



PM 1 Series Panelmount SPD

APC's comprehensive line of SurgeArrest® Panelmount SPDs cover all of your hardwired surge suppression needs.

Residential Commercial Industrial



Product Features:

- 40 kA - 160 kA Max Surge Current Rating to protect against catastrophic surge events.
- LED Status Indicators let you know at a glance when suppression circuitry has been compromised.
- UL1449 2nd ed., cUL listings mean certified solutions to power problems.
- Low Let-through Voltages provide high levels of protection from damaging power disruptions.
- Small physical size for easy integration into both new and existing panelboards.
- 5 Year Product Warranty: APC will provide unlimited replacement parts or units under its 5-year warranty (see policy details).
- Thermal cutout circuitry and overcurrent protection react instantaneously to provide the highest level of safety.

Important: All electrical connections should be performed by a qualified, licensed electrician.



APC SurgeArrest® Panelmount Surge Protection Devices (SPDs)

APC SurgeArrest® Panelmount SPDs (TVSS) safeguard your equipment from internally and externally generated power surges and spikes.

A Changing Electrical Landscape

Today's electronic devices are more sensitive than ever and your data is increasingly more valuable. Yet as many as 120 times per month your business may be put at risk by damaging electrical surges and spikes.

While the most notable power disruptions occur externally, the majority of all power disruptions originate from within your facility during the course of normal, everyday operation. Because these internally generated surges are typically smaller in magnitude than external events such as lightning and utility problems, they often go undetected. Yet, these power disruptions subtly shorten the life of your sensitive electronics, causing data loss and costing you money. Properly installed APC TVSS units will help protect against all of these power events.



PM Series Panelmount SPD Family

APC Offers a Full Line of Panelmount Surge Protection Devices (TVSS):

APC's TVSS products protect your facility and/or network from damaging power spikes and surges. Models are available for use in residential, commercial and industrial buildings, and are designed for almost every application, including service entrances, downstream panelboards and at critical pieces of equipment.

APC's TVSS units come with a wide variety of standard features and available options. Industrial models can be equipped with the Panelmount Environmental Monitoring Unit (AP9312PM for 120v, AP9312PMI for 230v), allowing remote monitoring capability via the web and e-mail event notification in the unlikely event of failure.

With the most current industry certifications, low let-through voltages, wide array of products and great technical support, APC is the clear choice for all of your TVSS needs. When used in conjunction with other APC power protection products, you'll enjoy the best possible safeguard against surges and spikes that could otherwise destroy data, hardware and profits.



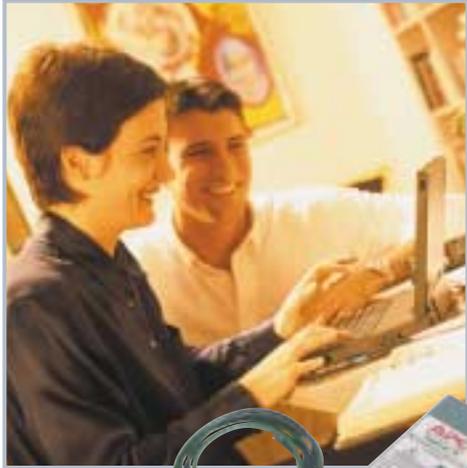
"100 Technology Companies That Are Changing the World"

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PM 1 Series Panelmount SPD

Hardwired surge suppression specifically designed to protect your home.



*PMP1X 40 kA
Panelmount SPD*

Designed specifically for residential service entrance applications, the PMP1X provides protection from externally generated power surges and spikes. Small in size, it is easily and quickly installed inside either new or existing breaker panels. It can also be installed next to the breaker panel using an external mounting kit (EMK1). The PMP1X is wired directly to any available two-pole breaker. A green LED lets you know at a glance the unit is working properly.

With today's increasingly sensitive electronics, whole-house surge protection has become the standard of many of today's networked or "smart" homes. When used in conjunction with other APC power protection products, you will enjoy complete protection for your computers, printers, fax machines, A/V components and more.

