µSec)	22 Volts	44 Volts	46 Volts	58 Volts
Maximum Surge Voltage	20 kV	20 kV	20 kV	20 kV
Maximum Surge Current (8 x 20 µSec)	2.5 kA	2.5 kA	2.5 kA	2.5 kA
Current Leakage/Line At Operating Voltage	5 µA	5 µA	5 µA	5 µA
Capacitance/ Line At Rated Voltage	2000 pF	500 pF	500 pF	500 pF
Response Time	Less than 1 nanosecond			
Operating & Storage Temperature	-40 °C to +85 °C			

**Circuit Components, Inc.**  
 2400 S. Roosevelt Street Tempe, AZ - 85282  
 Tel: 480-967-0624 - Fax: 480-967-9385  
 Email: [info@surgecontrol.com](mailto:info@surgecontrol.com) - Website: [www.surgecontrol.com](http://www.surgecontrol.com)

**SURGE CONTROL®**  
 A PRODUCT OF **CCI**

This information is not intended to and does not create any warranties, expressed or implied, including any warranty of merchantability or fitness for a particular purpose. Circuit Components Inc. reserves the right to change specifications at any time without notice.