# CyberPower®

## USER'S MANUAL

### *EXTENDED BATTERY MODULE*

BP48VP2U03

# INTRODUCTIONS

Thank you for purchasing the CyberPower Extended Battery Module **BP48VP2U03** for your Uninterruptible Power Supply!

The Extended Battery Module is designed for various CyberPower UPS systems and can be used in either rack or tower installations. The heavy gauge power cord has a plug-n-play DC connector for easy installation. When combining with UPS, the Extended Battery Module provides extended runtime with a 48VDC external connection. Further, additional parallel-connected Extended Battery Modules will provide a longer extended runtime for the UPS.

# IMPORTANT SAFETY INSTRUCTIONS

This manual contains important instructions that should be followed during installation and maintenance of the Extended Battery Module and batteries. Please read and follow all instructions carefully during installation and operation of the unit. Read this manual thoroughly before attempting to unpack, install, or operate.

**CAUTION!** The Extended Battery Module must be connected to a grounded AC power outlet with fuse or circuit breaker protection. DO NOT plug the Extended Battery Module into an outlet that is not grounded.

**CAUTION!** The battery can energize hazardous live parts inside even when the AC input power is disconnected.

**CAUTION!** To prevent the risk of fire or electric shock, install in a temperature and humidity controlled indoor area, free of conductive contaminants. Please see specifications for acceptable temperature and humidity range.

**CAUTION!** To reduce the risk of electric shock, do not remove the cover, except to service the battery. There are no serviceable parts inside, except for the battery.

**CAUTION! DO NOT USE THE EXTENDED BATTERY MODULE ON ANY TRANSPORTATION!** To reduce the risk of fire or electric shock, do not use the unit on any transportation such as airplanes or ships. The effect of shock or vibration caused during transit and the damp environment can cause the unit to short out.

**CAUTION!** Dispose of or recycle the unit after the end of its life, it should be in accordance with local regulations.

**CAUTION!** Please use only VDE-tested, CE-marked or UL/ CSA certified mains cable, (e.g. the mains cable of your equipment), to connect the Extended Battery Module to the AC outlet.

**CAUTION!** Do not unplug the unit from AC Power during operation, as this will invalidate the protective ground insulation.

**CAUTION! DO NOT USE WITH OR NEAR AQUARIUMS!** To reduce the risk of fire, do not use with or near aquariums. Condensation from the aquarium can come in contact with metal electrical contacts and cause the machine to short out.

**CAUTION! DO NOT INSTALL THE UNIT WHERE IT WOULD BE EXPOSED TO DIRECT SUNLIGHT OR NEAR A STRONG HEAT SOURCE!**

**CAUTION! DO NOT BLOCK OFF VENTILATION OPENINGS AROUND THE HOUSING!**

**CAUTION!** A single AC inlet can only support 10 Extended Battery Modules at most. If connecting more than 10 modules, split them up onto multiple circuits to avoid an overload.
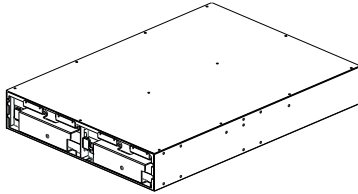
**CAUTION!** Do not connect the Extended Battery Module to itself.

**CAUTION!** For ground protection, plug AC power connectivity to wall receptacle with ground line before using the Extended Battery Module.
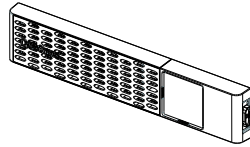
# UNPACKING

When you receive the unit, the package should contain the following items:
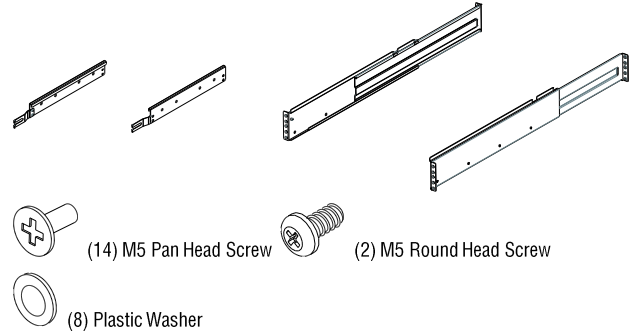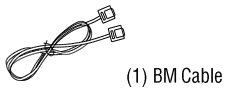
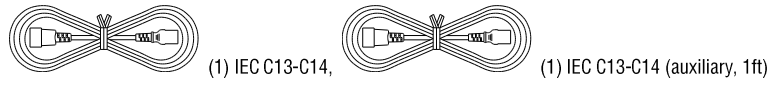| 1. Extended Battery Module | 2. Faceplate | 3. Rail Kit – CP2RAIL02 |
|---|---|---|



