Surge Protection You Can Count On!

MidNite Solar Surge Protection Devices are Type 2 devices (NEC 2011 Article 285), designed for indoor and outdoor applications. Engineered for both AC and DC electrical systems, they provide protection to service panels, load centers or electronic devices that are directly connected to a MidNite Surge Protection Device (SPD).

MidNite's SPDs are offered in four models to protect a variety of different voltage ranges. They achieve this protection by clamping surge voltage to a level that your system can sustain without damaging the components of the system.

Compare our SPDs against other surge protection devices. You will see there is no comparison in both our price and features. All our SPDs are made in the USA and have a 5 year warranty.

*With lightning you only get one chance, so get the best!*

Four Models:
MNSPD-115
MNSPD-300-AC
MNSPD-300-DC
MNSPD-600

www.midnitesolar.com/spd
17722 67th Ave. NE., Arlington, WA. 360-403-7207 FAX: 360-691-6862
### MidNite Surge Protection Devices

**PART NO.**

<table>
<thead>
<tr>
<th>MNSPD-115</th>
<th>MNSPD-300-AC</th>
<th>MNSPD-300-DC</th>
<th>MNSPD-600</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nominal Voltage</strong></td>
<td>0 to 90 VAC 0 to 115 VDC</td>
<td>0 to 250 VAC 0 to 300 VDC</td>
<td>0 to 485 VAC 0 to 600 VDC</td>
</tr>
<tr>
<td><strong>MCOV</strong></td>
<td>180V (162-198)</td>
<td>470V (423-517)</td>
<td>470V (423-517)</td>
</tr>
<tr>
<td><strong>Clamp Voltage @ 100A Current 8/20 μs</strong></td>
<td>295V</td>
<td>775V</td>
<td>775V</td>
</tr>
<tr>
<td><strong>Energy Absorption In Joules</strong></td>
<td>1120 J (Full Device) 560 J (Each Section)</td>
<td>3130 J (Full Device) 1560 J (Each Section)</td>
<td>3130 J (Full Device) 1560 J (Each Section)</td>
</tr>
<tr>
<td><strong>Suggested Placement</strong></td>
<td>Up to 90 VAC circuits, 12V, 24V, 48V DC battery circuits</td>
<td>120/240 VAC circuits Off-grid PV combiners Charge controller inputs up to 300VDC</td>
<td>Grid-tie PV combiners Grid-tie inverter input Non-Isolated Inverters</td>
</tr>
<tr>
<td><strong>Diagnostic Blue LED</strong></td>
<td>MNSPD-115, MNSPD-300-AC and MNSPD-300-DC</td>
<td>MNSPD-600</td>
<td></td>
</tr>
<tr>
<td><strong>Thermal Disconnector - Internal Fuse</strong></td>
<td>MN</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Response time</strong></td>
<td>&lt;1 micro sec.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Performance
- **Surge Current Rating per Phase**: 57kA
- **Short Circuit Current Rating**: 115kA
- **T-MOVs**: 8
- **Fusing**: Individually fused MOVs
- **Thermal Fusing**: Yes
- **Over current Fusing**: Yes
- **Operating Frequency**: 0 to 60 Hz

#### Mechanical Description
- **Enclosure**: Polycarbonate UL94V-0
- **Environmental Rating**: Type 4X
- **Connection Method**: #12 AWG
- **Weight**: 1 lb.
- **Mounting Method**: 1/2” Conduit Knockout
- **Operating Altitude**: Sea Level – 12,000’ (3,658 Meters)
- **Storage Temp**: -40° F to +185° F (-40° C to +85° C)
- **Operating Temp**: -40° F to +185° F (-40° C to +85° C)

#### Diagnostics
- **Blue status LED, one per leg**

#### Listings and Performance
- CSA C22.2 No. 8-M1986 Electromagnetic Interference (EMI) Filters, Fourth Edition

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**Critical Dimensions**

- **Ø3.527”**
- **3.82”**
- **4.425”**
- **24” Wires**

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</tr>
</thead>
<tbody>
<tr>
<td><strong>Nominal Voltage</strong></td>
<td>90VAC/115VDC</td>
<td>250VAC</td>
<td>300VDC</td>
</tr>
<tr>
<td><strong>Surge Current per Phase</strong></td>
<td>57kA</td>
<td>57kA</td>
<td>57kA</td>
</tr>
<tr>
<td><strong>Configuration</strong></td>
<td>1Ø 3-wire (2 Legs)</td>
<td>1Ø 3-wire (2 Legs)</td>
<td>1Ø 3-wire (2 Legs)</td>
</tr>
<tr>
<td><strong>MCOV</strong></td>
<td>180V L-N</td>
<td>470V L-N</td>
<td>470V L-N</td>
</tr>
<tr>
<td><strong>SSCR</strong></td>
<td>115kA</td>
<td>115kA</td>
<td>115kA</td>
</tr>
<tr>
<td><strong>VPR 600V/3kA</strong></td>
<td>330V</td>
<td>880V</td>
<td>880V</td>
</tr>
</tbody>
</table>

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**MidNite Solar, Inc.**

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