

M-Ti 400 Series

Meter Based Surge Protection Device Traditional

The **400-1SL-A Meter Based SPD** stops surges right at the electric meter, before they can enter your home or business.

Units are equipped with **SUNBRIGHT® diagnostics** with 1000 MCD LEDs that are fully visible in the brightest sunlight allowing fast and accurate readings in the field.

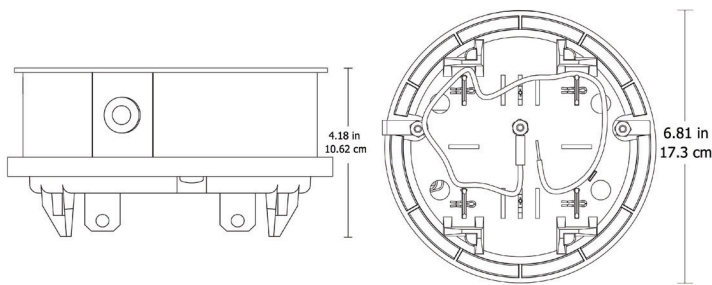
Units contain "**Smart Sensing Technology**" that distinguishes between surges and overcurrent events. The product complies with all current and proposed safety requirements. The 400-1SL is a Type 1 Surge Protection Device (SPD) that is Listed to **ANSI/UL 1449**.

The integration of design, performance and safety features in the **METER TREATER** makes it an ideal choice for Utility Power Quality Programs. A **15 Year Product Warranty** and concurrent Extended Warranty for downstream white appliances are included†.



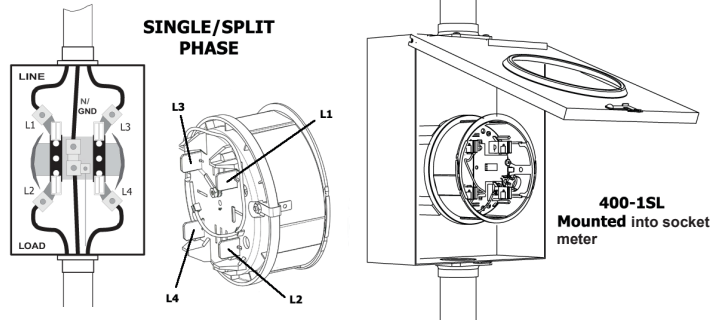
Rated for 260 Amp (320 Max) Continuous Service

Dimensions



(Diagrams not drawn to scale)

Typical Installations



Product Specifications			
Applied Voltage	120/240 Vac	Product Dimensions	4.18" x 6.81" (2.48" installed depth)
Max Surge Current	120kA (60kA per phase)	Diagnostics*	Red Status LED, SUNBRIGHT
Max Load Current	320 Amps (260 Amps Continuous) attained in HQ4D L&G 250 Amps (200 Amps Continuous) attained in HQ-5B L&G	Safety Standards (Type 1 SPD)	UL 1449 (most current)
MCOV	150 Volts	VPR (Suppressed Voltage)	500 Volts (8x20µs, 6kV/3kA)
Short Circuit Current	10k RMS Symmetrical Amps	I _n (nominal discharge current)	20 kA
Housing Rating	3R (UL 414) with UV inhibitors	Connection Method	Meter Base 4 or 5 Jaw Blades
Product Weight	2.5 lbs.	Surge Technology	40mm MOV Blocks
		Operating Temperature	-40° to +140°F (-40° to +60°C)10%+-
		Operating Frequency	50/60 Hz

Available Models/Options	
400-1SL-A	4 Jaws (Standard)
400-1SL-A-5J	5 th Jaws for 120/208 Networks
5 th Jaw kit	Kit with single jaw blade and hardware to modify a standard unit.

†Concurrent extended warranty is only applicable for customers participating in a utility residential surge protection program and for those utilities requesting the extended warranty.

* Two red LED's - one monitors each phase.

All product dimensions provided are ± 0.125

Meter Treater Inc.: 1349 South Killian Drive • Lake Park, FL 33403

Email: sales@metertreater.com

Sales: 561.845.2007 Toll: Free: 800.638.3788 Fax: 561.848.2372

Website: www.metertreater.com

Warranty Information

Meter-Treater, Inc.(MTI) warrants to its customers that the hardware products that MTI manufactures and sells will be free from defects in material and workmanship. Warranty coverage is for fifteen (15) years starting from the date of the original shipment from MTI. If any such product proves defective during the applicable warranty period, MTI, at its discretion, will repair without charge for parts and labor or will provide a replacement in exchange for the defective product. THESE WARRANTY TERMS ARE FOR RESIDENTIAL INSTALLATIONS ONLY.

This warranty shall not apply to any defect, failure, and/or damage caused by improper use, or inadequate maintenance or care. MTI shall not be obligated to furnish service under this warranty (a) to repair damage resulting from connection to incompatible equipment or (b) to service a product that has been modified, altered or integrated with other products. For additional warranty information contact MTI at 800.342.6890.

Warranty Returns

All warranty and non-warranty repairs must be returned freight prepaid and insured to MTI. All returns must have a Return Materials Authorization (RMA) number on the outside of the shipping container. This number may be obtained from MTI Customer Service at 800.342.6890. Products returned without an RMA number will not be accepted.

IF UNIT(S) ARE RECEIVED DAMAGED, NOTIFY THE SHIPPING COMPANY IMMEDIATELY. RETAIN ALL SHIPPING CONTAINERS AND PACKING MATERIALS FOR INSPECTION.

Please Note:
There are no user serviceable parts inside.



Meter-Treater, Inc.

