



## Surge Protective Devices

For Original Equipment Manufacturers

Leviton Wired-Module Surge Protective Devices are specially designed for use by OEM's who wish to incorporate integral transient voltage surge suppression as a feature of their products. Our experienced engineering staff can also work with OEM's to adapt any of Leviton's state-of-the-art Surge Protective Devices for their equipment needs.

Transient voltage surges are present on AC power and communication lines within every facility. These transient voltage surges are particularly threatening to a wide variety of modern electronic equipment.

See your Leviton OEM representative today for detailed information on Leviton's broad selection of Surge Protective Devices.

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NOTE: Dimensions in parentheses are in millimeters. All other dimensions are in inches.

SECTION

M

**Industrial Grade**

# Equipment-Cabinet Surge Protective Devices

Modules are designed for mounting in standard equipment cabinets where transient voltage surge suppression is desired for the enclosed equipment. Compact black-box styling coordinates with other mounted equipment. The MOV-based suppression circuitry provides optimum clamping. Three-module choice: either DIN-rail mounting, terminal block wiring or wire leads.

Backed by a Limited 10 Year Warranty

### Cat. No. 3800 Series

- UL Recognized Component tested to UL 1449 Standard
- CSA Certified

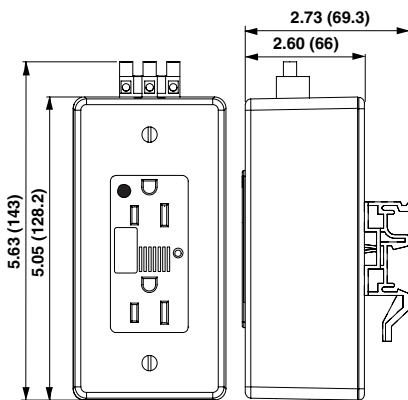


3800

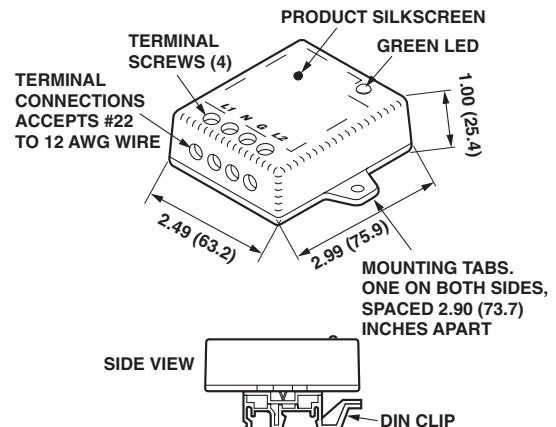


3880

Description	Cat. No.	Nominal Rating
For DIN Rail Mounting, with Terminal Block	3800-DIN	120V AC
Terminal Block	3800-OWM	120V AC
Pigtail Wire Leads	3800-OEM	120V AC
For DIN Rail Mounting, with Terminal Block; 12V DC	3812-DIN	12V DC
Terminal Block; 12V DC	3812-OWM	12V DC
Pigtail Wire Leads, 6" long; 12V DC	3812-OEM	12V DC
For DIN Rail Mounting, with Terminal Block; 24V DC	3824-DIN	24V DC
Terminal Block; 24V DC	3824-OWM	24V DC
Pigtail Wire Leads, 6" long; 24V DC	3824-OEM	24V DC
For DIN Rail Mounting, with Terminal Block; 240V AC	3840-DIN	240V AC
Terminal Block; 240V AC	3840-OWM	240V AC
Pigtail Wire Leads, 6" long; 240V AC	3840-OEM	240V AC
For DIN Rail Mounting, with Terminal Block; 48V DC	3848-DIN	48V DC
Terminal Block; 48V DC	3848-OWM	48V DC
Pigtail Wire Leads, 6" long; 48V DC	3848-OEM	48V DC
Duplex Hospital Grade NEMA 5-15R Receptacle	3880-DIN	120V AC
For DIN Rail Mounting, with Terminal Block		



