

Product Highlights

10 kA Impulse Discharge Current

Higher surge capability and lower clamping voltage for better protection; compliant with the IEC 61643-21 standard

10/100BASE-T, Gigabit, and PoE Compatible

The surge protector is ideal for deployment in situations where PoE passthrough and high bandwidth are required

Built-In Failure Indicator

Easily keep track of the unit's condition through the built-in failure indicator that warns you when the device needs replacement



DPE-SP110I

PoE Lightning Protector

Features

High Standard of Protection

- 10 kA impulse discharge current

Easy to Use

- Suitable for all PoE equipment and Ethernet devices
- Plug and Play, no software required
- 10/100/1000 Mbps connection up to 100 meters
- Compact and easy-to-install design
- Failure indicator to notify you when the device needs replacement

Protection Mode

- Common mode up to 10 kA
- Differential mode up to 1 kA

Surge Compliance

- IEC 61643-21
- IEC 61000-4-5
- ITU-T K-Series

PoE Passthrough

- Supports IEEE 802.3af/at
- Supports up to 60 W PoE passthrough
- Protects all four pairs of the Ethernet cable

Any type of sudden electrical surge can damage electronic equipment beyond practical repair. The DPE-SP110I PoE Lightning Protector helps protect your network equipment from damage caused by lightning or other static charge buildup. In the event of an electricity surge, the DPE-SP110I will cut off or divert all the excess electricity while continuing to let through the regular amount of power necessary for your equipment to work as normal.

High Surge Capability

The DPE-SP110I features a higher surge capability and lower clamping voltage. This durable design aims to reduce maintenance costs. The 10 kA impulse discharge current provides reliable surge protection. The DPE-SP110I is also compliant with the IEC 61643-21 standard, meaning it automatically covers all other existing international standards such as the ITU-T K-Series and IEC 61000-4-5.

