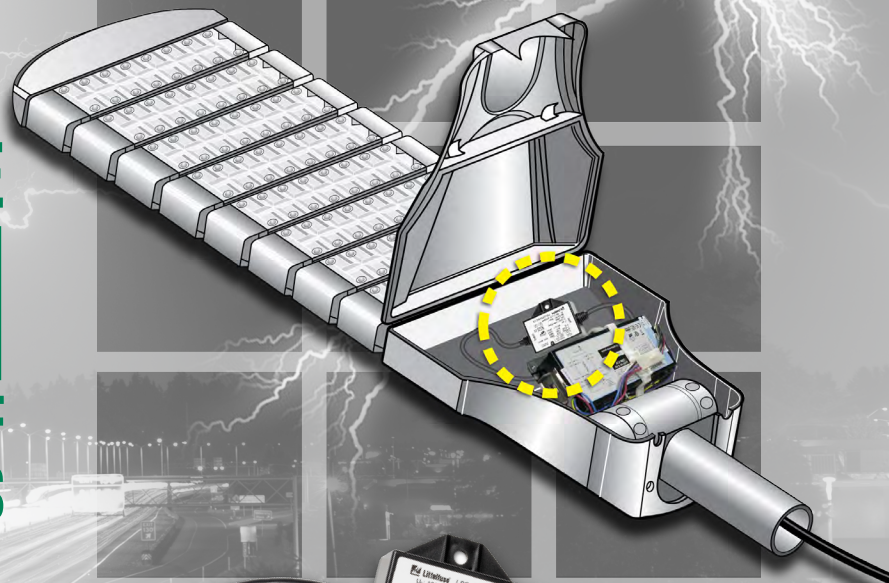


**REDUCES SURGE
LET-THROUGH
EXTENDS LIFETIME OF
YOUR LED LUMINAIRES**



Highest Performing SPD Module for Outdoor LED Lighting Protection

LSP10GIHP Series modules provide coordinated protection for most commercially available LED drivers used today, reducing driver failure more effectively than ever before. Lower clamping voltage and surge let-through current ensure greater luminaire protection.

These modules comply with ANSI C136.2-2015 Extreme, ANSI C82.77-5-2015 High Exposure, IEEE C62.41.2 Location Category C High Exposure, and US Dept. of Energy MSSLC Roadway Luminaire Elevated (20kV/10kA, 1.2/50 μ s-8/20 μ s) surge immunity standards. A built-in thermal disconnect provides additional protection against catastrophic failure/fire hazard under varistor end-of-life or sustained overvoltage conditions.



DataSheet



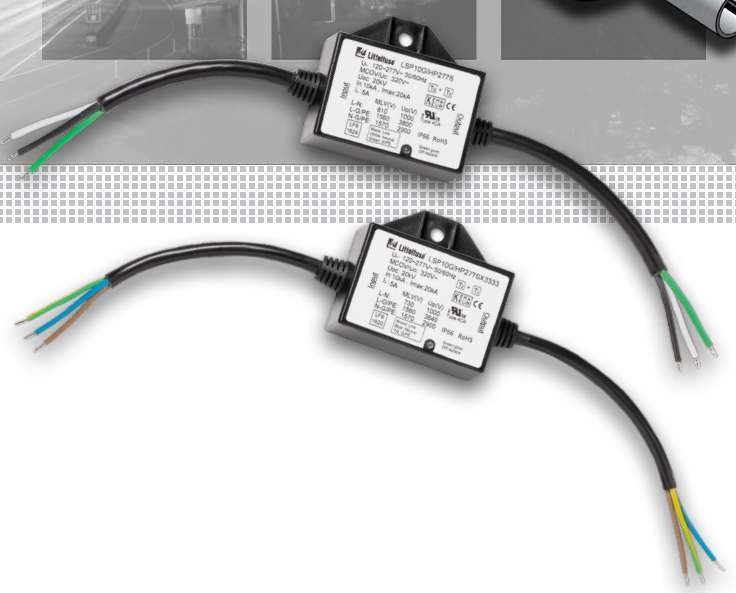
Design Guide



Samples

Applications

- Roadway, street and traffic lighting
- Parking garage lighting
- Wash wall lighting
- Digital signage
- Tunnel lighting
- Flood lighting



LSP10GIHP Series Surge Protection Modules provide the industry's most robust surge protection for your outdoor/commercial LED lighting fixtures