QUALITY SURGE PROTECTION DEVICES SINCE 1986

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MTI-METERINSTALL-112017

Meter-Base Surge Protection Device User Manual & Installation Guide

(Units include 400 Series, 575 Series, 675 Series & CL320 Series)

Surge Protection Devices For AC Power Applications



400 Series
Residential
Installations



575 Series
Residential
Installations



675 Series
Residential, Commercial
& Industrial Installations



CL320 Series
Residential,
Commercial & Light
Industrial Installations

DANGER OF FLASH BURNS AND BODILY INJURY!!

USE A CUT-OFF COVER DURING INSTALLATION AND REMOVAL.
ENSURE LOCKING RING IS PROPERLY INSTALLED AND SECURE.
DEVICE TO BE INSTALLED AND REMOVED BY A QUALIFIED AND
LICENSED TECHNICIAN.

NEVER APPLY GREASE OR PRY JAWS.

REFERENCE 'ELECTRICITY METERING HANDBOOK'

DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

Thoroughly read and comprehend all instructions before commencing installation. Failure to follow these instructions could result in damage to the electrical system(s) or related equipment.

This equipment must be installed by qualified electrical personnel in accordance with all applicable codes which supersede these instructions. Improper installation or misapplication of these devices may result in death or serious injury.

Apply appropriate Personal Protective Equipment (PPE) and follow safe electrical work practices. See NFPA 70E.

CAUTION

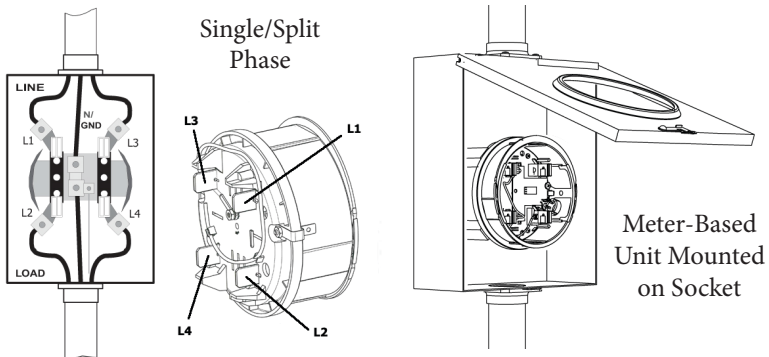
HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

Never install this unit if it has fallen, has been dropped or looks damaged in any way. Return device to factory for diagnostic testing.

WARNING

HAZARD OF EQUIPMENT DAMAGE

This device does not contain serviceable parts. Do NOT attempt to test this device, damage may occur. Any alterations, tampering, misuse or unauthorized repairs of this product will void its original factory warranty. Never install on an underground system.



INSTALLATION

This unit must be installed by a qualified electrician or power company employee familiar with the danger of working around live electrical equipment.

CAUTION: ELECTRONIC COMPONENTS - NEVER INSTALL THIS UNIT IF IT HAS FALLEN OR BEEN DROPPED. RETURN DEVICE TO FACTORY FOR RETESTING.

1. Verify that the building has single-phase service (400 series, 575 series, CL320 series) or three-phase service (675 series) and that the meter conforms properly with the Meter-Treater.
 - A. **400 and 575 Series** Use a "5J" version for five jaw 208 volt networked meters. This unit was designed for residential loads that do not draw more than 200 amps continuous.
 - B. **CL320 Series** This unit was designed for residential, commercial and light industrial loads that do not draw more than 320 amps continuous.
 - C. **675 Series** This unit was designed for residential, commercial and industrial loads that do not draw more than 200 amps continuous.

2. Notify customer that the power will be off momentarily. Disconnect any large inductive loads such as air conditioners, pumps or other large motors.

DANGER, THERE IS LETHAL VOLTAGE INSIDE THE METER-CAN EVEN WITH THE METER REMOVED!!!!

3. While wearing appropriate PPE, remove the meter and inspect the neutral/ground bond inside the meter-can. Correct any problems before proceeding. Good grounding is important.
4. If this unit is provided with a ground wire (green) it must be attached to the neutral/ground bond inside the meter-can, to the ground wire with a split bolt, or to the meter-can itself with a self-drilling self-tapping sheet metal screw using a power driver. Units with a fifth jaw at the 9 o'clock position or units with a ground jaw do not require the auxiliary ground wire.

INSURE THAT THE GREEN GROUND WIRE DOES NOT MAKE CONTACT WITH EITHER LEG OF SERVICE.

GROUND WIRE SHOULD BE ATTACHED SO THAT IT WILL LOOP DOWN IN THE METER-CAN.

5. This device has improved jaw blades ensuring better current handling capabilities. In accordance with ANSI standards, a slightly higher insertion force may be required to install a meter into a Meter-Treater.
6. A service cutoff cap (plastic disconnect cover) must be installed over the face of the Meter-Treater as a precaution during the insertion of the Meter-Treater into the socket.
7. Never pry open, grease or alter the jaw receptacles in the Meter-Treater.
8. Re-seal meter. WHEN USING AN ADDITIONAL LOCKING/SEALING RING (screw lock is recommended) BE SURE IT IS INSTALLED IN THE PROPER DIRECTION AND SNUG. Re-seal Meter-Treater and verify proper meter operation.
9. Deliver or advise customers that single outlet protectors, cable TV, and phone line protectors are recommended for protection of their more sensitive equipment.

PLEASE CALL OUR HELP LINE SHOULD YOU HAVE ANY QUESTIONS BEFORE INSTALLATION 1.800.638.3788