

ECG SURGE SUPPRESSORS

Power Outlet Strips

UL Listed

EMF™-61, EMF-63A, EMF-65A, EMF-67

- Single or Full 3-Mode Surge Protection
- EMI/RFI Noise Filter
- Phone Line Protection
- Spike Energy Absorption to 115 Joules
- Nanosecond Response Time
- 15 A/125 VAC (1875 W Max)
- Illuminated Power Switch
- Surge Protection Indicator
- Resettable Circuit Breaker
- Keyhole Slot Mounting

EMF™ Power Outlet Strips are effective protection against transient AC line voltage spikes that can damage electronic equipment or interfere with its operation. These spikes are shunted through protecting MOVs where they are dissipated. All models, with the exception of the EMF-61, feature full 3-mode surge protection: **HOT TO NEUTRAL, HOT TO GROUND, and NEUTRAL TO GROUND**. The EMF-61 provides basic single mode protection from **HOT TO NEUTRAL** lines.

The EMF-65A can also be used for phone line protection. They will protect against transient voltage spikes from **RING (Red) TO GROUND and TIP (Green) TO GROUND**.

All EMF Power Outlet Strips are controlled by an illuminated power switch and protected against overloads by a resettable circuit breaker.

Plug-In Protection For...

Office

- Electronic Typewriters
- Copy Machines
- Computers

Industrial

- Process Controls
- Electrical Hand Tools

Institutional/Industrial

- Lab Equipment
- Amplifiers
- Film/Video Equipment

Residential

- TV
- Stereo
- Video Games

Phone Line Protection

- Modems
- FAX Machines
- Cordless Phones
- Telephones
- Answering Machines



EMF-61

90° Rotated Outlets
Single Mode Surge Protection



EMF-63A

EMI/RFI Noise Filter
Surge Protection Indicator
3 Mode Surge Suppression



EMF-65A

Phone Line Protection
EMI/RFI Noise Filter
Surge Protection Indicator
3 Mode Surge Suppression



EMF-67

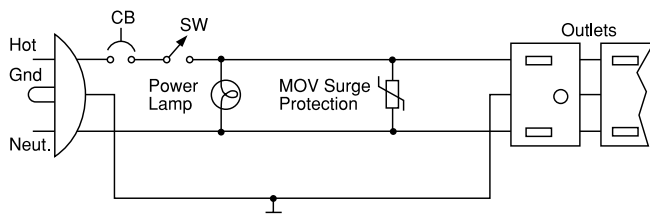
90° Rotated Outlets
EMI/RFI Noise Filter
3 Mode Surge Suppression

ECG POWER OUTLET STRIPS, cont.

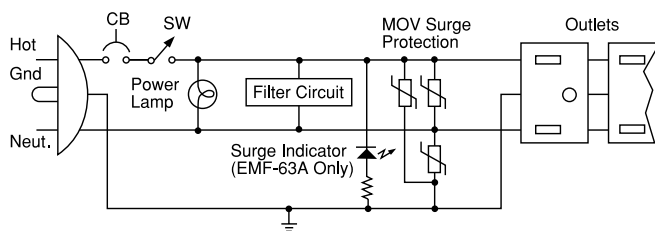
Specifications

	EMF-61	EMF-63A	EMF-65A	EMF-67
General				
Case, Heavy Duty	Plastic	Steel	Plastic	Plastic
Number of Outlets	6	6	6	7
Surge Protection Indicator	---	LED	LED	---
Operating Current and Voltage (1875 W Max.)	15A, 125VAC	15A, 125VAC	15A, 125VAC	15A, 125VAC
Circuit Breaker, Resettable	15A	15A	15A	15A
Clamping Response Time	<1 nSec.	<1 nSec.	<1 nSec.	<1 nSec.
AC Power Section				
Surge Protection (MOVs)	Hot to Neut.	Hot to Neut. Hot to Gnd Neut. to Gnd	Hot to Neut. Hot to Gnd Neut. to Gnd	Hot to Neut. Hot to Gnd Neut. to Gnd
Clamping Voltage				
@ 1mA	200V	185V	185V	185V
@ 50A	395V	340V	340V	330V
Energy Absorption (Max.)	50 Joules	100 Joules	100 Joules	100 Joules
Peak Surge Current	4500A	7000A	7000A	7000A
EMI/RFI Noise Attenuation	---	5-40 dB	5-40 dB	4-45 dB
		100kHz to 30MHz	100kHz to 50MHz	100kHz to 50MHz
Telecommunications Section				
Surge Protection (MOVs)	---	---	Ring to Gnd Tip to Gnd	---
Clamping Voltage				
@ 1mA	---	---	245V	---
@ 10A	---	---	450V	---
Energy Absorption (Max.)	---	---	20 Joules	---
Peak Surge Current	---	---	1200A	---

