

# LC Plus

ISOLATION TRANSFORMER-BASED  
LINE CONDITIONER

With  
SMART  
GROUND



COMPUTER-GRADE  
LINE CONDITIONING

User's guide for the following models:  
LC70SG-2R, LC100SG-2R, LC180SG-4R,  
LC200SG-4R, LC300SG-4R

*Thank you for purchasing this LC Plus. Smart Power Systems is dedicated to developing and manufacturing the highest performance power protection and filtration devices for your electronic equipment. Proper use of this device will provide the protection needed for your connected equipment.*



## LINE CONDITIONERS

Reduces the need for a dedicated line where voltage on ground is present. This transformer isolation technology is an option to expensive rewiring where poor wiring conditions exist on older or renovated buildings.

## OTHER POWER PROTECTION PRODUCTS

### TRANSFORMER BASED FILTER SERIES (TBF™) POWER FILTERS

Considered to be one of the most significant developments in the power protection industry. TBF™ Filters contain innovative technology that combines Surge Suppression and Noise Isolation which filters the noise on the ground to less than 0.5 Volts (US Patent # 6229682). Exclusive "POVP" Prolonged Over Voltage Protector (US Patent # 6560086) disconnects the output power if voltage exceeds 155 volts. Exclusive Smart Technology (US Patent #5721661) protects microprocessor based equipment against reverse polarity or no ground. The patented TBF™ filters prevent 90% of the power problems experienced by your POS system, computer, copier and facsimile machine.

### AUTOMATIC VOLTAGE REGULATOR - AVR SERIES

Regulates the voltage to protect equipment against voltage sags and brownouts. Electronic systems are designed to operate based on a clean and constant supply of AC voltage. Smart Power Systems' AVR line provides boost & buck capability to eliminate under or over voltage fluctuations.

### UNINTERRUPTIBLE POWER SUPPLIES - UPS SERIES

Smart Power Systems' Uninterruptible Power Supplies (UPS) integrated TBF™ Technology provide on-line power conditioning.

## WARRANTY

### 5 year product warranty

Smart Power Systems warrants that our LC Plus Series Line Conditioners are free of defects in material and workmanship for 5 years --or, they will be repaired or replaced free of charge. See our website for more details - [www.smartpowersystems.com](http://www.smartpowersystems.com)

### \$25,000 Connected Equipment Warranty

If the Smart Power Systems equipment fails and this failure allows a surge to pass through and damage the connected equipment, Smart Power Systems will pay for the repair or replacement of the connected equipment of the original purchaser . See our website for more details - [www.smartpowersystems.com](http://www.smartpowersystems.com)

## IMPORTANT

If for any reason you need to return the **LC Plus** unit to the manufacturer, you should obtain an RMA (Return Material Authorization) number before returning the unit. To request an RMA number please call 1-800-772-7633 or visit the website at [www.smartpowersystems.com/rma.htm](http://www.smartpowersystems.com/rma.htm)

## INSIDE THE BOX

- ▶ LC Plus Unit
- ▶ User's Manual
- ▶ CAT.5 Patch Cord



7409 Railhead Ln. - Houston, Texas 77043 - Tel:(713)464-8000 - Fax:(713)984-0841  
E-mail: [support@smartpowersystems.com](mailto:support@smartpowersystems.com) - [www.smartpowersystems.com](http://www.smartpowersystems.com) **1-800-882-8285**

## CAUTION

- Use indoors only
- Avoid dropping the unit.
- Only plug the LC Plus into a three pronged grounded outlet. This unit is not to be used with any type of ground "lift" or pin eliminator.
- Do not open the LC Plus unit, there are no serviceable parts inside. Opening the unit will void your warranty.

If you have any questions call us at our Tech Support line toll free  
1-800-772-7633 or email us at [Support@smartpowersystems.com](mailto:Support@smartpowersystems.com)

## IMPORTANT SAFETY INSTRUCTIONS

### WARNING

- **SAVE THESE INSTRUCTIONS:** This manual contains important instructions that should be followed during installation and maintenance of the LC Plus.
- Install this unit in a controlled environment.

