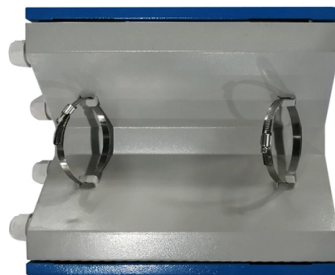


Causes of lightning strikes on PoE switches



Overview

PoE powering is often used indoors because outdoor cabling requires unshielded network cables and causes PoE switches to be damaged by lightning strikes. What is the explanation?

What can I do to avoid it?

Can the lightning enter through the indoor network cabling?

Or maybe through some network device not connected to UPS?

Today we had a massive thunderstorm coming through and one lightning strike must have hit my house or at least very close by. Lightning and thunder was without any delay and extremely loud. Right after the strike all my security cams went offline. They are all hooked up to that switch, and powered. A switch supplies power to APs using outdoor cabling. Feb 28 2020 14:35:50 hwPoePowerOff_active (I):CID=0x0-alarmID=0x08012266; PD powered off. But with great convenience comes vulnerability. Power surges, whether caused by lightning strikes, electrical overload, faulty wiring. This report considers the implementation of lightning surge protection for Power over Ethernet (PoE) Powered Device (PD) applications. The need for implementing such protection will normally depend on the environment in which the PD is intended to operate and the inherent isolation properties of. Thunderstorms Knock Out POE : r/Ubiquiti This is a place to discuss all things Ubiquiti, especially UniFi. My power (lights etc) isn't flickering.

Article Content

Aug 09, 2025

Case Study: A Switch Undergoing Lightning Strikes Cannot Power APs

If network cables between a PoE switch and APs are deployed outdoors, the power supply module of the PoE switch may be burnt due to lightning strikes. The following describes the damage caused by

May 19, 2026

Ethernet Surge Protection for Home Networks

Between rooms to create protection between components Between indoor-outdoor connections, when running Ethernet cables to outdoor equipment such as PoE cameras It's

Dec 31, 2025

Proven Lightning Protection for Outdoor POE WiFi

The Best PROVEN Lightning Protection for your WiFi - Wireless Bridge, Outdoor Access Point, or Ethernet POE Camera! RadioLabs POE Compatible lightning /

Dec 07, 2025

PoE Grounding & Lightning Protection Essentials

PoE system long-distance wiring is vulnerable to lightning surges and ground potential differences. Core protection: Build a standardized grounding

Jan 15, 2026

What Is a Power Surge: Causes, Effects, and Protection

After we know what happens during an electrical surge, let's explore what causes a power surge. Why do power surges happen? Understanding these

Apr 27, 2026

Thunderstorms Knock Out POE : r/Ubiquiti

We had a lightning strike across the road from my apartment and the induced EMI definitely did something to the PoE circuitry of the switch to the point it was outputting 24v power frying whatever

May 25, 2026

Ethernet Surge Protector

Discover how to choose and install the best Ethernet surge protector. Learn about PoE, grounding, gigabit support, and more. Protect your

Feb 28, 2026

PoE ports dead after lightning strike

So I have no clue how the lightning strike manage to get into my switch. On the power side, I have a server rack surge protector right in-front of the switch, and a UPS with its own surge

Apr 09, 2026

Protect POE systems from lightning surges and other

As the power POE systems deliverhas increased, developers are installingEthernet equipment in areas that exposeit to increased hazards from

Jan 31, 2026

Back Button

Hier sollte eine Beschreibung angezeigt werden, diese Seite lässt dies jedoch nicht zu.

Jan 25, 2026

How To Protect Network Switch From Lightning

How To Protect Network Switch From Lightning 2022-11-27 16:39:35 Lightning is inevitable all over the world and it causes real trouble to all electrical and

May 21, 2026

How would a lighting strike, or power surge, effect a (POE) switch and ...

How would a lighting strike, or power surge, effect a (POE) switch and connected devices? I've experienced twice now the same odd occurrence the past two back lightning storms we've had.