PM 1 SERIES OFFERS:

- 40 kA max surge current rating.
- LED status indicator lets you know at a glance when suppression circuitry has been damaged by a heavy strike or surge.
- Small physical size for easy installation inside existing circuit breaker panels using screws or adhesive tape.
- Low Let-through Voltage for superior surge protection.
- UL1449 2nd ed., cUL recognition and thermal cutout circuitry mean safe solutions to power problems.
- External mounting kit available for retrofit applications.
- Protection for 120/240 single-phase voltage.
- No EMI/RFI noise filtering allows for use with powerline networking systems (X10, PLC, HomePlug, etc.).
- Non-modular construction (surge suppression modules are not replaceable).

PM 2 Series Panelmount SPD

High quality surge protection against internally and externally generated transients for commercial building.



*PMF2X 80 kA
Panelmount SPD*

APC's SurgeArrest® PM 2 Series Panelmount SPD provides complete hardwired surge protection against externally generated power spikes and surges at the electrical service entrance of your commercial facility. It can also be used in an industrial setting to safeguard critical pieces of equipment against internally generated transients. It mounts solidly to the outside of your panelboard, using a chase nipple fitting. When used in conjunction with other APC power protection products, you will enjoy a complete power protection solution for your computers, monitors, printers, cash registers, fax machines, alarm systems and more.

PM 3 and PM 4 Series Panelmount SPD

High quality surge protection against internally and externally generated transients for data centers and industrial applications.

APC's SurgeArrest® PM 3 and PM 4 Series Panelmount SPDs provide complete hardwired surge protection against externally generated power spikes and surges at the electrical service entrance of your light industrial facility and data center applications. These heavy-duty units cover most popular voltages with off-the-shelf availability and can also be used at branch panels throughout your building. When used in conjunction with other APC power protection products, you will enjoy a complete power protection solution for your data centers, computers, PLCs, alarm systems, sensitive electronic equipment and more.



PMG4S 160 kA Panelmount SPD

PM 3/PM 4 SERIES OFFERS:

- 120 kA (PM 3 Series) and 160 kA (PM 4 Series) max. surge current ratings.
- LED Status Indicator for each phase lets you know when suppression circuitry has been damaged by a heavy strike or surge.
- UL1449 2nd ed., UL1283, cUL ratings and thermal cutout circuitry mean safe solutions to power problems.
- EMI/RFI filtration for suppression of electrical noise.
- Low let-through voltage for superior surge protection.
- Audible alarm provides immediate protection failure notification.

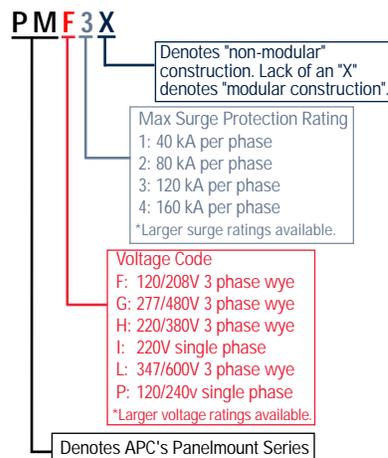
- Modular and non-modular units available. (Modular units have field replaceable modules for quick corrective maintenance.)
- Optional surge counter gives you an indication of your building's power quality history.
- Optional electrical disconnect is contained neatly within the NEMA 1 enclosure, saving installation time.
- Dry contacts allow for configuration into a facility maintenance system, remote alarm or indicator via easy to use terminal block connections.
- Protection for single- and three-phase voltages (see specifications).

PM 2 SERIES OFFERS:

- 80 kA max. surge current rating.
- LED Status Indicator for each phase let you know at a glance when suppression circuitry has been damaged by a heavy strike or surge.
- Small physical size for easy installation onto the outside of your panelboard.
- UL1449 2nd ed., cUL ratings and thermal cutout circuitry mean safe solutions to power problems.
- Low Let-through Voltage for superior surge protection.
- Protection for single- and three-phase voltages (see specifications).
- Non-modular construction (surge suppression modules are not replaceable).
- No EMI/RFI noise filtering allows for use with powerline networking systems (X10, PLC, HomePlug, etc.).