### CAUTION

- For indoor use only.
- Plug the LC Plus unit into a three pronged 120VAC power outlet.
- Use of adapters or ground pin eliminators will void your warranty.
- Risk of electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.
- Avoid exposing the LC Plus to direct sunlight, stoves or any other heat source.
- To prevent overheating, make sure that the ventilation openings of the unit are not covered.
- Keep unit away from moisture and dust.

## FEATURES

- ▶ Magnetic Isolation Transformer For Noise Filtration

## SPECIFICATIONS

| MODEL                    | LC70SG-2R   | LC100SG-2R | LC180SG-4R | LC200SG-4R | LC300SG-4R |
|--------------------------|---|------------|------------|------------|------------|
| Output Current (Amps)    | 0.7   | 1          | 1.5        | 2          | 2.5        |
| Power Rating (VA)        | 84  | 120        | 180        | 240        | 300        |
| Input Voltage            | 120V  |            |            |            |            |
| Output Voltage           | 120V  |            |            |            |            |
| Input/Output Frequency   | 60Hz (Optional 50Hz)  |            |            |            |            |
| Typical Noise Rejection: | Common mode noise rejection >100dB (Less than 0.5 Volts pass through voltage) - Normal mode noise rejection >65dB (Less than 10 Volts pass through voltage) |            |            |            |            |
| Cooling                  | Convection  |            |            |            |            |
| Input Cord Length        | 6 ft.   |            |            |            |            |
| Input Plug               | 5-15P   |            |            |            |            |
| Output Receptacle        | (2) 5-15R   |            | (4) 5-15R  |            |            |
| Overload Protection      | Circuit Breaker & Electronic  |            |            |            |            |
| Color                    | Black   |            |            |            |            |
| Size D x W x H (In)      | 7.9 x 5.5 x 4.5 (200 x 139 x 114)   |            |            |            |            |
| Net Weight (Lbs.)        | 5.85  | 6.30       | 9.70       | 10.45      | 13.45      |
| Operating Environment    | 0-40°C at full load, 0-90% relative humidity (non condensing)   |            |            |            |            |
| WARRANTY                 | 5 years   |            |            |            |            |

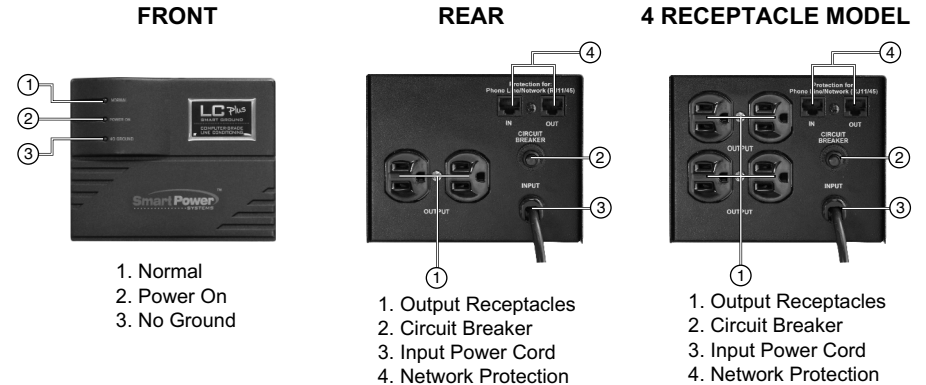
All models include Smart Ground (Patent Pending). Specifications subjects to change without notice.

## INSTALLATION

1. Turn off and unplug your equipment.
2. Plug your equipment into the LC Plus unit.
3. Plug the LC Plus unit into a properly grounded power outlet.
4. Turn on your equipment. Your equipment is now fully protected from disruptive and destructive power disturbances.

## SYSTEM DESCRIPTION

### LC70 to LC300



1. Normal
2. Power On
3. No Ground

1. Output Receptacles
2. Circuit Breaker
3. Input Power Cord
4. Network Protection

1. Output Receptacles
2. Circuit Breaker
3. Input Power Cord
4. Network Protection