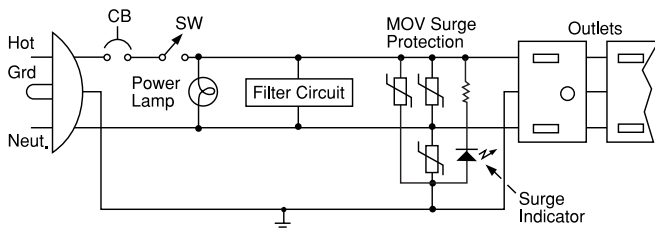
EMF-61



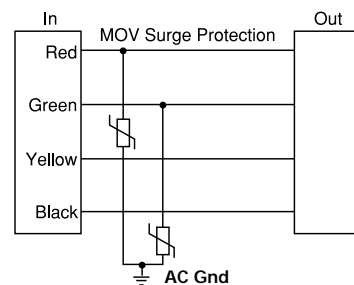
EMF-63A, EMF-67



EMF-65A



Telephone Line Protection (EMF-65A)



ECGSURGE SUPPRESSOR

Power Outlet Strip

EMF-60 6-Outlet Surge Suppressor with Circuit Breaker Protection

UL Listed

- 15 Amp/125V/1875W
- Resettable circuit breaker
- 4-foot, 14 gauge, grounded power cord
- Surge indicator light
- On/off lighted master switch
- 6 grounded AC outlets
- Durable, fire-retardant plastic construction

EMF Power Outlet Strips are effective protection against transient AC line voltage spikes that can damage electronic equipment or interfere with its operation. These spikes are shunted through a protecting MOV where they are dissipated. The EMF-60 provides basic single mode protection from hot to neutral lines.

The EMF-60 is useful in home or business environments, and will protect valuable equipment from power surges that may be caused by lightning strikes, appliances such as air conditioners or refrigerators, machinery, or line switching.

Plug-In Protection For...

Office

- Electronic Typewriters
- Copy Machines
- Computers
- Modems
- Fax Machines
- Answering Machines

Industrial

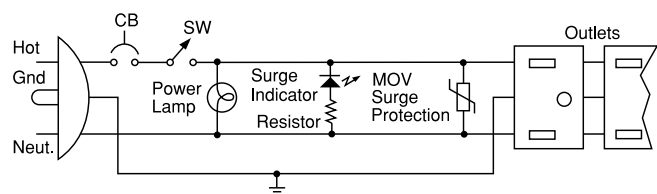
- Process Controls
- Electrical Hand Tools

Institutional/Industrial

- Lab Equipment
- Amplifiers
- Film/Video Equipment

Residential

- TV
- Stereo
- Video Games



Specifications

Operating Current and Voltage	15 Amp/125V/1875W
Clamping Voltage	400 volts
Maximum Surge Dissipation.....	60 joules
Maximum Spike Current	4500 amps
Response Time	<1 nanosecond
Maximum Surge Voltage.....	6000 volts

ECG SURGE SUPPRESSORS

Power Outlet Strip

EMF-41 4-Outlet Surge Suppressor with Circuit Breaker Protection

- 15 Amp/125V/1875W
- Resettable Circuit Breaker
- 4 Ground AC Outlets
- 14 Gauge, Grounded Power Cord
- Flame Retardant Plastic Construction
- Keyhole Slot Mounting

The EMF-41 is useful in the home or businesses environments. It will protect valuable equipment from power surges that may be caused by lightning strikes, appliances such as air conditioners or refrigerators, machinery, or line switching.

