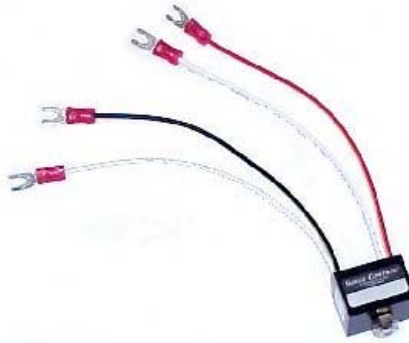


# SPR-42US SERIES

TWO WIRE INSTRUMENTATION

SURGE SUPPRESSOR



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## FEATURES:

- ▶ Exceeds severity level 4 of IEC/EN 61000-4-4 (Provides 10 kA / line of surge protection).
- ▶ Compatible with all 2 wire signal or current loop equipment installations.
- ▶ Can be installed on analog or digital signal data lines.
- ▶ Space efficient protector is hermetically sealed and suitable for the most harsh industrial environments.
- ▶ Unique multi-stage design provides the most effective suppression available.
- ▶ Sub nanosecond response time stops failures due to lightning, spikes and overvoltage surges while minimizing other electrical noise.
- ▶ Automatic reset and fail safe design requires no maintenance. Eliminates "Out of Service" downtime and repair/replacement costs caused by damaging electrical surges.
- ▶ Simple installation to a wall or case. Hardware is included.
- ▶ Superior protection at an affordable price.

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## Applications:

The SPR-42US Series is designed to protect traffic controllers, measurement and process control equipment, 4-20 mA loop instrumentation, data processing and telecommunication equipment, etc.

Select the model according to the operating voltage from table found on the reverse side of this data sheet.

Select the SPR-42US14 for RS-422 and RS-485 applications. The SPR-42US24 for RS-232 data lines and SPR-42UST for Telco installations.

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## Typical Installation:

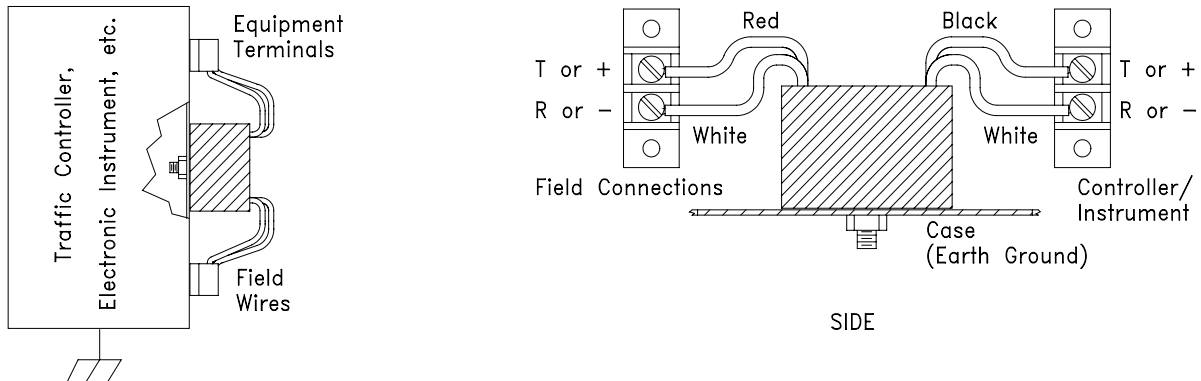
The SPR-42US Series is normally mounted to a panel or case wall using the #6 screw stud provided. This stud must be connected to a good earth ground. Connect the field and instrument wires as indicated, taking care to dress output wires away from field wires. Mount the suppressor as near the equipment it protects as possible. Keep the suppressor ground and equipment ground common.

# SPR-42US SERIES OPERATING SPECIFICATIONS:

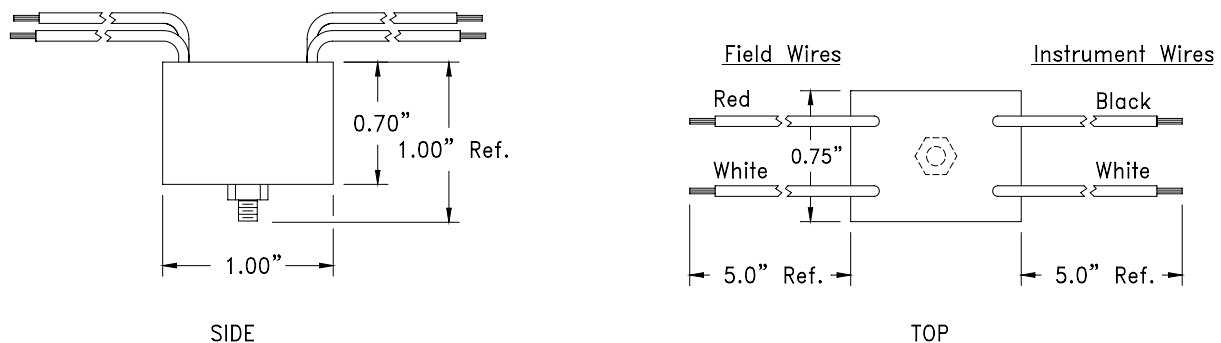
Specifications	SPR-42US05	SPR-42US14	SPR-42US25	SPR-42US28	SPR-42US36	SPR-42US50	SPR-42US60	SPR-42US185
Operating Voltage	5 Volts	12 Volts	24 Volts	28 Volts	36 Volts	50 Volts	60 Volts	185 Volts
Maximum Operating Voltage	6 Volts	14 Volts	27 Volts	30 Volts	38 Volts	55 Volts	67 Volts	205 Volts
Maximum Operating Current	200 mA	200 mA	200 mA	200 mA	200 mA	200 mA	200 mA	200 mA
Clamping Action Turn-On	7.1 Volts	14.3 Volts	28.5 Volts	31.4 Volts	40.9 Volts	58.9 Volts	71.3 Volts	209 Volts
Maximum Clamping at 2kA (8 x 20 µSec)	11 Volts	22 Volts	44 Volts	46 Volts	58 Volts	81 Volts	94 Volts	340 Volts
Maximum Surge Voltage	20 kV	20 kV	20 kV	20 kV	20 kV	20 kV	20 kV	20 kV
Maximum Surge Current (8 x 20 µSec)	10.0 kA	10.0 kA	10.0 kA	10.0 kA	10.0 kA	10.0 kA	10.0 kA	10.0 kA
Current Leakage / Line At Operating Voltage	500 µA	5 µA	5 µA	5 µA	5 µA	5 µA	5 µA	5 µA
Capacitance/Line At Rated Voltage	4000 pF	2000 pF	500 pF	500 pF	400 pF	300 pF	200 pF	50 pF
Response Time	Less than 1 nanosecond							
Operating & Storage Temperature	-40 °C to +85 °C							

Consult factory to select other operating conditions and specifications. All specifications at 25 degrees Celsius.

## Typical Installation:



## Outline Dimensions:



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 A PRODUCT OF **CCI**

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