

## Surge Protective Device

## Technical Documentation



The ASCO Model 186 are 19" rackmount, 8-48 channel modular high-speed data line surge protectors that utilizes a three-stage hybrid design topology to protect critical Category 6 equipment from damaging transient voltages.

Model 186 are ideal protection devices for network switches, hubs and other sensitive IT equipment.

## Key Specs

- **Voltage:** 0-57 VDC
- **Current:** 750mA per Pin
- **Connection:** Input: female RJ-45  
Output: female RJ-45
- **Mounting:** 19" Rackmount (1U)

\*See Ordering Information for model number selection

## General Technical Specifications

Operating Voltage	0-57 VDC
Clamping Voltage	68 VDC
Operating Current	0.75 Amp Per Pin
Peak Surge Current	10kA (8 x 20 μs) Per Pair
Insertion Loss	< 0.1 dB
SPD Technology	GDT, SAD, Series PTC
SPD Topology	2-Port Series
Modes of Protection	All Eight Pins Protected Signal High-Low, High-Ground, and Low to Ground
Connection Type	RJ-45 Input & Output
Transmission Speed	10baseT, 100baseT, 1000baseT
Operating Temperature	-40°C to +85°C
Operating Humidity	0-95% Non-Condensing
Response Time	< 1 ns
Enclosure Type	Aluminum, Conductive Chromate Finish
Mounting	19" Rack Mounting 1U
Dimensions	19" x 6.25" x 1.75" (1U) [483 x 159 x 44.5 mm]
Weight ( #channel) (lb / kg)	(48)=6.9 lb [3.13 kg] (24)=4.5 lb [2.04 kg] (16)=3.7 lb [1.68 kg] (8)=2.9 lb [1.32 kg]
Warranty	1 Year

### Caution

Do not place this product in service on any signal line capable of supplying more than 0.75 Amps continuously.

### Attention

Ne pas placer ce produit dans le service sur une ligne de signal capable de fournir en permanence plus de 0.75 ampères.

## DANGER!

Only qualified personnel should install or service this system. Electrical safety pre-cautions must be followed when installing or servicing this equipment. To prevent risk of electrical shock, turn off and lock out all power sources to the unit before making electrical connections or servicing.

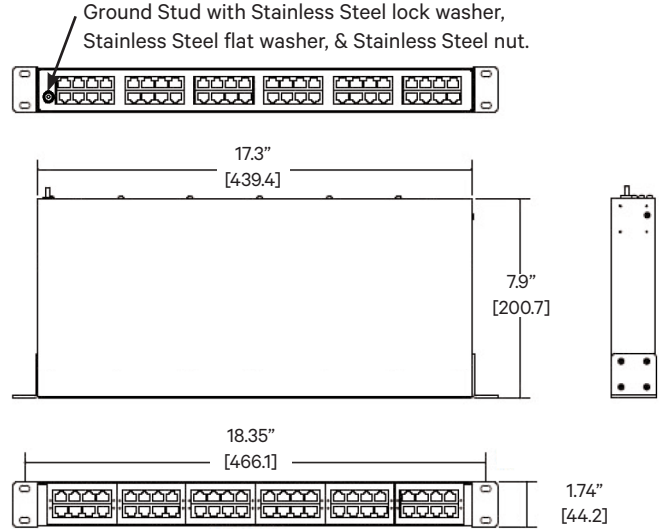
Seulement le personnel qualifié doit installer ou maintenir ce système. Des précautions de sécurité en électricité doivent être suivies lors de l'installation ou de la maintenance de cet équipement. Pour éviter tout risque de choc électrique, débranchez et verrouillez toutes les sources d'alimentation de cet équipement avant de.

## Features

- Exceeds Cat 6 transmission values
- Three stage hybrid circuit
- Low Insertion Loss
- Installs in 1U of rack space
- Replaceable module design
- 8, 16, 24, & 48 channel protection
- IEEE802.3af & IEEE802.3at compliant (POE & POE+)

## Installation Instructions

1. The ASCO Model 186 is designed to be installed in a standard 19" equipment rack and take up 1 unit (1U) of space. Secure unit to rack using the four slots and four screws (not provided).
2. Make ground connection using #10 AWG wire and a #10 ring terminal from the ground stud on switch side of device to an approved building ground. Wire must be short and straight as possible.
3. Connect incoming field wiring to the RJ-45 connectors on "Field Side" of SPD, (see drawing below).
4. Connect outgoing wiring from RJ-45 connectors on the switch side of SPD to equipment to be protected, (see drawing below).



## Ordering Information

MODEL	APPLICATION
<b>186D068S10KX08NO</b> <i>Edco RM-CAT6-8POE</i>	8 Channel (8 Input/8 Output)
<b>186D068S10KX16NO</b> <i>Edco RM-CAT6-16POE</i>	16 Channel (16 Input/16 Output)
<b>186D068S10KX24NO</b> <i>Edco RM-CAT6-24POE</i>	24 Channel (24 Input/24 Output)
<b>186D068S10KX32NO</b> <i>Edco RM-CAT6-32POE</i>	32 Channel (32 Input/32 Output)
<b>186D068S10KX40NO</b> <i>Edco RM-CAT6-40POE</i>	40 Channel (40 Input/40 Output)
<b>186D068S10KX48NO</b> <i>Edco RM-CAT6-48POE</i>	48 Channel (48 Input/48 Output)

## ACCESSORIES

<b>RM-CAT6-COVERS</b>	Set of two (2) covers to conceal empty module opening.
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## MODULES

<b>RM-CAT6-MOD1</b>	Surge Module for channels 1-8
<b>RM-CAT6-MOD9</b>	Surge Module for channels 9-16
<b>RM-CAT6-MOD17</b>	Surge Module for channels 17-24
<b>RM-CAT6-MOD25</b>	Surge Module for channels 25-32
<b>RM-CAT6-MOD33</b>	Surge Module for channels 33-40
<b>RM-CAT6-MOD41</b>	Surge Module for channels 41-48
<b>RM-CX06-MOD</b>	Surge Module for Coax Protection

**Pass-Through modules:** For a "Pass-Through" module, add "PT" after "MOD" in the replacement module part number above. (Example: RM-CAT6-MODPT41)

## Coax Protection Modules

Optional 4 channel coax SPD modules implementing three stage hybrid technology

### Model Number: RM-CX06-MOD

Operating Voltage:	5 VDC
Clamping Voltage:	6 VDC
Operating Current:	0.15 A
Peak Surge Current:	20kA (8 x 20µs)
Frequency Range:	0-100 MHz
Insertion Loss:	<0.1 dB at 20MHz
SPD Technology:	GDT, SAD, Series PTC
Connection Type:	BNC, 50/75 Ohm



## Surge Modules & Pass-Through Modules

Individual replacement **surge modules** are available for each location within the 19" SPD chassis. For clarification and traceability each surge module is screened with circuit numbers (1-8, 9-16, 17-24, etc).

Individual **pass-through modules** are available for applications not allowing series-connected circuitry or surge protection, as well as assistance with system troubleshooting. For clarification and traceability each pass-through module is screened with circuit numbers (1-8, 9-16, 17-24, etc).