Cat. No. 3880-DIN



Cat. No. 3840-DIN

### AC Module Data

Specification	Cat. No. 3800	Cat. No. 3840	Cat. No. 3880
Rated line voltage	120V (VRMS)	240V (VRMS)	125V (VRMS)
Maximum continuous operating voltage	135V	250V	150V (RMS)
Maximum single-pulse transient current (8x20µs, Amps peak)	1300A (L-N) 6500A (L-G) 6500A (N-G)	1300A (L-N) 6500A (L-G) 6500A (N-G)	24kA (L-N) 12kA (L-G) 12kA (N-G)
Rated single-pulse transient Energy (10x100µs, impulse)	280 Joules	280 Joules	320 Joules
Noise rejection @ 5kHz-5MHz	-35db	-35db	-35db

### AC Clamping Performance

Specification	Cat. No. 3800	Cat. No. 3840	Cat. No. 3880
UL Standard 1449 permanently wired test (8x20µs, 3000A)	L-N: 500V Peak L-G: 500V Peak N-G: 500V Peak	L-N: 330V Peak L-G: 400V Peak N-G: 330V Peak	L-N 400V Peak L-G 400V Peak N-G 400V Peak

#### Wiring Means:

Nos. 3800-DIN, 3800-OWM: Terminal block accepts 22 AWG to 12 AWG conductors

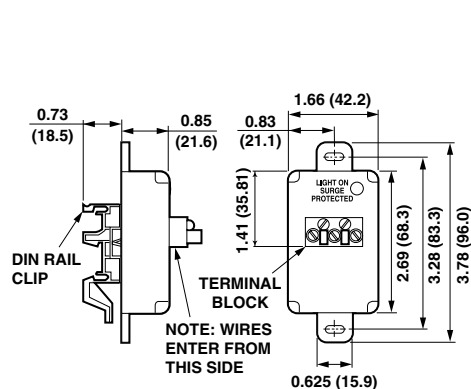
No. 3800-OEM: #16 AWG leads, 6" long, stripped 1/2".

### DC Module Data

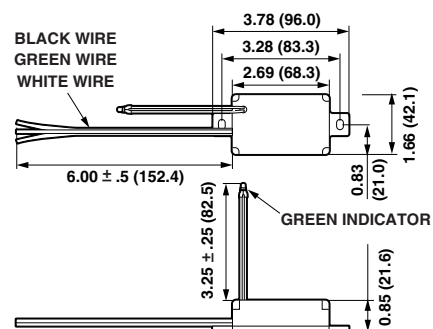
Cat. No.	Max. DC Operating Voltage	(+) to (-) Clamping	Maximum Surge Current
3812-DIN, -OWM, -OEM	13.2V DC	17V Peak	10A
3824-DIN, -OWM, -OEM	26.4V DC	33V Peak	10A
3848-DIN, -OWM, -OEM	52.8V DC	70V Peak	10A

### Physical Specifications

Operating Temperature Range: -10°C to 60°C  
Storage Temperature Range: -20°C to 85°C



Cat. No. 3800-DIN



NOTE: ALL DIMENSIONS ARE FOR REFERENCE ONLY  
REFER TO PART DRAWINGS FOR SPECIFICATIONS

Cat. No. 3800-OEM

**Industrial Grade**

# Wired-Module Surge Protective Devices



51020-0WM

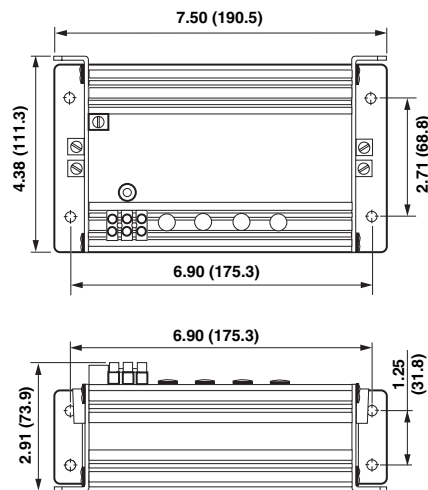
Ideal for equipment manufacturers who wish to incorporate 120/240V surge protection as a product feature or provide surge protection to branch circuits. These compact units have extruded aluminum housings for mechanical strength in demanding applications, real-time diagnostics for visual display of power and suppression status, as well as a built-in acoustic alarm that sounds if surge protection is lost. Additional features include: staged multi-component surge suppression circuitry with clamping envelope that follows AC sine-wave, thermal-fuse protection for primary and secondary suppression circuits. Also available with DIN rail mounting.