(14) M5 Pan Head Screw     (2) M5 Round Head Screw

(8) Plastic Washer

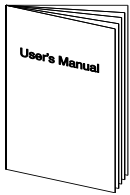| 4. Management Cable | 5. Power Cord |
|---|---|

(1) BM Cable

(1) IEC C13-C14,     (1) IEC C13-C14 (auxiliary, 1ft)
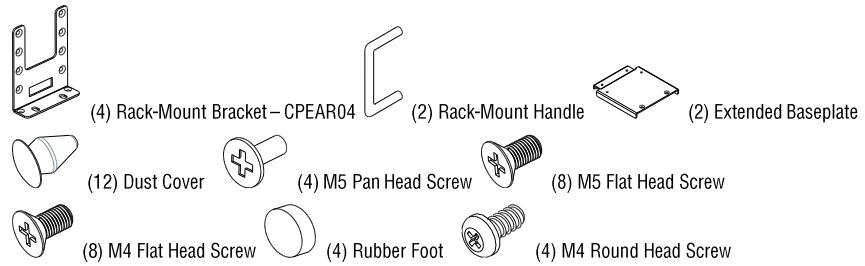
Note: Types and quantity may be different by models and selling regions.

| 6. User's Manual | 7. Mechanical Accessory |
|---|---|

User's Manual

(4) Rack-Mount Bracket – CPEAR04     (2) Rack-Mount Handle     (2) Extended Baseplate

(12) Dust Cover     (4) M5 Pan Head Screw     (8) M5 Flat Head Screw

(8) M4 Flat Head Screw     (4) Rubber Foot     (4) M4 Round Head Screw
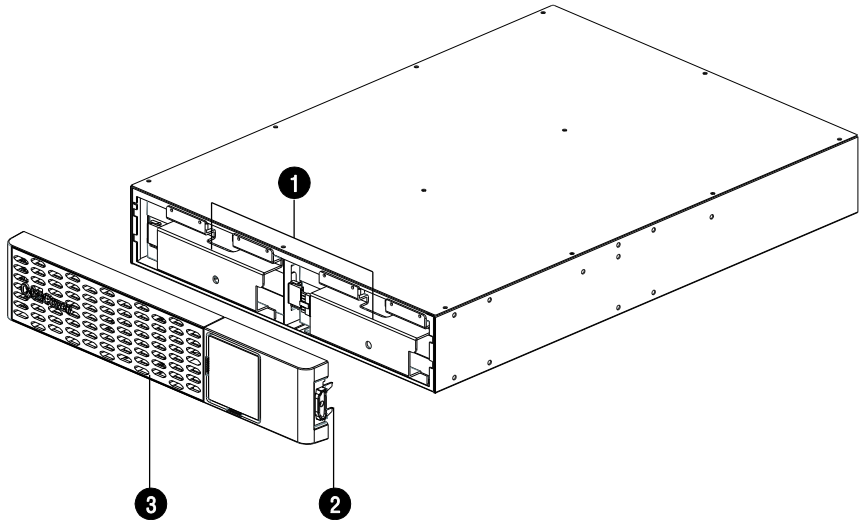
## BASIC CONFIGURATION

