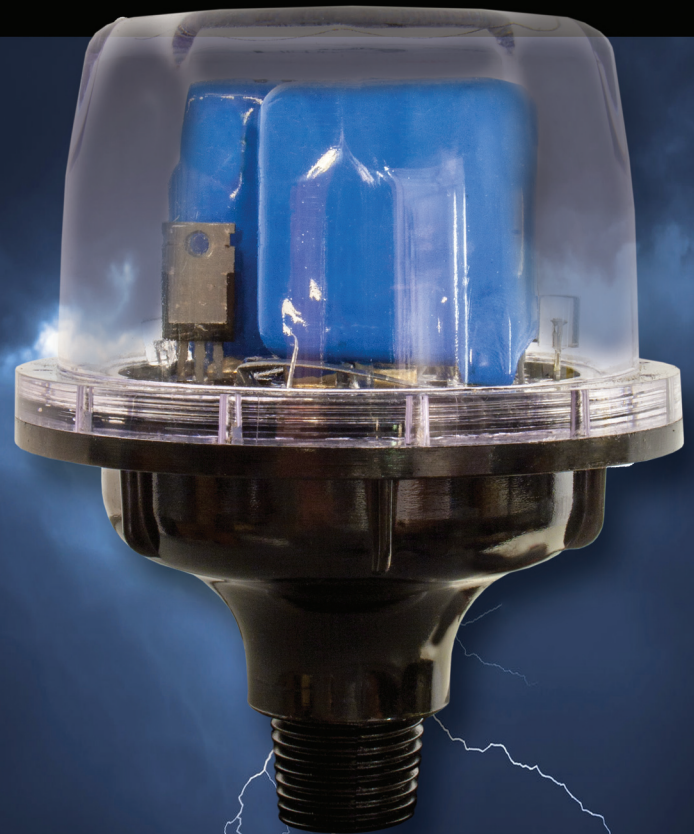




MIDNITE SOLAR INC.

Surge Protection

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



**Surge Protection
You Can Count On!**

Four Models:

MNSPD-115

MNSPD-300-AC

MNSPD-300-DC

MNSPD-600




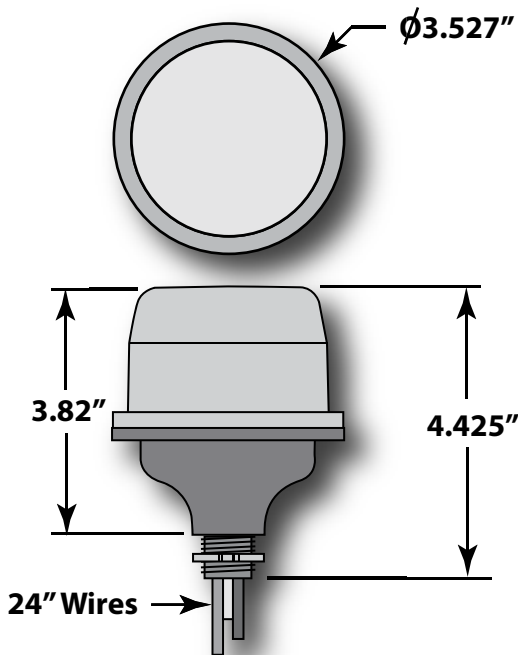
***With lightning you only
get one chance, so get
the best!***

www.midnitesolar.com/spd
19115 - 62nd Ave. NE., Arlington, WA.
PH. 360-403-7207

10-408-1

MidNite Surge Protection Devices

PART NUMBER	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 480 VAC 0 to 600 VDC
MCOV	180V	470V	470V	780V
VPR Line to Ground	600V	1200V	1200V	1800V
Suggested Placement	Up to 90VAC circuits, 12V, 24V, 48VDC 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
Type	UL1449 4th Ed. Type 1	UL1449 4th Ed. Type 1	UL1449 4th Ed. Type 1	UL1449 4th Ed. Type 1
Diagnostic Blue LED	MNSPD-300-AC LED indicates when voltage is present between L1 + ground and L2 + ground MNSPD-115, MNSPD-300-DC and MNSPD-600: LED indicates when voltage is present between L1 + L2 (PV+ PV-)			
Thermal Disconnect	Internal Fuse			
Response Time	<1 micro sec.			



Performance

Surge Current Rating per Phase	80kA
Short Circuit Current Rating	10kA

Fusing	Individually fused MOVs
Thermal Fusing	Yes
Over current Fusing	Yes
Operating Frequency	0 to 500 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-Forth 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	100VAC/150VDC	80kA	1 ϕ , 3-wire (2 Legs)	180V L-N	10kA	600V
MNSPD-300-AC	300VAC	80kA	1 ϕ , 3-wire (2 Legs)	470V L-N	10kA	1200V
MNSPD-300-DC	385VDC	80kA	1 ϕ , 3-wire (2 Legs)	470V L-N	10kA	1200V
MNSPD-600	480VAC/600VDC	80kA	1 ϕ , 3-wire (2 Legs)	780V L-N	10kA	1800V