Backed by Leviton's Limited Ten-Year Warranty

**Cat. Nos. 51020 & 51240**

- UL Recognized Component E-146315 tested to UL 1449 Standard
- Cat. No. 51020 also • CSA Certified LR-80198M7-8M

Description	Cat. No.	Nominal Rating
1 Phase 3-Wire	51020-0WM	20A 120V AC
1 Phase 3-Wire, with DIN-rail mounting	51020-DIN	20A 120V AC
1 Phase 3-Wire	51240-0WM	20A 240V AC
1 Phase 3-Wire, with DIN-rail mounting	51240-DIN	20A 240V AC



Cat. Nos. 51020-0WM, 51240-0WM, 51020-DIN & 51240-DIN

## General Data

### Industrial Grade

Cat. No.	Rated Line Voltage (VRMS)	MCOV
51020-0WM	120V AC (20 Amps max. load)	150V
51020-DIN	120V AC (20 Amps max. load)	150V
51240-0WM	240V AC (20 Amps max. load)	270V
51240-DIN	240V AC (20 Amps max. load)	270V

## Performance Specifications

Specification	51020-0WM 51020-DIN	51240-0WM 51240-DIN
Max. single-pulse transient current (8x20µs Amps peak)	L-N: 52kA L-G: 52kA	L-L: 52kA L-G: 52kA
Noise Rejection @ 50 Ohms 5k to 100Mhz Normal and Common Mode	-20 to -30	-40 to -50
Operating Frequency Range	50, 60Hz	50, 60Hz

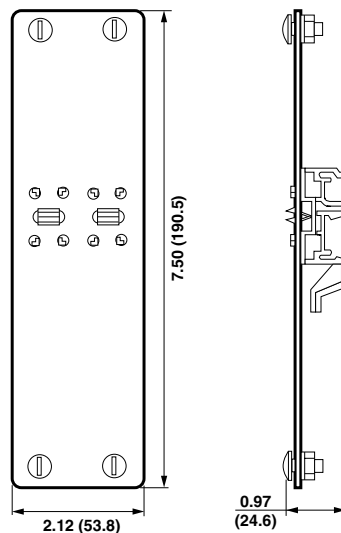


## Clamping Performance

Specification	51020-0WM	51240-0WM
UL 1449 ratings	L-N: 330V L-G: 330V N-G: 400V	L-L: 600V L-G: 600V
Fault current rating (AIC rating assigned per UL)	5000A	5000A

## Physical Specifications

Operating Temperature Range:	-10°C to 60°C
Storage Temperature Range:	-20°C to 85°C
Dimensions (LxWxD):	7.5" (190.5) x 2.34" (59.44)
Termination Means:	Screw terminals accept 14AWG to 12AWG conductors



Cat. Nos. 51020-DIN & 51240-DIN



51005-DIN

## Wired Module Surge Protective Devices

**Industrial Grade**

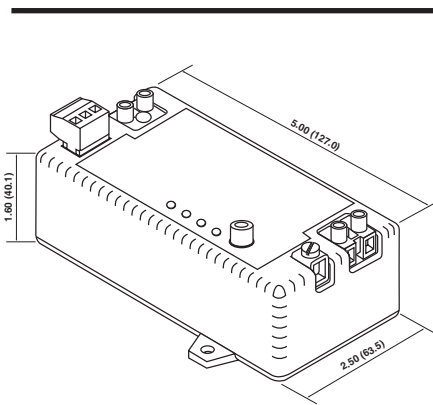


Modules are designed for industrial environments and OEM applications, with extruded aluminum housing for mechanical strength and real-time diagnostics for visual display of power and suppression status. Built-in acoustic alarm sounds if surge protection is lost. Staged multi-component surge suppression circuitry provides clamping envelope that follows AC sine wave contour. Equipped with dry relay contacts for remote monitoring. Also available with DIN rail mounting.