EMF Power Outlet Strips are effective protection against transient AC line voltage spikes that can damage electronic equipment or interfere with its operation. These spikes are shunted through a protecting MOV where they are dissipated. The EMF-41 provides basic single mode protection from hot to neutral line.

Plug-In Protection For...

Residential

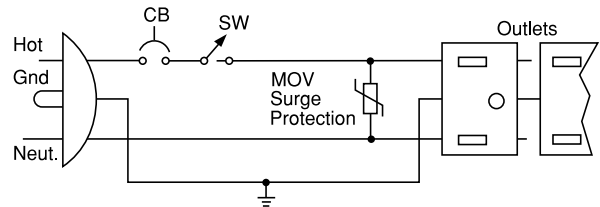
- TV
- Stereo
- Video Games

Office

- Electronic Typewriters
- Copy Machines
- Computers
- Modems
- Fax Machines
- Answering Machines



UL & CUL
Listed



Specifications

Operating Current Voltage	.....115 Amp/125V/1875W
Clamping Voltage	.....400 Volts
Maximum Surge Dissipation	......60 Jouels
Maximum Spike Current	......4500 Amps
Response Time	.....<1 Nanosecond
Maximum Surge Voltage	......6000 Volts

E C G S U R G E S U P P R E S S O R S

Master Power Controller

Intelligent Power Controller

EMF-515MC

UL Listed

MASTER Outlet Controls Three Auxiliary Outlets Electronically

- 3 Mode AC Line Surge Suppression
 - Hot to Neutral
 - Hot to Ground
 - Neutral to Ground
- Spike Energy Absorption 222 Joules
- Nanosecond Response Time
- Power and Surge Indicator Lights
- 4 Foot Power Cord
- Resettable Circuit Breaker
- Fused Surge Protection
- Three Switched Outlets
- Two Unswitched Outlets



Typical Applications

Residential

- TV • Stereo • VCR
- Computer/Peripherals
- Video Games • Appliances

Office

- Electronic Typewriters
- Computers • Word Processors
- Security Systems

Institutional/Industrial

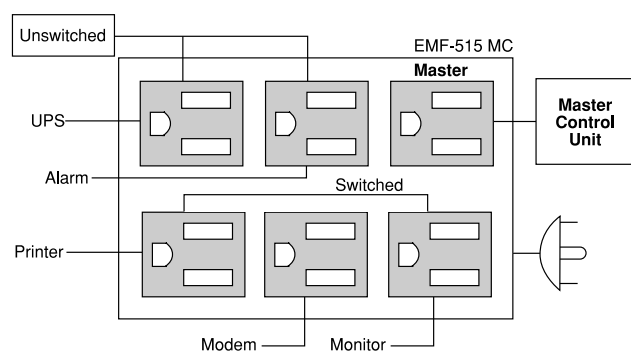
- Lab Equipment • Amplifiers
- Film/Video Equipment

MASTER Outlet Controls Three Auxiliary Outlets

The unique EMF-515MC Intelligent Power Controller has one MASTER outlet, three electronically controlled AUXILIARY (Slave) outlets, and two unswitched outlets. It senses when something plugged into the MASTER outlet is turned ON and responds by turning ON power to the AUXILIARY outlets.

Choose one piece of equipment with an easily accessible on-off switch to be the master control unit and plug it into the MASTER outlet on the EMF-515MC*. Plug the other pieces of equipment in the group into the auxiliary outlets and turn them on.

Now, with the EMF-515MC plugged in, when you turn on the master unit, everything goes on. When you turn off the master unit, everything goes off. There is no need to turn off each piece of equipment individually. So long as the master unit is turned on, the auxiliaries can be operated independently.



Typical Computer Application – The EMF-515MC senses when the master control unit is switched ON and responds by turning on the auxiliary equipment.

