

# Surge Cop

## Transient Surge Protector

Two Wire or Four Wire  
4 to 20mA Current Loop Surge Protector  
Type: SCSP-30VDC-20mA

## Technical Data



### Description:

The transient surge suppressor features a two stage protection mechanism that provides over-voltage and surge current protection for 2 wire + 4-20mA current loops. Internally, the module has 100% redundancy to safeguard the system and prevent nuisance failures. This series of modules is for systems using a power supply at the Data Acquisition System end of the twisted pair to power the transducer.

### Application:

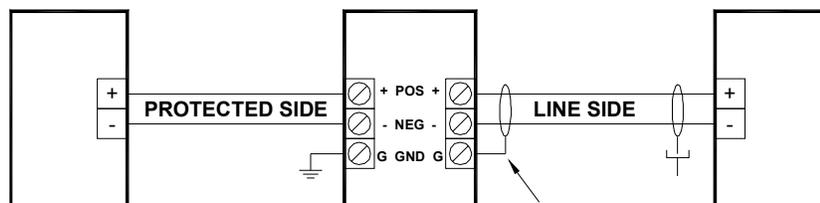
The module has a PROTECTED SIGNAL and POWER side that is connected to the Data Acquisition System input and power supply. It also has a LINE SIGNAL and POWER side that is connected to the transmission wire. The EARTH connection of the modules must be terminated to earth by low impedance heavy gauge wire.

### WIRING DIAGRAM

SCADA SYSTEM  
OR OTHER  
CONTROL PANEL  
INSTRUMENT

"SURGE COP"  
SURGE  
PROTECTOR

TRANSDUCER  
OR  
FIELD  
INSTRUMENT



NOTE: SHIELD IS  
TO BE GROUNDED  
AT ONE SIDE ONLY.

### FEATURES

- Hybrid Design
- Reflection of Surge
- Two Stage MOV Suppression
- Wave Form Sloping
- Compact Individual Units
- DIN Rail Mounting
- Clearly Marked Wiring Terminals
- Rising Cage Clamp Screw Terminations

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## Technical Specifications

### Transient Surge Protector

Operating Voltage:	+ 30V	
	Signal	Power
Over-Voltage Level, Protected Side Suppression Begins:	35.1V	52.0V
Maximum Clamp Volts For Maximum Transient on Line:	56.4V	93.0V
Series Resistance	15 Ohms	5 Ohms
Surge Current 8/20uSec Pulse: 2mSec Pulse:	4000A 52 Joules	
Resistance to Earth Max Over-Voltage: Operating Voltage:	0.01 ohm > 1M ohm	
Suppression Threshold Voltage Derating: (mV/°C)	39.0	

#### Dimensions:

WEG 6 terminal modular housing,  
#12 to #22 AWG terminals.  
Size: 60.6 mm x 90.5 mm x 22.5 mm  
(2.39" x 3.56" x 0.89")  
(W x H x D excluding DIN Rail)

#### Operating Conditions:

-40 to +85°C  
0 to 93% Relative Humidity

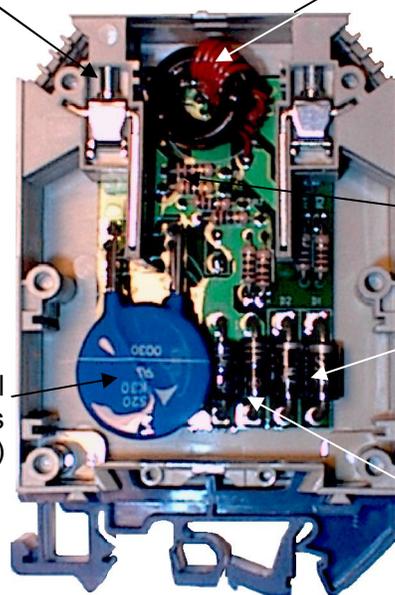
Specifications subject to change without notice

#### Ordering Part Number:

+30V SCSP-30VDC-20mA

Field wiring connections.  
Accepts up to #12 AWG

Durable Metal Oxide Varistors (Redundant)



Choke  
Impedance nominally low pass filter reflects RF & higher frequencies (redundant)

Resistors (Redundant)

Transorbs (Redundant)

Silicone Avalanche Diodes (Redundant)