**Front Panel**
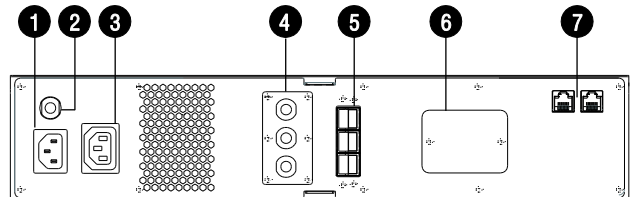
1. Battery Cover
2. Front Panel Access Tabs
3. Faceplate

**Rear Panel**

1. AC Inlet
2. Input Circuit Breaker
3. AC Outlet
4. Extended Battery Module Connector Plug
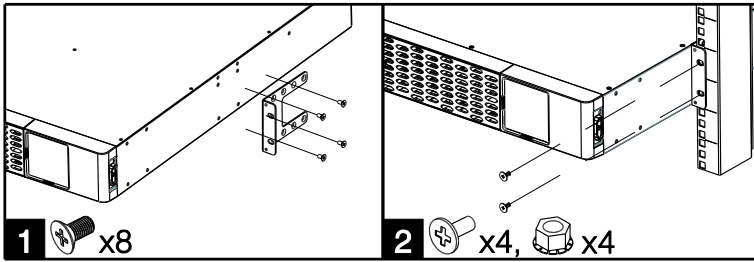5. Extended Battery Module Connector Socket
6. Fuse Cover
7. BM Port

**BM Port**

Connection port for built-in battery management module on UPS and Extended Battery Module. Refer to Basic Operation section in Product Overview.
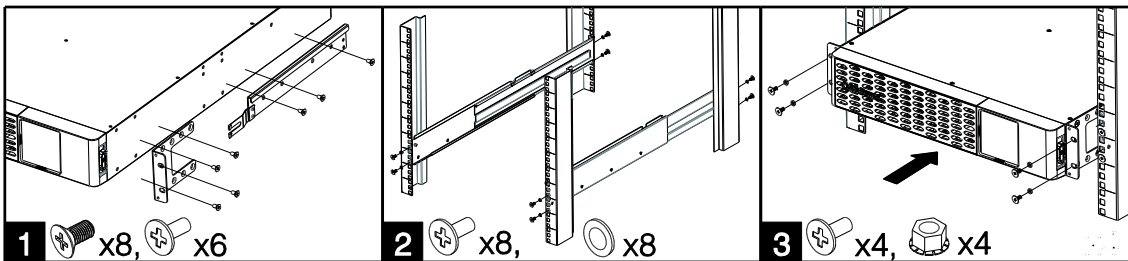
### Rack Installation for 2-post Rack



1. Attach the brackets with provided M5 flat head screws.
2. Affix the Extended Battery Module to the rack with provided M5 pan head screws or suitable screws and cage nuts.

### Rack Installation for 4-post Rack



1. Use the provided M5 flat head screws to attach the brackets and provided M5 pan head screws for hanging brackets.
2. Screw the hanging rails to the rack with provided M5 pan head screws and plastic washers.
3. Lift the Extended Battery Module upon the hanging rails and slide the unit into the rack. Affix the Extended Battery Module to the rack with provided M5 pan head screws or suitable screws and cage nuts. If handles are needed, affix them to the brackets with M4 flat head screws.

### Tower Installation with your UPS
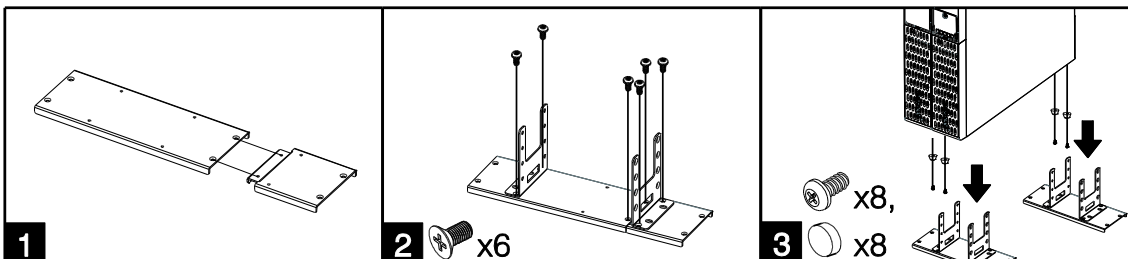


1. Combine the extended baseplate to the tower baseplate that comes with the UPS accessories.
2. Screw in the baseplates and attach the brackets to the combined baseplate with the provided M4 flat head screws that come with both the UPS and Extended Battery Module.
3. Screw the rubber feet with provided M4 round head screws that come with both the UPS and Extended Battery Module and then put the UPS and Extended Battery Module onto the assembled tower stand. You can also put the dust covers in the screw holes on the top side of the units to prevent dust from falling into the units.

## BASIC OPERATION

### Normal Use

1. Plug the Extended Battery Module into a grounded receptacle/ wall outlet.

2. Connect the Extended Battery Module to your UPS by plugging the extended battery module connector plug into the connector socket on the rear panel of the UPS. Ensure the color coded connector plug lines up correctly with the colors in the UPS socket, such as red to red, black to black and green to green.