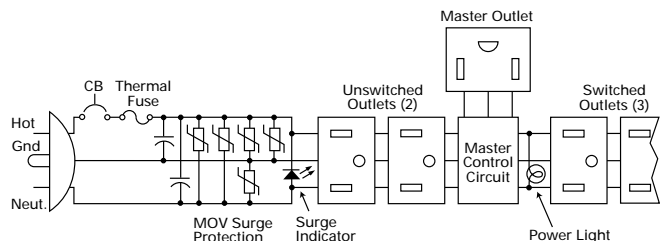
* **Note:** Equipment chosen to be the master should not draw more than 10 mA at 120 VAC while switch is in the off position.

3-Mode AC Line Surge Suppression

An important feature of the EMF-515MC is the three-mode transient voltage protection it offers. The surge protectors (high-quality Metal Oxide Varistors) will handle voltage spikes coming in on any of the three input conductors, i.e., **HOT TO NEUTRAL, HOT TO GROUND, OR NEUTRAL TO GROUND.**

Two indicator lights are located on the front of the EMF-515MC. One light serves as a power indicator and the other indicates that the surge protectors are working.

Other features of the Master Power Control include a 15-amp, resettable circuit breaker. The EMF-515MC is UL listed.



Specifications

Receptacle Application	..... 3 Prong Only
Operating Current and Voltage	..... 15 A Max. @ 125 VAC (1875 W Max.)
Clamping Voltage	..... 200V @ 1 mA, 330V @ 50 A Peak
Energy Absorption Capability	..... 222 Joules Max.
Peak Surge Current Capability	..... 13,500 A
EMI/RFI Attenuation	..... 40 dB Max., 150 kHz to 20 MHz

ECG SURGE SUPPRESSORS

General Purpose Protector

EMF-33

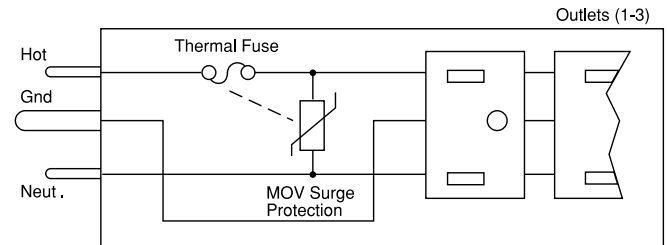
UL Listed

- Single Mode AC Line Surge Protection
 - Hot to Neutral
- 15 Amp Rated with Overload Protection
- Simple Plug-in Installation
- Fast Acting - <5 nanosecond
- Spike Energy Absorption Up to 80 Joules



The EMF-33 General Purpose Surge Suppressor is an effective basic safeguard against transient AC line voltage spikes that can damage electronic equipment or interfere with its operation. These spikes are shunted through a protecting MOV where they are dissipated. These models provide single mode protection from **HOT TO NEUTRAL** lines.

The EMF-33 features positive overload shutdown protection. If overstressed by a very high energy surge, an internal thermal fuse will open removing AC power from the equipment and signaling the need for a replacement. This guarantees that expensive electronic equipment will be protected from subsequent transient voltage surges if the MOV (Metal Oxide Varistor) is overloaded.



Typical Applications

Residential

- TV
- VCR
- Stereo
- Video Games
- Computers
- Electronic Organs
- Appliances

Office

- Electronic Typewriters
- Word Processors
- Video Monitors
- Copy Machines
- Computers
- Security Systems

Commercial/Industrial

- Microwave Ovens
- Numerical Controls
- Closed Circuit TVs
- Amplifiers
- Cash Registers
- Alarm Systems

Specifications

Operating Current and Voltage.....	15 A @ 125 VAC
.....	(1875 W Max.)
Clamping Voltage at Peak Current	300 V @ 50A,
.....	395 V @ 100 A
Energy Absorption Capability	80 Joules Max.
Peak Surge Current Capability.....	6500 A (1 Cycle),
.....	4000 A (2 Cycles)
Thermal Overload Fuse (Non-Replaceable)	
Opening Temperature.....	76°C Max.