

SERIES II POWER CONDITIONERS, 20 AMP

ADVANCED PROTECTION AND FILTERING FEATURING **SMP+** TECHNOLOGY

The latest generation of Furman's legendary 20 amp power conditioners offer the most advanced protection of your valuable equipment while significantly reducing AC line noise and providing the current capacity for today's most demanding applications.

ALL MODELS FEATURE

SMP
SERIES MULTISTAGE
PROTECTION

LiFT
LINEAR FILTERING
TECHNOLOGY

E.V.S.
EXTREME
VOLTAGE SHUTDOWN

- Series Multi-Stage Protection Plus (**SMP+**) for virtually maintenance free protection from surges and spikes
- Furman's unequalled Linear Filtering Technology (**LiFT**) rids systems of AC line noise for consistent audio/video clarity
- Automatic Extreme Voltage Shutdown (**E.V.S.**) powers down equipment during a prolonged or extreme over-voltage
- Zero ground contamination circuitry assures the delivery of pure AC
- Rear BNC connector for connection of any standard gooseneck lamp
- Eight rear panel outlets and one front panel outlet
- 20 amp rating with ultra-high inrush capable magnetic circuit breaker
- Front panel master power switch protected by hinged panel to prevent accidental power off
- 10 foot, 12 gauge heavy-duty power cable
- Three year limited warranty



P-8 PRO II

- Base model



ADDITIONAL PL-8 PRO II FEATURES

- Two retractable, long life, low heat LED lights with dimmer for rack illumination



ADDITIONAL PL-PRO II FEATURES

- Two retractable, long life, low heat LED lights with dimmer for rack illumination
- Multi-segmented, colored LED voltmeter



ADDITIONAL PL-PRO D II FEATURES

- Two retractable, long life, low heat LED lights with dimmer for rack illumination
- Laboratory precision grade voltmeter



ADDITIONAL PM-PRO II FEATURES

- Laboratory precision grade voltmeter
- True RMS current meter

DESCRIPTION

The most widely recognized and trusted name in AC power conditioning is proud to introduce **SERIES II** power conditioners featuring Furman's revolutionary **SMP+** technology. Furman's Series Multi-Stage Protection Plus (**SMP+**) circuit features our exclusive Linear Filter Technology (**LiFT**), Extreme Voltage Shutdown (**E.V.S.**) and a high current TVZ-MOV. Together; these technologies comprise what is, without question, the world's most advanced and comprehensive transient voltage surge suppressor.

Series Multi-Stage Protection Plus (SMP+)

SMP+ is Furman's proprietary surge suppression and noise filtration system. Designed over a period of two years by our California based engineering team, **SMP+** is composed of three separate and distinct technologies which work together in a precisely tuned circuit to filter or "clean" the incoming power and to protect connected equipment from potentially damaging AC events. These technologies are Linear Filtering, Series Multi-Stage Protection, and Extreme Voltage Shutdown.

Linear Filtering Technology (LiFT):

Unfortunately, traditional AC filter conditioners have been designed for unrealistic laboratory conditions. Prior technologies could actually harm audio and video performance more than they help, due to the resonant peaking of their antiquated, non-linear designs. Under certain conditions, these designs can actually add more than 10 dB of noise to the incoming AC line! Worse still, lost digital data, the need to reboot

digital pre-sets, or destroyed digital converters are frequently caused by excessive voltage spikes and AC noise contaminating the equipment ground. Furman's **LiFT** takes another approach, ensuring optimal performance through linear filtering and no leakage to ground.

Series Multi-Stage Protection (SMP):

Traditional surge suppression relies on circuits that "sacrifice" themselves when exposed to multiple transient voltage spikes, requiring the dismantling of your system and repair of your surge suppressor. With Furman's **SMP+**, however, damaging transient voltages are safely absorbed, clamped and dissipated. No sacrificed parts, no service calls, no downtime. Also unique to Furman's **SMP+** is its unparalleled clamping voltage. While other designs offer clamping voltages that are well above 300Vpk, Furman's **SMP+** clamps at 188Vpk, 133 VAC RMS, even when tested with multiple 6000Vpk - 3000 amp surges! This unprecedented level of protection is only available with Furman's **SMP+** technology.

Extreme Voltage Shutdown (E.V.S.):

When voltage rises to extreme levels because of a lost neutral line or an accidental connection to 208 or 240 VAC, Furman's Extreme Voltage Shutdown kicks in, automatically powering down all equipment quickly and safely in order to prevent damage from occurring. An indicator LED will then illuminate, alerting you to the situation until the over voltage condition is corrected.



Rear panel identical on all models.

SERIES II 20 AMP POWER CONDITIONERS SPECIFICATIONS

Current Rating
20 Amps

Operating Voltage
90 to 140 VAC

Overvoltage Shutdown
140 VAC typically

Voltmeter Accuracy
±2 VAC, calibrated with internal trimpot adjustments (PL-PRO II)
±1.5 VAC (PL-PRO D & PM-PRO)

Spike Protection Multi-Stages
Line to neutral, zero ground leakage

Spike Clamping Voltage
188 Vpk @ 3,000 amps, 133 VAC RMS
(tested to UL-1449 6,000 Vpk @ 3,000 amps)

Response Time:
1 nanosecond

Maximum Surge Current
6,500 Amps

Noise Attenuation
10 dB @ 10 kHz
40 dB @ 100 kHz
100 dB @ 10 MHz
Linear attenuation curve from 0.05 - 100 ohms line impedance

Dimensions
19" W x 10.5" D x 1.75" H

Weight
11 lbs.

Power Consumption:
P8-PRO II: 6 Watts
PL8-PRO II & PL-PRO II: 11 Watts
PL-PRO D II & PM-PRO II: 12 Watts

Three Year Limited Warranty
All Series II units are protected by a limited three year warranty covering defects in materials and workmanship.

Safety Agency Listing
CE, NRTL-C
Patent Number CA1332074 (4,901,183)