

# MPT SERIES

## Transient Voltage Surge Suppression for ... Service Entrance & Main Distribution Panels

The **MPT Series** is a modular Transient Protection System providing high-energy surge protection and optional RF filtering for Commercial, Industrial and Remote Site applications. These panel units provide superior control over transients by delivering low clamping voltages combined with high surge energy handling capabilities. All MPT models are ETL listed to UL 1449 3rd edition SPD devices. They are configured for quick and easy parallel installation and require very little maintenance in service.

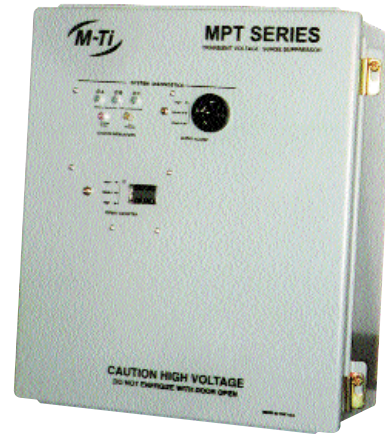
Superior energy handling capabilities of the MPT Series is due to the utilization of the *RPM Series* of ETL Recognized replaceable protection modules. The RPM's unique design and construction allows them to deliver low clamping voltages while safely dealing with large surge currents.

The MPT Series is available for all service voltages and phase configurations and can be equipped with several specialized diagnostic options. All Models have a fault current rating suitable for Type 1 or Type 2 service panel applications and are available with surge ratings from 100kA to 300kA per phase.

On board diagnostics include a front panel display equipped with LED indicators that continuously monitor the operational status of the entire unit. An audio alarm is standard with switch positions for test, able and enable and a set of NO/NC contacts are provided as an interface for remote monitoring. A surge counter is another standard feature plus optional remote monitor.

# Specification Sheet

## 1449 3rd Edition



NEMA 4 Enclosure Option Shown

## PRODUCT APPLICATION

- First Stage Protection for IEEE C3 Applications
- Rated for IEEE Category C Applications
- Coordinated 100kAIC Rated Fusing
- Available for Single, Split and 3 Phase (wye or delta) Services
- Models for 120V to 480V Services Available
- Packages for Exterior or Interior Installations
- Configured for Cost Effective Parallel Installation
- ETL Listed: 3rd Edition 1449 SPD
- Patented Integrated Thermal Overload Protection
- Low Impedance Construction For Low Clamping

## PRODUCT FEATURES

- Field Replaceable, RPM Series Protection Modules (ETL Recognized Components)
- Solid State MOV Suppression Components
- High Surge Withstand 100-300kA Per Phase
- Front Panel Diagnostics With LEDs & Alarm
- UL Listed Metallic And/Or Plastic Enclosures
- Surge Counter Standard
- Form C (NO/NC) Dry Contacts Standard
- Available UL Listed 1283 Filter Option
- Available Remote Monitor Option
- 10 Year Warranty

# PRODUCT SPECIFICATIONS

# MOUNTING INFORMATION

## Electrical

- Service Voltages: *See Ordering Information*
- MCOV: *See Ordering Information*
- Protection Modes: *See Ordering Information*
- Clamp Voltage Ratings: *See Ordering Information*
- Surge Current Ratings: 100kA, 200kA or 300kA per Phase (based upon specific model number).
- Operating Frequency: 47/63Hz
- Fault Current Rating: 100kAIC
- Filter (Optional): -50dB @ 100KHz (MIL-STD- 220A)
- Operating Temperature Range: -40<sup>0</sup> to +85<sup>0</sup> C
- Operating Humidity Range: 0 to 95%  
(Non-Condensing)

## Mechanical

- Dimensions: see mounting information
- Recommended Wire Lead Length: 60 inches is standard
- Enclosure:
  - Standard Enclosure is NEMA 12
  - Optional Enclosure Rating is NEMA 4

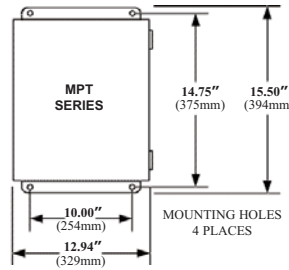


Figure #1: MPT Front View

**CONSTRUCTION**  
 14 gauge steel with continuous hinge  
 UL 50 Type 12 & Type 13  
 NEMA/EEMAC Type 12 & Type 13  
 JIC standard EGP-1-1967  
 CSA Type 12. IEC 529, IP65

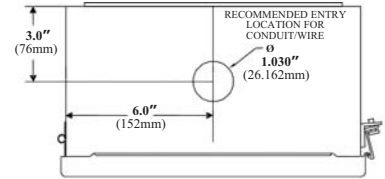
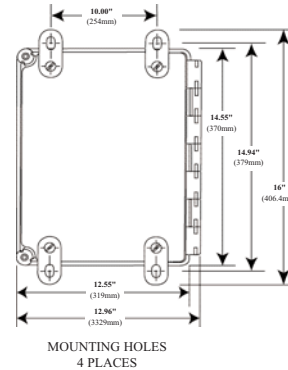


Figure #2: MPT Enclosure Top View

After determining a position to mount the device that will minimize the length of connecting wires, drill a hole in the enclosure for the conduit to run wires from the distribution panel to the connecting lugs inside the SPD. Installation is simplified if the wires enter the enclosure at the top (see figure #2) of the enclosure. Securely mount the SPD unit using 1/4-20 bolts in the four (4) mounting holes provided in the enclosure's mounting flanges.

Figure #3: MPT Back View of Optional NEMA 4 Non-Metallic Enclosure



MOUNTING HOLES  
4 PLACES

## Ordering Information:

MODEL NUMBER	SERVICE VOLTAGE	MCOV	CLAMP VOLTAGE RATINGS Per UL 1449 3rd Edition			
			L-N	L-G	N-G	L-L
MPTXXX/120-10-#-1/	120 Volt Single Ø	150Vac	700V	700V	700V	N/A
MPTXXX/120-SP-#-1/	120/240 Volt Split Ø	150Vac	700V	700V	700V	1500V
MPTXXX/120-3W-#-1/	120/208 Volt 3Ø Wye	150Vac	700V	700V	700V	1500V
MPTXXX/120-3H-0-1/	120/240 Volt 3Ø Delta	150/320Vac	700V	700/1500V	700V	1500/1800V
MPTXXX/240-3D-0-1/	240 Volt 3Ø Delta	320Vac	N/A	700V	N/A	1500V
MPTXXX/220-3W-#-1/	220/380 Volt 3Ø Wye	320Vac	700V	700V	700V	1500V
MPTXXX/230-3W-#-1/	230/400 Volt 3Ø Wye	320Vac	700V	1500V	700V	1500V
MPTXXX/240-3W-#-1/	240/415 Volt 3Ø Wye	320Vac	700V	1500V	700V	1500V
MPTXXX/277-3W-#-1/	277/480 Volt 3Ø Wye	320Vac	1000V	1000V	1000V	2000V
MPTXXX/480-3D-0-1/	480 Volt 3Ø Delta	520Vac	N/A	1800V	N/A	2500V

- NOTES:**
1. Replace XXX with desired kA rating per phase: 100 for 100kA, 200for 200 kA or 300 for 300 kA
  2. Replace # with F at the end of the part number if filtering is required (Wye Models only).
  3. Other Option: Remote Monitoring