Mar 29, 2026

PoE + Lightning = POOF!

Anyone with relevant experience, I'd appreciate your perspective on the following: I've got an office with 30+ IP phones running off a pair of Adtran 1234 PoE switches. My telecom demarc

Jul 17, 2025

Lightning Surge Considerations for PoE Powered Devices

The multiple ports lightning surge test checks that the equipment has the required level of resistibility when an overvoltage surge occurs on n ports simultaneously, which can result in a high current

Mar 19, 2026

Low voltage network (poe / ethernet) lightning protection

This lightning protection method is characterized by a short response time and a small capacity, which together with high pulse power at a low residual voltage,

Mar 01, 2026

How to Protect Network Switch from Lightning? (3 Best Ways)

Lightning is inevitable all over the world and it causes real trouble to all electrical and electronic devices. Also, the network devices are not safe from attack. Especially if you have a tower without any

Feb 21, 2026

POE port outdoor 4KV and 6KV lightning protection solution

2. Problems encountered by POE port 1) In a network environment, you may encounter electrical interference caused by factors such as lightning strikes, power mutations, and power failures. These

Jan 29, 2026

Lightning damaging Switches PoE modules and indoor Access Points

This can be a surge caused by the lightning striking the electricity supplier's infrastructure. However, if there was a power outage after a storm, it could also be caused by a surge

Apr 15, 2026

Mitigating Surge Events in Ethernet Networks | DigiKey

As Ethernet becomes the backbone of industrial communications, the susceptibility of its infrastructure to surge events, such as lightning strikes, poses

Mar 05, 2026

Protect PoE Devices from Power Surges and Other

The downside is this exposes PoE devices to the risk of power surges or spikes caused by weather conditions, including lightning strikes and other disruptions.

Apr 03, 2026

How to Protect Your Gigabit PoE Network from Power

Firstly, a nearby lightning strike can induce high voltage into Ethernet cables (as they are made of pure copper wires) in outdoor deployments, even

Aug 09, 2025

How to Design Lightning Protection for Poe Products?

Therefore, the corresponding multi-level lightning protection circuit must be installed at the signal line interface connecting the power receiving

Jun 01, 2026

Surge Protection for POE Injectors / Adapters

Why is surge protection for PoE important? Power over Ethernet systems utilize power equipment that is vulnerable to a range of electrical overstresses that can

Jun 06, 2026

Designing Ethernet Cable Ports to Withstand Lightning

Known mechanisms that couple lightning surges onto communication cables, and how these mechanisms apply for the specific case of Ethernet cabling.

Feb 22, 2026

Thunderstorms Knock Out POE : r/Ubiquiti

I'm guessing there is some kind of power or RF induced by the lightning on at least one run that the switch doesn't like and so it causes the POE to reset. I'm further guessing it is a physical limitation

Dec 22, 2025

When Lightning Strikes. What works and doesn't work.

The damaged switches worked well enough initially. For the most part, only PoE devices (couple of security cameras and wireless access points) didn't

Mar 16, 2026

PoE Switch with Surge Protection

Yes, in real-world deployments, especially in outdoor or industrial settings, PoE switches can be susceptible to electrical transients such as lightning strikes or power grid disturbances. These

Mar 25, 2026

Protecting PoE systems from lightning surges and other

As the power delivered over PoE systems has increased, it has caused Ethernet equipment to be installed in areas that expose it to increased

Jun 10, 2026

When Lightning Strikes! Ethernet Data Cable and

If lightning strikes a house, it can easily start a fire. Lightning can also produce shock waves that can blow out windows, damage chimneys, and crack

Apr 12, 2026

PSA for those of you who use POE equipment outdoors...

Had lightning strike across the street, must have come through a POE camera ethernet run, fried my switch's POE and the NIC on the only desktop in the house. Strangely it didn't fry any of the cameras

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://moletenare-ew.co.za>

Email: info@moletenare-ew.co.za

Phone: +86 138 1658 3346

Address: Ningbo, China

This document is for informational purposes only. Specifications subject to change without notice.