Backed by Leviton's Limited 10-Year Warranty

### Cat. Nos. 51005 & 51010 Series

- UL Recognized Component E-146315 tested to UL 1449 Standard
- CSA Certified LR-94773



Cat. Nos. 51005 & 51010 Series

Description	Cat. No.	Nominal Rating
1 Phase 3-Wire	51005-0WMM	5A 120V AC
1 Phase 3-Wire	51005-DIN	5A 120V AC
1 Phase 3-Wire	51010-0WMM	10A 120V AC
1 Phase 3-Wire	51010-DIN	10A 120V AC

### General Data

Cat. No.	Rated Line Voltage (VRMS)	MCOV
51005-0WMM	120V AC (5 Amps max. load)	150V
51005-DIN	120V AC (5 Amps max. load)	150V
51010-0WMM	120V AC (10 Amps max. load)	150V
51010-DIN	120V AC (10 Amps max. load)	150V

### Performance Specifications

Specification	51005-0WMM 51005-DIN	51010-0WMM 51010-DIN
Max. single-pulse transient current (8x20ms Amps peak)	L-N: 26kA L-G: 13kA N-G: 13kA	L-N: 26kA L-G: 13kA N-G: 13kA
Noise Rejection @ 50 Ohms 10k to 100Mhz Normal and Common Mode	-20 to -40	-20 to -40
Operating Frequency Range	50, 60Hz	50, 60Hz

### Clamping Performance

Specification	51005-0WMM	51010-0WMM
UL 1449 ratings	L-N: 400V L-G: 400V	L-L: 400V L-G: 400V
Fault current rating (AIC rating assigned per UL)	5000A	5000A

### Physical Specifications

Operating Temperature Range:	-10°C to 60°C
Storage Temperature Range:	-20°C to 85°C
Dimensions (LxWxD)	5.00" (127.0) x 1.60" (40.1) x 2.50" (63.5)
Termination Means:	Screw Terminals accept 14AWG to 12AWG conductors

## Traffic Signal Control Surge Protective Device

**Industrial Grade**

The 51020-WMT is a surge protective device for use in traffic signal control equipment. It offers a quick, cost-effective turnkey solution to the problem of transient voltage surges causing malfunctions in traffic signal control systems. Features include real-time diagnostics with visual and acoustic alarms if surge protection is lost, as well as LED indication of open ground line or reverse polarity. The device is parallel operated and can be connected to any 120V single-phase service regardless of ampacity. Surge Protector Performance-tested to ANSI/IEEE C62.31 standards for categories A, B and C environments.

Backed by Leviton's Limited Ten-Year Warranty

**Cat. No. 51020-WMT**

- UL Listed tested to UL 1449 Standard
- CSA Certified



**51020-WMT**

### General Data

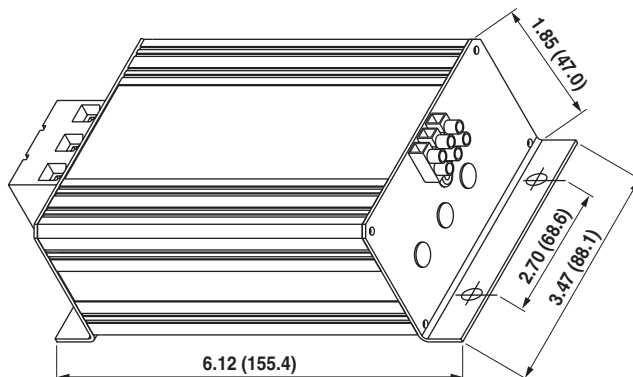
Specification	Cat. No. 51020-WMT
Rated line voltage	120V (VRMS)
Maximum continuous operating voltage	150V AC
Maximum single-pulse transient current (8x20µs, Amps peak)	L-N: 26kA L-G: 26kA
Rated single-pulse transient energy (10x1000µs, impulse)	L-N: 320J L-G: 320J
Noise rejection @ 50 Ohms 5k to 100MHz Normal and Common Mode	-40 to -50
Operating Frequency Range	50, 60Hz

### Clamping Performance

Cat. B3 combination wave (8x20µs) peak clamping voltage	L-N: 300V L-G: 350V
UL 1449 ratings	L-N: 330V L-G: 400V

### Physical Specifications

Operating Temperature Range:	-10°C to 60°C
Storage Temperature Range:	-20°C to 85°C
Wiring Means: Line, neutral and ground terminals accept up to 6 AWG gauge wire.	



