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.

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**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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**WIRING DIAGRAM**

SCADA SYSTEM OR OTHER CONTROL PANEL INSTRUMENT

TRANSUDER OR FIELD INSTRUMENT

"SURGE COP" SURGE PROTECTOR

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

### Transient Surge Protector

<table>
<thead>
<tr>
<th>Operating Voltage:</th>
<th>+ 30V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signal</td>
<td>Power</td>
</tr>
<tr>
<td>Over-Voltage Level, Protected Side Suppression Begins:</td>
<td>35.1V</td>
</tr>
<tr>
<td>Maximum Clamp Volts For Maximum Transient on Line:</td>
<td>56.4V</td>
</tr>
<tr>
<td>Series Resistance</td>
<td>15 Ohms</td>
</tr>
<tr>
<td>Surge Current 8/20uSec Pulse:</td>
<td>4000A</td>
</tr>
<tr>
<td>2mSec Pulse:</td>
<td></td>
</tr>
<tr>
<td>Resistance to Earth Max Over-Voltage: Operating Voltage:</td>
<td>0.01 ohm</td>
</tr>
<tr>
<td>Suppression Threshold Voltage Derating: (mV/°C)</td>
<td>39.0</td>
</tr>
</tbody>
</table>

### 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
- Choke Impedance nominally low pass filter reflects RF & higher frequencies (redundant)
- Resistors (Redundant)
- Transorsbs (Redundant)
- Silicone Avalanche Diodes (Redundant)
- Durable Metal Oxide Varistors (Redundant)