APC Panelmount SPD Part Number Code:

The following example explains the PM Series' part number system. For a full list of available combinations, visit www.apc.com/products/surge.cfm.



Specifications	PM 1 Series	PM 2 Series	PM 3 Series	PM 4 Series
Application	Residential	Commercial, Industrial	Industrial	Industrial
Maximum Surge Current	40 kA per phase	80 kA per phase	120 kA per phase	160 kA per phase
UL1449 2nd ed. Clamping Voltage*	L-N — L-G 400V N-G — L-L 800V	120/240 & 120/208: 400V; 277/480: 900V 120/240 & 120/208: 400V; 277/480: 900V — 120/240 & 120/208: 800V; 277/480: 1500V	120/240 & 120/208: 400V; 277/480: 700V 120/240 & 120/208: 400V; 277/480: 700V (non-modular units only) 120/240 & 120/208: 400V; 277/480: 700V 120/240 & 120/208: 800V; 277/480: 1500V	
Voltage	120/240 single phase, 3 wire	120/240 single phase, 3 wire + gnd 120/208 3 phase wye, 4 wire + gnd 277/480 3 phase wye, 4 wire + gnd *Other voltages available upon request	120/240 single phase, 3 wire + gnd 120/208 3 phase wye, 4 wire + gnd 277/480 3 phase wye, 4 wire + gnd 347/600 3 phase wye, 4 wire + gnd *Other voltages available upon request	
EMI/RFI Filtering	none	none	up to 50dB (100kHz to 100MHz)	
Max Electrical Service	400 Amps or less	unlimited amperage		
Status Indication	a single green LED	green LEDs for each phase	tricolor LEDs for each phase	
Lead Length (Lead wire AWG)	36" (10 AWG)	36" (12 AWG)	n/a	
Weight	1.5 lbs	4 lbs	Modular: 25 lbs. (32 lbs. w/internal disconnect) Non-modular: 19 lbs.	
Dimensions	7.50 x 2.75 x 1.25"	8.0 x 3.0 x 3.0"	Modular: 12 x 12 x 6" (16 x 14 x 6" w/internal disconnect) Non-modular: 8.0 x 8.0 x 5.5"	
Conformance	UL1449 2nd ed. Recognized, cUR	UL1449 2nd ed., cUL	UL1449 2nd ed.; UL1283, cUL	
Product Warranty	5 years			
Environmental	Operating:-40F(-40C) to 140F(60C), 0-95% relative humidity (non condensing). Storage:-67F(-55C) to 140F(60C), clean dry environment			
Operating Frequency	47-63 Hz			
Type of Surge Protection	Patented MOV Technology			
Safety Protection	Both overcurrent (fuse) and thermal cutout circuitry			
Enclosure	NEMA 1 (polycarbonate)	NEMA 4X (polycarbonate)	NEMA 1 (14 gauge steel)	

*For a complete list of Clamping Voltages for each service voltage, please visit www.apc.com/products/surge.cfm

Providing the Total Solution:

Using a panelmount SPD at your electrical service entrance provides protection against all electrical transients originating outside your home or facility. However, surveys have shown the majority of all electrical transients originate from within your home or building. In order to provide maximum protection for your sensitive electronic devices, the best method of overall power protection is a "multi-level" approach. This means using other types of power protection equipment in addition to panelmount surge protection devices. Here are some ideas for maximizing your protection:

	Level 1 Protection <i>This approach uses:</i> – Panelmount SPD only	Level 2 Protection <i>This multi-level approach uses:</i> – Panelmount SPD (left) – Point of use surge protectors (below)	Level 3 Protection <i>This multi-level approach uses:</i> – Panelmount SPD (left) – Point of use surge protectors (center) – Battery backup units (below)
Residential 	 PM 1 Series	 APC SurgeArrest® Surge Protection	 APC Back-UPS™
Commercial 	 PM 2 Series	 APC SurgeArrest® Surge Protection	 Back-UPS™ Smart-UPS™ Matrix-UPS™
Industrial 	 PM 3, PM 4 Series	 APC SurgeArrest® Network Series Surge Protection	 Symmetra® Power Array™ Silcon® Series

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APC's quality system is certified by ISO 9001 standards

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