**Cat. No. 51020-WMT**

SECTION M



3420-009

## Communication Protection Modules—Low Voltage

**Industrial Grade**



For Factory Automation and Industrial Control

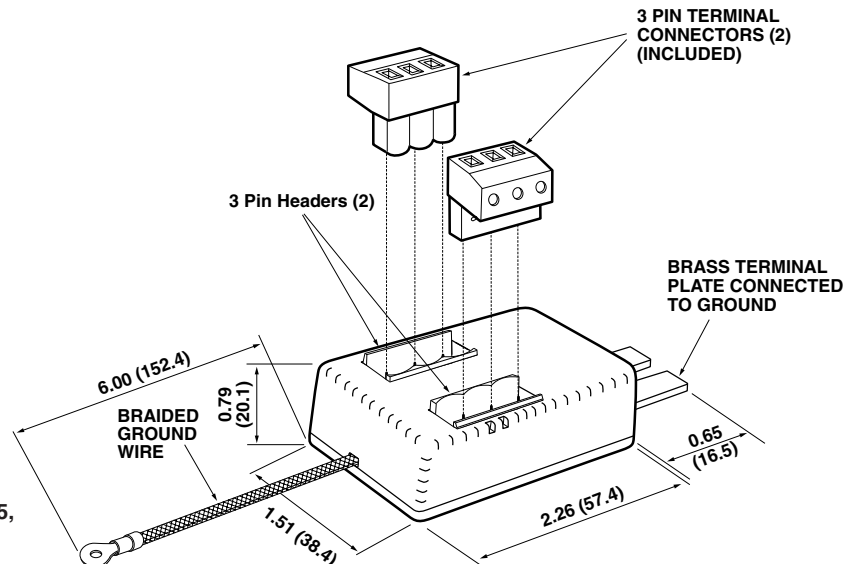
Leviton Surge Protective Devices are designed to provide transient voltage surge suppression for a comprehensive selection of programmable logic devices and other computer-related data network products. All units are UL 497B Listed and CE marked for data communication circuits. They provide low clamping voltages and withstand high transient current surges that may be encountered by equipment in harsh electromagnetic environments or regions with high exposure to lightning.

- UL 497B Listed E-175161
- CE Marked
- CSA Certified LR-94773

Catalog Number	Application
3803-DHP†	For Data Highway and Remote I/O networks, sometimes referred to as Blue Hose*
3803-485†	For Allen-Bradley DH-485 networks
3803-SPX	For SERIPLEX Control Bus networks
3803-CAN	For Honeywell Canada networks
3803-MOD	For Modbus and Modbus Plus networks
3420-009†	For 4-20ma Signal Loop networks, 9V DC
3420-035†	For 4-20ma Signal Loop networks, 35V DC
3860-GEF	For GE Fanuc Control Bus networks
3861-ETH	For Ethernet PLC ports and CAT 3 networks
3862-CON	For ControlNet networks
3863-DEV	For DeviceNet networks

\* Trademark Allen Bradley

† Referenced with the Rockwell Automation Encompass Program, which references complementary products from third party manufacturers committed to providing quality products and services that enhance the Rockwell Automation Solution products and solve the industrial automation needs of mutual customers.