LSP10GIHP277S



LSP10GIHP277SX3333

Features

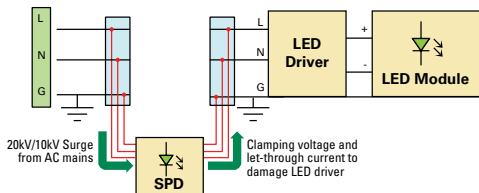
- Low measured limiting voltage (MLV) and low voltage protection level (U_p)
- 20kA Maximum Discharge Current (I_{max}) 8/20 μ s
- Meets US Department of Energy Municipal Solid State Street Lighting Consortium Specification
- Meets ANSI C136.2-2015 Extreme Level and ANSIC82.77-5 Category C High (20kV, 10kA combination wave surge) requirements
- UL 1449 and IEC 61643-11/EN 61643-11 approved
- Thermally protected
- Double-insulated cable wire
- IP66 rated
- Series-connected design with built-in LED indication

Benefits

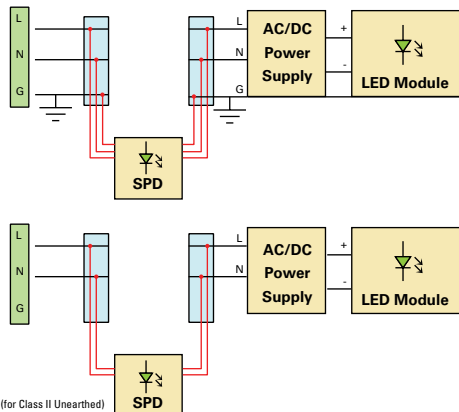
- Reduces driver failure and increases time between maintenance calls
- Coordinated protection with most commercially available drivers used today
- Allows easy selection from only two voltage options for confident use across more luminaire voltages
- Protects outdoor LED fixtures from high electrical hazard environments
- Suitable for use in many parts of the world
- Protection from hazards affecting light or facility due to 'end-of-life' or extreme surge conditions
- Suitable for use in Class II luminaires per EN 60598-1*
- Dust-tight and water resistant
- Saves maintenance time by identifying when a replacement module is needed

Surge Let-through Compared to LSP10

	NEW!	LSP10
Clamping Voltage (10kA source, L-N)	LSP10GIHP277S - 810V LSP10GIHP480S - 1400V	LSP10277S - 1330V LSP10480S - 2020V
Let-through Current (20kV/10kA source, L-N)	Independent from LED driver, less than 0.5kA	Vary with different LED drivers, ranged from 1kA to 4kA

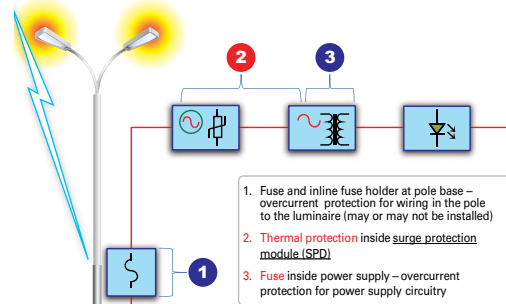


Series Connection Using an SPD



- Thermal protection prevents MOV fire hazard caused by unstable line voltage and end-of-life failure
- Series-connected SPD turns off luminaire power to provide a clear indication the light requires maintenance
- The built-in LED indicator alerts the need for SPD replacement

LED Street Light Protection Scheme



Surge Protection Module Key Characteristics

Model	LSP10GIHP277S LSP10GIHP277SX3333 LSP10GIHP277SX3316	LSP10GIHP480S
Connection Type	Series	
Indication for SPD Replacement	Luminaire turned off	
Thermal Protection	MOV thermal disconnection when overheated	
Recognition/Compliance	UL 1449 Type 4 CA IEEE C62.41.2 C High Exposure ANSI C136.2 Extreme ANSI C82.77-5 High Exposure US DOE MSSLC Roadway Elevated EN/IEC 61643-11 Class II + III CE KEMA-KEUR (20kV/10kA, 1.2/50 μ s-8/20 μ s)	UL 1449 Type 4 CA IEEE C62.41.2 C High Exposure ANSI C136.2 Extreme ANSI C82.77-5 High Exposure US DOE MSSLC Roadway Elevated (20kV/10kA, 1.2/50 μ s-8/20 μ s)
U_n (nominal operating voltage)	120VAC - 277VAC	347VAC - 480VAC
I_{max} (maximum surge current, one hit)	20kA	
I_n (nominal surge current, 15 hit)	10kA	
Luminaire Insulation Class	Class I earthed/Class II unearthed	Class I earthed
Water-proof and Dust-proof	IP66	
Dimensions	71.63 x 49.6 x 32mm (mounting tab excluded)	
Applicable Markets	America/Europe	America