

MIDNITE SOLAR INC.

Surge Protection

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!



R&P Services Group www.rpservicesgroup.com
35, Rue Clerveaux info@rpservicesgroup.com
Petion-Ville, Haiti Tel: +(509)3800-4444



MNSPD300ACFM (Cut-in box)
(MNSPD-300-AC included)




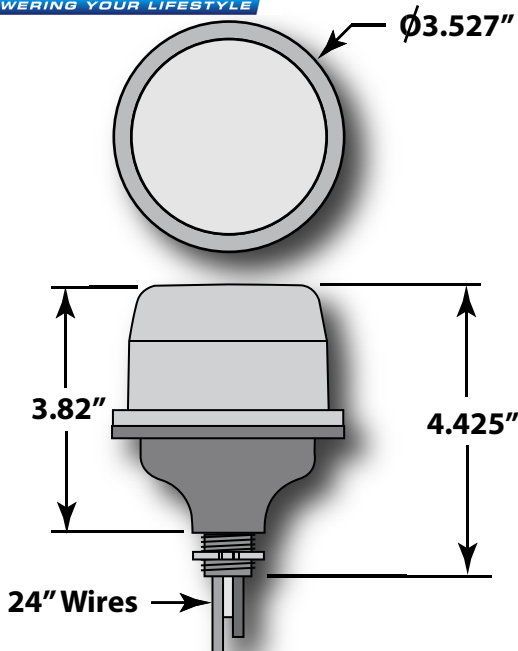
Four Models:

MNSPD-115
MNSPD-300-AC
MNSPD-300-DC
MNSPD-600



MidNite Surge Protection Devices

| PART NO. | MNSPD-115 | MNSPD-300-AC | MNSPD-300-DC | MNSPD-600 |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Nominal Voltage | 0 to 90 VAC 0 to 115 VDC | 0 to 250 VAC | 0 to 300 VDC | 0 to 485 VAC 0 to 600 VDC |
| MCOV | 180V (162-198) | 470V (423-517) | 470V (423-517) | 780V (702-858) |
| Clamp Voltage @ 100A Current 8/20 μ s | 295V | 775V | 775V | 1290V |
| Energy Absorption In Joules | 1120 J (Full Device) 560 J (Each Section) | 3130 J (Full Device) 1560 J (Each Section) | 3130 J (Full Device) 1560 J (Each Section) | 4320 J (Full Device) 2160 J (Each Section) |
| Suggested Placement | Up to 90 VAC circuits, 12V, 24V, 48V DC battery circuits | 120/240 VAC circuits | Off-grid PV combiners Charge controller inputs up to 300VDC | 316V/480 VAC circuits Grid-tie PV combiners Grid-tie inverter input Non-Isolated Inverters |
| Diagnostic Blue LED | MNSPD-115, MNSPD-300-AC and MNSPD-300-DC LED indicates when voltage is present between L1+Ground and L2+Ground MNSPD-600 LED indicates when voltage is present between L1+L2 (PV + PV-) | | | |
| Thermal Disconnecter - Internal Fuse |  | | | |
| Response time | <1 micro sec. | | | |



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

UL Standard for Safety, UL 1449 Surge Protective Devices-Third Edition
CSA C22.2 No. 8-M1986 Electromagnetic Interference (EMI) Filters, Fourth Edition

| Model No. | Max Operating Voltage | Surge Current per Phase | Configuration | MCOV | SCCR | VPR 600V/3kA L G |
|--------------|-----------------------|-------------------------|---------------------------------|----------|-------|------------------|
| MNSPD-115 | 90VAC/115VDC | 57kA | 1 \emptyset , 3-wire (2 Legs) | 180V L-N | 115kA | 330V |
| MNSPD-300-AC | 250VAC | 57kA | 1 \emptyset , 3-wire (2 Legs) | 470V L-N | 115kA | 880V |
| MNSPD-300-DC | 300VDC | 57kA | 1 \emptyset , 3-wire (2 Legs) | 470V L-N | 115kA | 880V |
| MNSPD-600 | 485VAC/600VDC | 57kA | 1 \emptyset , 3-wire (2 Legs) | 780V L-N | 115kA | 1500V |

R&P Services Group
35, Rue Clerveaux
Petion-Ville, Haiti

www.rpservicesgroup.com
info@rpservicesgroup.com
Tel: +(509)3800-4444