Cat. Nos. 3803-MOD, 3803-DHP, 3803-485, 3420-009 & 3420-035

# Communication Protection Modules— Low Voltage

Industrial Grade



For Factory Automation and Industrial Control

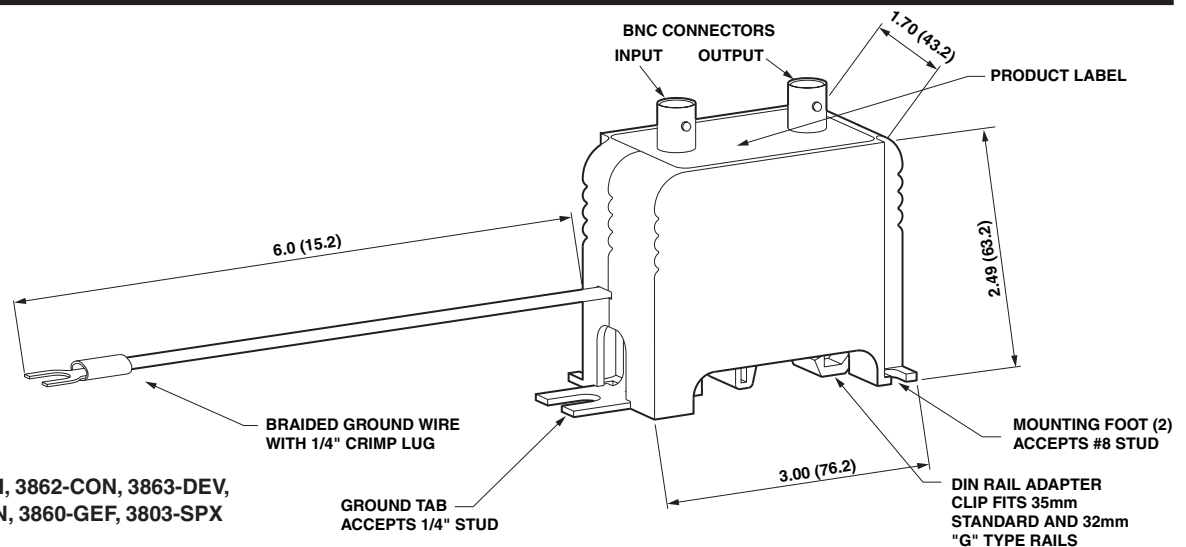


Catalog Number	Max DC Operating Voltage		Clamping Voltage		Surge current (1 pulse)	Capacitance	
	L-G	L-L	L-G	L-L		L-G	L-L
3803-DHP	9.6V DC	—	81V	—	1kA	53pf	53pf
3803-485	9.6V DC	—	81V	—	1kA	53pf	53pf
3803-SPX	13.6V DC	30V DC	130V	123V	1kA	—	53pf
3803-CAN	25V DC	—	105V	45V	1kA	28pf	20pf
3803-MOD	9.6V DC	—	81V	—	1kA	53pf	53pf
3420-009	9.6V DC	—	81V <sup>1</sup>	—	1kA	53pf	53pf
3420-035	38.5V DC	—	155V <sup>2</sup>	—	1kA	53pf	53pf
3860-GEF	100V DC <sup>3</sup>	16V DC <sup>4</sup>	205 <sup>3</sup>	61V <sup>4</sup>	1kA	20pf	17pf
3861-ETH	19.8V DC	5.6V DC	119V	56V	1kA	20pf	17pf
3862-CON	9.18V DC	9.18V DC <sup>5</sup>	62V	37V	1kA	53pf	53pf
3863-DEV	19.8V DC	5.6V DC	119V	56V	1kA	28pf	20pf

## Physical Specifications

	<b>3803-DHP, 3803-485, 3803-MOD 3420-009, 3420-035</b>	<b>3803-SPX, 3803-CAN, 3860 Series</b>
Operating Temperature Range:	-40°C to 60°C	-10°C to 85°C
Storage Temperature Range:	-40°C to 90°C	-20°C to 85°C

- NOTES: <sup>1</sup> 11.8V @ .01kA  
<sup>2</sup> 50V @ .01 kA  
<sup>3</sup> Serial 1 L-G (shield out) & Serial 2 L-G (shield out)  
<sup>4</sup> Serial 1 Line- Serial 2 Line  
<sup>5</sup> Line-Shield



