



## IPV-P188Q

PoE (Power over Ethernet) Surge Protector

## Manual



- Helps prevent damage to sensitive networking equipment
- Intercepts repeated surges and spikes that could damage network equipment
- Installs on a Cat5e/6 4-pair UTP cable with RJ45 jacks
- Power and signal line protection
- 10/100 Base-T Cat5/5e compatible
- Support mid-span PoE and end-span PoE
- Complies with 802.3af and 802.3at for PoE
- Includes a 16" grounding wire for convenient connection to ground

# ENFORCER PoE (Power over Ethernet) Surge Protector

## Introduction:

The ENFORCER PoE (Power over Ethernet) Surge Protector is a passive device that helps protect sensitive networking equipment from power surges. The device can be deployed in new installations or added to existing ones.

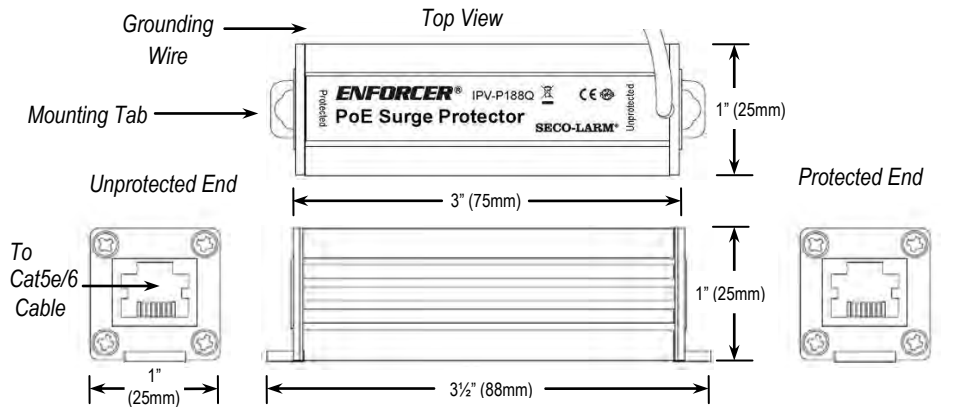
The ENFORCER PoE Surge Protector should be installed between the PoE hub and a networked device to protect against surges that could damage the equipment.

**NOTE:** For the best protection, installing two surge protectors is recommended: one at each end of the network cable.

## Specifications:

Bandwidth		Up to 68MHz
Maximum input		58Vp-p
Insertion loss		<0.2dB
Return loss		16dB@100Ω
Frequency response		Up to 3dB@68MHz
Insulation resistance		10,000MΩ
Maximum surge voltage		Up to 4 kV
Discharging current		400A
Surge life		30000 surges@4 kV
Surge protection time		1ns
Surge resistance		0Ω
Signal passing capability	Breakdown voltage	58V
	Clamping voltage	77V
Power passing capability		45W
Connector	In	RJ45
	Out	RJ45
Impedance		42Ω
Dimensions		3½"x1"x1" (88x26x25 mm)
Weight		2.8-oz (80g)
Material		Aluminum
Operating temperature		-40°~185° F (-40°~85° C)

## Overview:



## Parts List:

1x PoE Surge Protector

2x Mounting Screws

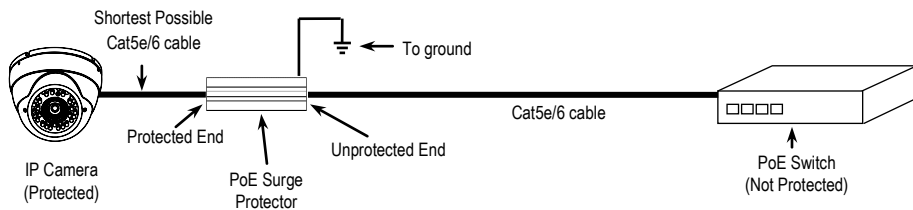
2x Plastic Wall Anchors

## Installation:

**NOTE:** These instructions assume that 2 PoE devices have already been connected together.

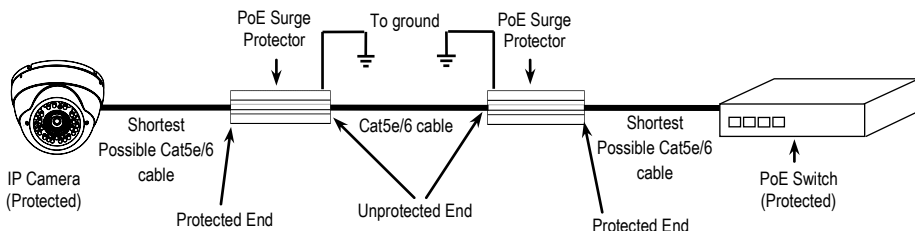
### Protecting a Single Device:

1. The PoE Surge Protector should be mounted as close as possible to the device that is to be protected.
2. Detach the existing Cat5e/6 cable from the device to be protected and attach it to end of the PoE Surge Protector marked "Cable End."
3. Prepare and connect an additional Cat5e/6 cable to the device to be protected and to the end of the PoE Surge Protector marked "Equipment End." For best protection, this cable should be the shortest length possible to connect the PoE Surge Protector and the protected device. In addition the protected cables should not cross unprotected cables.
4. Connect the ground wire from the PoE Surge Protector to earth ground. The system should use a single ground point and the protected device should be isolated from ground.



### Protecting Multiple Devices:

1. Each of the two PoE Surge Protectors should be mounted as close as possible to the devices that are to be protected.
2. Detach the existing Cat5e/6 cables from the devices to be protected (such as a PoE switch and IP Camera) and attach them to end of their corresponding PoE Surge Protector marked "Cable End."
3. Prepare and connect an additional Cat5e/6 cable to each device to be protected and to the end of its PoE Surge Protector marked "Equipment End." For best protection, these cables should be the shortest length possible to connect the PoE Surge Protectors and the protected devices. In addition the protected cables should not cross unprotected cables.
4. Connect the ground wires from the PoE Surge Protectors to earth ground. The system should use a single ground point and the protected device should be isolated from ground.



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## Troubleshooting:

Wavy or ghost video image if connected to an image processor (e.g., multiplexer or DVR), but not if connected directly to the monitor.	<ul style="list-style-type: none"><li>• Move the cable away from possible sources of interference.</li><li>• Replace the cable with a new cable.</li><li>• Ensure that the protected cable is as short as possible</li></ul>
Video image background flutters between dark and light.	<ul style="list-style-type: none"><li>• Remove a local power source, or adjust the monitor's brightness and contrast.</li></ul>
Video image is weak or faded.	<ul style="list-style-type: none"><li>• Reduce the cable length.</li><li>• Replace with a higher-grade cable. Cat5 cable meets the specifications in the manual. Cat6 cable allows longer range.</li></ul>
No video image.	<ul style="list-style-type: none"><li>• Double-check that the cables were connected properly.</li><li>• Run a continuity test on all wires in the cable.</li></ul>

## Also Available from SECO-LARM:

Video Surge Protector  
VS-1V12BQ



IP Surge Protector  
IPV-PD88Q



HD-SDI Surge Protector  
VS-1V22AQ



**IMPORTANT:** Users and installers of this product are responsible for ensuring this product complies with all national, state, and local laws and statutes related to monitoring and recording audio and video signals. SECO-LARM will not be held responsible for the use of this product in violation of any current laws or statutes.

**WARNING:** Incorrect mounting which leads to exposure to rain or moisture inside the enclosure could cause a dangerous electric shock, damage the device, and void the warranty. Do not open the case of this device, as there are no field-serviceable components inside.

**WARRANTY:** This SECO-LARM product is warranted against defects in material and workmanship while used in normal service for a period of one (1) year from the date of sale to the original consumer customer. SECO-LARM's obligation is limited to the repair or replacement of any defective part if the unit is returned, transportation prepaid, to SECO-LARM. This Warranty is void if damage is caused by or attributed to acts of God, physical or electrical misuse or abuse, neglect, repair, or alteration, improper or abnormal usage, or faulty installation, or if for any other reason SECO-LARM determines that such equipment is not operating properly as a result of causes other than defects in material and workmanship. The sole obligation of SECO-LARM, and the purchaser's exclusive remedy, shall be limited to replacement or repair only, at SECO-LARM's option. In no event shall SECO-LARM be liable for any special, collateral, incidental, or consequential personal or property damages of any kind to the purchaser or anyone else.

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