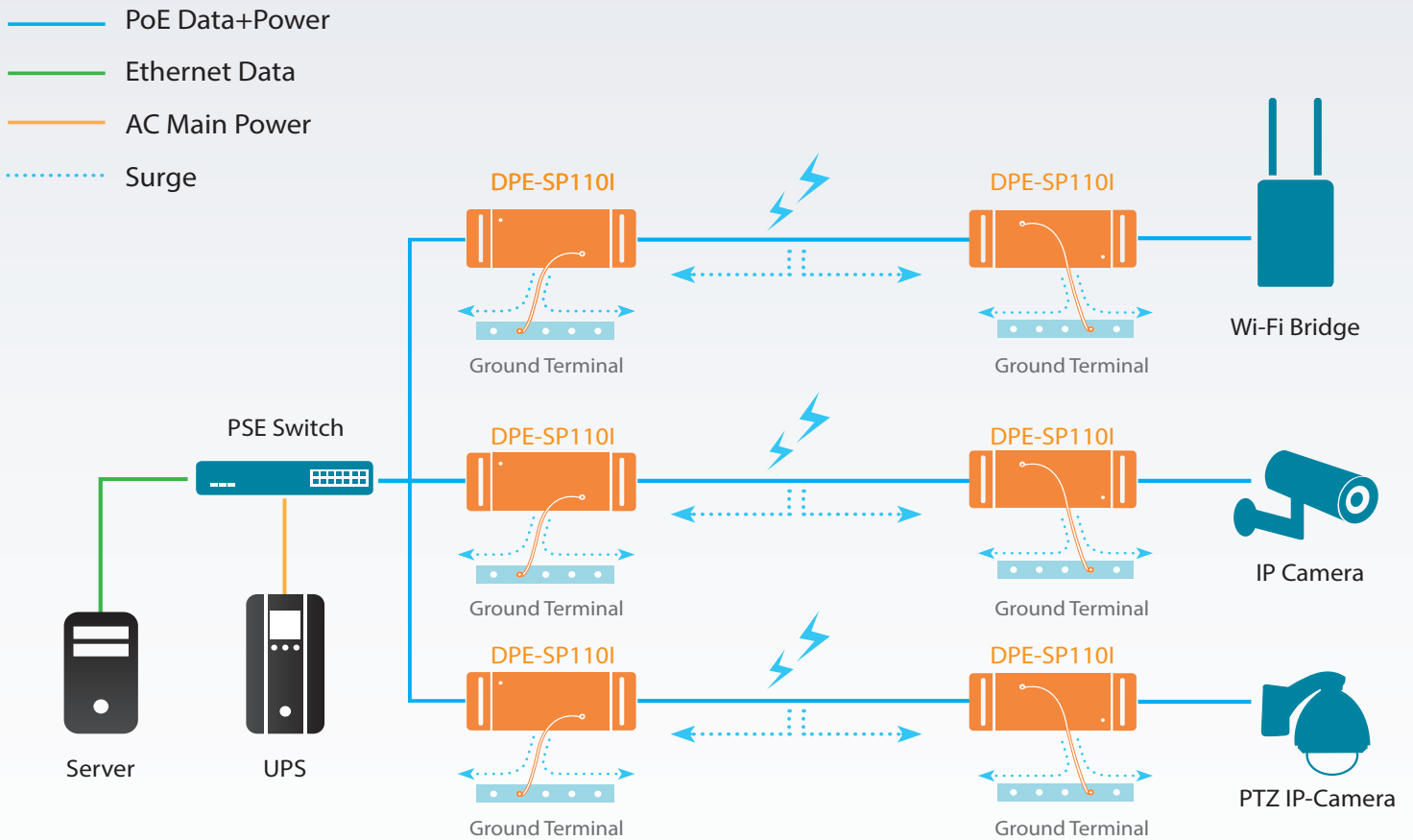
High Speed PoE Connectivity

The DPE-SP110I can work as a transmitter for a PoE switch to deliver power and data through an Ethernet cable. This device helps protect all 8 pins and is compatible with all types of RJ45 cables. The DPE-SP110I can handle data rates of up to 1000 Mbps and is backwards compatible with older 10/100 Mbps ports while also providing support for both PoE and PoE+ standards.

Optimal Efficiency

Most traditional lightning protectors use either Gas Discharge Tube (GDT) and Silicone Avalanche Diodes (SAD) technology or a combination of both, resulting in unstable current and limited surge capability. When used in the field, these lightning protectors have shown to be unreliable and still damage the connected equipment. The D-Link DPE-SP110I and DPE-110 feature an innovative patented design that balances surge current on each line to maximize surge capability, significantly enhancing reliability.

Typical Installation Diagram



Technical Specifications

Interface

Line In Port (Line IN)	<ul style="list-style-type: none"> • 1 x RJ-45 port (power + data in) • Compatible with 10/100/1000BASE-T 	<ul style="list-style-type: none"> • PoE Passthrough
Line Out Port (Device)	<ul style="list-style-type: none"> • 1 x RJ-45 port (power + data out) • Compatible with 10/100/1000BASE-T 	<ul style="list-style-type: none"> • PoE Passthrough

Performance

Maximum Discharge Current	<ul style="list-style-type: none"> • 10 kA 	
Common Mode (Line-to-Ground) Protection	<ul style="list-style-type: none"> • 20 kV (10/700 us) 	<ul style="list-style-type: none"> • 10 kA (8/20 us)
Differential Mode (Line-to-Line) Protection	<ul style="list-style-type: none"> • 6 kV (10/700 us) 	<ul style="list-style-type: none"> • 1 kA (8/20 us)
Clamping Voltage (Line-to-Ground)	<ul style="list-style-type: none"> • 600 V at 10 kA 	
Clamping Voltage (Line-to-Line)	<ul style="list-style-type: none"> • 20 V at 1 kA 	
Surge Protection Response Time	<ul style="list-style-type: none"> • 5 ns 	
Ethernet PoE/Data Line	<ul style="list-style-type: none"> • Added protection for 10/100/1000 Mbps Ethernet ports • Added protection for all RJ-45 8-pin assignments 	<ul style="list-style-type: none"> • Added protection for all four pairs of all types of Ethernet cables including Cat 5, Cat 5E, and Cat 6

DPE-SP110I PoE Lightning Protector

PoE Passthrough	• Supports IEEE 802.3af/at	• Supports up to 60 W PoE Passthrough
Diagnostic LEDs		
Service Life (per device)	• OFF - normal	• ON - Device has reached its service life and needs to be replaced ¹
Physical		
Dimensions (L x W x H)	• 120 x 40 x 25 mm (4.72 x 1.57 x 0.98 in)	
Weight	• 152 g (0.34 lbs)	
Maximum PoE Operation DC Voltage	• 60 V DC	
Maximum PoE Operation DC Current	• 1 A	
Operation Temperature	• -40 to 85 °C (-40 to 185 °F)	
Storage Temperature	• -40 to 85 °C (-40 to 185 °F)	
Humidity	• 0 to 95%, non-condensing	
Material	• Aluminium	
Ground Cable	• AWG 12-type cable	
Mean Time Between Failure (MTBF)	• 923,617 hours	
Certifications	• CE • IEC 61643-21 (10 kA) • IEC 61000-4-5	• ITU-T K-Series • RoHS 6
Order Information		
<i>Product Number</i>	<i>Description</i>	
DPE-SP110I	PoE Lightning Protector	

¹ Note: The indicator only works with PoE equipment. The indicator works based on the characteristics of the snubber components. Snubber components absorb surge energy by consuming its chemical contents that will gradually degrade its resistance. The resistance degradation can be tested by applying a DC voltage, indicating its service life.

Safety Information:

Please read this safety information carefully. By installing or making use of the lightning protector, you acknowledge and agree to the statement herein.

- This product is sold pursuant to the terms and conditions set forth in the Warranty document. You acknowledge your review and acceptance of all terms and conditions of such Warranty.
- Proper installation is required for the ground cable to achieve its highest surge capability.
- Lightning protectors and lightning: It is a common misunderstanding that surge protectors will protect equipment from lightning. Even the most effective lightning protectors cannot always fully protect equipment from the sudden increase in electrical pressure of several millions of volts transmitted by a lightning strike.
- A lightning/surge protector is a passive device with a variable life span, depending on the number of surges it receives. Its service life also varies depending on the amount of energy absorbed during each electrical surge. It is difficult to assess the current status of the lightning/surge protector based on its outer appearance or physical shape. For optimal performance, we strongly recommend that you replace your lightning/surge protector every two (2) years.

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