Cat. Nos. 3861-ETH, 3862-CON, 3863-DEV,  
3803-CAN, 3860-GEF, 3803-SPX



# 19-inch Rack-Mount Surge Protective Devices

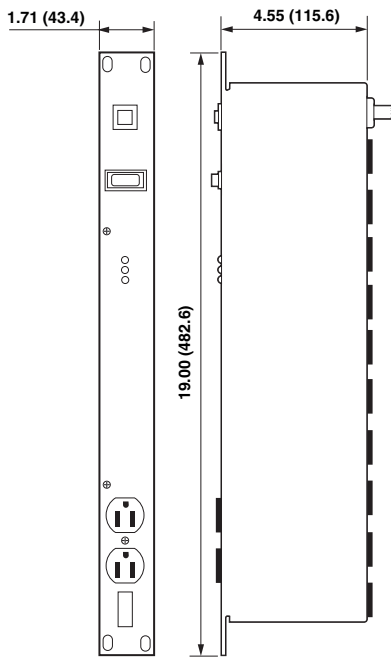
**Industrial Grade**

Mounts on 19" equipment racks to provide point-of-use surge suppression for electronic equipment. Clamping profile tightly tracks AC sine wave. Provides 6 protected duplex receptacles—5 in back, 1 in front. Available with easy-access ON/OFF rocker-style switch, or without switch to avoid unnecessary equipment switching. Resettable circuit breaker protects against overloading and power supply failure. Provides 12-ft. line cord with either NEMA 5-15P, L5-15P, 5-20P or L5-20P plug.

Backed by a Lifetime Limited Downline Warranty.

### Cat. No. 5500 Series

- UL Recognized Component tested to UL 1449 Standard
- CSA Certified



Cat. No. 5500-190

Description	Cat. No.	Rating
With ON/OFF Switch, NEMA 5-15P Straight Blade Plug	5500-190	15A 120V
With ON/OFF Switch, NEMA 5-15P Straight Blade Plug	5505-190	15A 120V
Without ON/OFF Switch, NEMA 5-15P Straight Blade Plug	5500-15N	15A 120V
With ON/OFF Switch, NEMA L5-15P Locking Plug	5500-15L	15A 120V
Without ON/OFF Switch, NEMA L5-15P Locking Plug	5500-NL	15A 120V
With ON/OFF Switch, NEMA 5-20P Straight Blade Plug	5500-192	20A 120V
Without ON/OFF Switch, NEMA 5-20P Straight Blade Plug	5500-20N	20A 120V
With ON/OFF Switch, NEMA L5-20P Locking Plug	5500-20L	20A 120V
Without ON/OFF Switch, NEMA L5-20P Locking Plug	5500-2NL	20A 120V

### General Data

Specifications	5500-190, 5505-190, 5500-15N 5500-15L, 5500-NL	5500-192, 5500-20N, 5500-20L, 5500-2NL
Rated line voltage (VRMS)	120V	120V
Load current	15A	20A
Max. continuous operating voltage	135V	135V
Operating frequency range	50, 60Hz	50, 60Hz
Circuit type	Staged multi-component, series	Staged multi-component, series

### Clamping Performance—Normal Mode followed by (Common Mode)

Specifications	All 5500 Rack-Mount Devices	5505-190
Max. single-pulse transient current (8x20µs, Amps peak)	52kA	20kA
EM/RFI noise rejection @ 50 Ohms 5kHz-100MHz	50-60dB (30-40dB)	50-60dB (30-40 dB)
UL 1449 ratings (8x20µs @ 3kA (L-N/L-G, N-G))	330/330/330	400/400/400

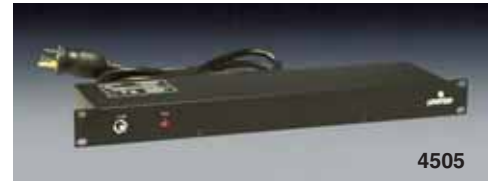
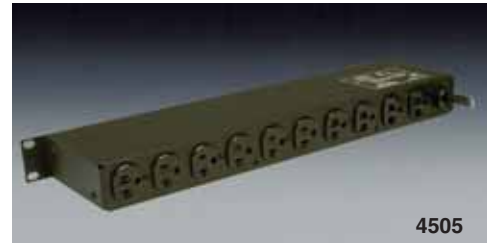
# 19-Inch Rack Mount Multi-Outlet Devices (Non-Surge)

**Industrial Grade**

Mounts on 19" equipment racks and has 5 duplex receptacles. Designed without a switch to avoid unnecessary equipment switching. Features include 20A locking plug to prevent accidental power loss to connected equipment, LED to indicate power light is on and 20A circuit breaker for protection against overloading.