3. Connect the BM/ENV port from UPS rear panel to BM port marked "IN" on the rear panel of the Extended Battery Module using the provided BM cable.

4.  Check and modify the Extended Battery Module Quantity setting on your UPS through the LCD module, PowerPanel® Business Edition software or RMCARD interface (if installed) to ensure the UPS reports an accurate runtime.

**Connecting Multiple Extended Battery Modules**

Additional Extended Battery Modules are connected in parallel, the voltage maintains the same, yet the battery amp-hour capacity depends on the numbers of Extended Battery Modules in the set-up. Follow the steps described below to add multiple Extended Battery Modules to your UPS.

1.  Use the auxiliary power cord to connect the AC inlet from one Extended Battery Module to the AC outlet of another Extended Battery Module.

2.  Plug the Extended Battery Module into a grounded receptacle/ wall outlet.

3.  Connect the Extended Battery Module to your UPS by plugging the extended battery module connector plug into the connector socket on the rear panel of the UPS. Ensure the color coded connector plug lines up correctly with the colors in the UPS socket, such as red to red, black to black and green to green.

4.  Connect the BM/ENV port from UPS rear panel to BM port marked "IN" on the rear panel of the Extended Battery Module using the provided BM cable, and then connect another BM cable between BM port marked "OUT" and BM port marked "IN" of another Extended Battery Module. Refer to illustration below.

5.  Check and modify the Extended Battery Module Quantity setting on your UPS through the LCD module, PowerPanel® Business Edition software or RMCARD interface (if installed) to ensure the UPS reports an accurate runtime.



Normal Use

Multiple Use
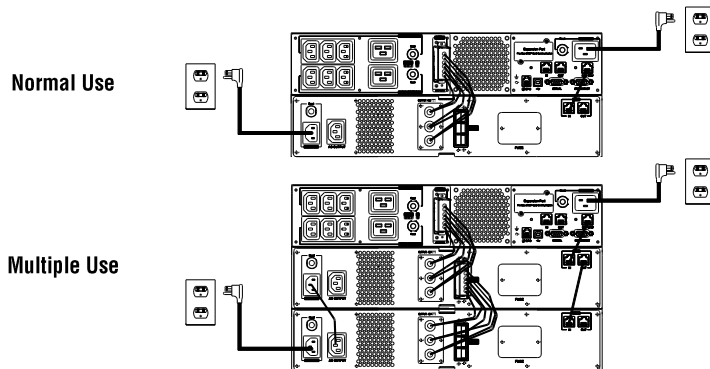
Be aware of the following statements:

A.  Your Extended Battery Module may be used immediately upon receipt. However, **charging the battery for at least twelve (12) hours before connecting to UPS is recommended** to ensure the battery reaches its maximum charge. Charge loss may occur during shipping and storage. To recharge the battery, simply leave the unit plugged into an AC outlet.

B.  To maintain optimal battery charge, leave the Extended Battery Module plugged into an AC outlet at all times.

C.  Always plug the Extended Battery Module into a grounded receptacle/ wall outlet. Make sure the wall branch outlet is protected by a fuse or circuit breaker and does not service equipment with large electrical demands, e.g. air conditioner, refrigerator, copier, etc. Avoid using extension cords.

D.  DO NOT plug the AC power cord from the Extended Battery Module into a UPS.

E.  To prevent risk of electric shock, it is necessary to plug the Extended Battery Module into a grounded receptacle before connecting to the UPS, or turn the UPS off first, connect the Extended Battery Module as above steps and then turn the UPS on.

**Storage**

To store your Extended Battery Module for an extended period, cover it and store with the battery fully charged. Recharge the battery every three months to ensure battery life.

**Operation/Storage Environment**

To prevent risk of fire or electric shock, install or place the unit in a temperature and humidity controlled indoor area, free of conductive contaminants.

| | | |
|---|---|---|
| | Temperature | 32°F to 104°F (0°C to 40°C) |
| Operation | Relative Humidity | 0% - 95% Non-condensing |
| | Elevation | 0 - 10000 feet (0 - 3000 meters) |
| | Temperature | 5°F to 113°F (-15°C to 45°C) |
| Storage | Relative Humidity | 0% - 95% Non-condensing |
| | Elevation | 0 - 50000 feet (0 - 15000 meters) |
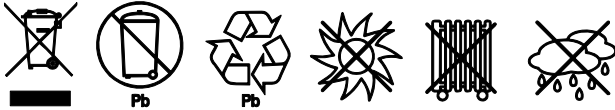
# BATTERY REPLACEMENT

Read and follow the important safety instructions before servicing the batteries. Replacement of batteries located in an operator access area. Visit CyberPower official website www.cyberpower.com or contact your dealer for more information on battery replacement.