**Cat. No. 4505 Series**

- UL Recognized Component tested to UL 1363 Standard
- CSA Certified



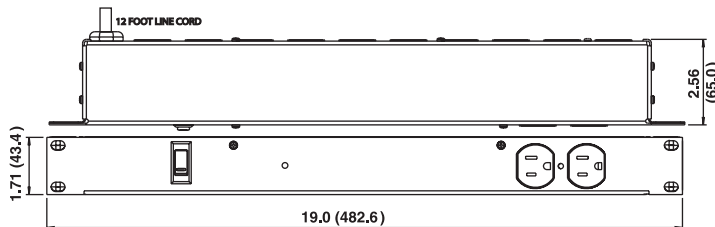
Description	Cat. No.	Rating
19" Rack-Mount Power Center with 7 1/2-ft. Cord	4505-20L	20A 125V
19" Rack-Mount Power Center with 10-ft. Cord	4505-20T	20A 125V



### Multi-Outlet Power Strips

Leviton has a large selection of Multi-Outlet Power Strips for your OEM needs. The selection includes surge-protected and non-surge strips in a variety of lengths. Call your OEM representative for more information.

SECTION M



**Cat. No. 4505**

# SECONDARY SURGE ARRESTERS



**SURGE PROTECTIVE DEVICES**



54175-SSA

## Secondary Surge Arresters for Industrial and Commercial Environments

**Industrial Grade**

Leviton's Secondary Surge Arresters are ideal for use in agricultural, oil/petrochemical and construction industries, helping to prevent external power surges from entering buildings, transformers and submersible pumps. Built of high-impact, non-conductive, fiberglass-reinforced polycarbonate, the rugged, compact units come with 18" pigtail wires and are easy to install. Available with and without LED's and audible alarms.

**Cat. Nos. 54175, 55175 & 55650 Series**

- UL Listed E-146315 tested to UL (OWHX) Secondary Surge Arresters & IEEE C62.11 Standards
- CSA Certified LR-94773 • ANSI/IEEE C-62.11



55175-ASA

Description	Cat. No.	Rating
Secondary Surge Arrester	54175-SSA	120/240, 200A
Secondary Surge Arrester w/LED's and Audible Alarm	55175-ASA	120/240, 200A
Secondary Surge Arrester	55175-SSA	120/240, 200A

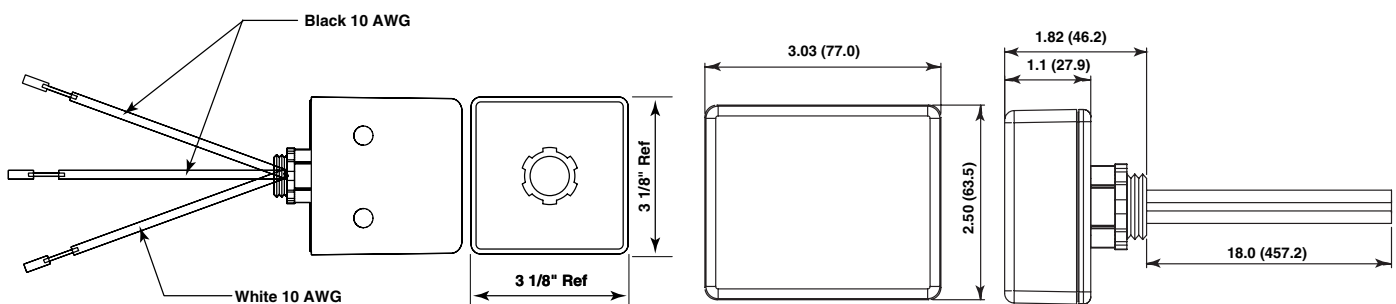
### Performance Specifications:

Cat. No.	MCOV	UL 1449 (2nd Ed) Impulse 6kV/500A	Max. Surge Current (Test w/8x20ms Wave)
54175-SSA	150V AC*	L-N: 400V	L-N: 52kA
55175-ASA	180V AC	L-N: 400V	L-N: 70kA
55175-SSA	180V AC	L-N: 400V	L-N: 70kA

\* MOV's rated at 150V. UL assigns a derated MCOV of 132V for surge arrester applications.

### Physical Specifications

Operating Temperature Range: -10°C to 60°C  
 Storage Temperature Range: -20°C to 85°C



55175 Series

54175 Series