**CAUTION!** RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. When replacing batteries, replace with the same number of the following battery: CyberPower RB1260X8 for BP48VP2U03.

**CAUTION!** Risk of Energy Hazard, 12V, maximum 9 Ampere-hour battery.

**CAUTION!** The used batteries are considered hazardous waste and must be disposed through recycling. Most retailers that sell lead-acid batteries collect used batteries for recycling, as required by local regulations. Do not dispose of batteries in a fire. The batteries may explode.

**CAUTION!** Do not open or mutilate batteries. Released material is harmful to the skin and eyes. It may be toxic.

**Take the following precautions before replacing the battery:**

1. Remove watches, rings, or other metal objects.
2. Use tools with insulated handles.
3. Wear rubber gloves and boots.
4. Do not lay tools or metal parts on top of batteries.
5. Determine if battery is inadvertently grounded. If inadvertently grounded, remove source from ground. CONTACT WITH ANY PART OF A GROUNDED BATTERY CAN RESULT IN ELECTRICAL SHOCK. The likelihood of such shock can be reduced if such grounds are removed during installation and maintenance (applicable to equipment and remote battery supplies not having a grounded supply circuit).

## BATTERY REPLACEMENT PROCEDURE
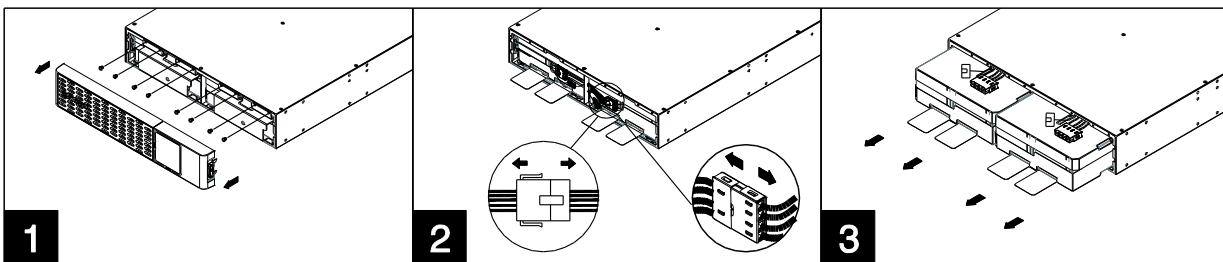


1. Disconnect the Extended Battery Module from your UPS, remove faceplate and unscrew the screws on battery cover and then remove the battery cover.

2. Disconnect the battery and battery management module connector.

3. Insert the new battery pack. Assemble the connectors, screws, battery cover and faceplate. Recharge the unit for at least 12 hours to ensure the Extended Battery Module performs expected runtime and then connect the Extended Battery Module to your UPS.

**Reminder:** Check and modify the Extended Battery Module Quantity setting on your UPS through the LCD module, PowerPanel® Business Edition software or RMCARD interface (if installed) to ensure the UPS reports an accurate runtime.

# TECHNICAL SPECIFICATIONS

| Model | BP48VP2U03 |
|---|---|
| **Input** | |
| Input Voltage Range | 100V – 240V |
| Input Frequency | 50/60Hz |
| Plug Type | IEC 320 C14 |
| **Output** | |
| Output Voltage | 48Vdc |
| Rated Output Current | 70A |
| Overload Protection | Fuse |
| **Battery** | |
| Battery Type | Sealed Maintenance Free Lead Acid Battery |
| Replacement Battery Pack | RB1260X8 |
| RBP Quantity | 2 |
| Typical Recharge Time | 6 hours |
| Built-in Charger | Yes |
| User Replaceable | Yes |
| Hot-swappable | Yes |
| Compatible UPS Model | PR2200RTXL2UA, PR3000RTXL2UA, PR2200RTXL2UHVA, PR3000RTXL2UHVA |
| **Physical** | |
| Dimensions | 2U Rack, 17.1" x 3.4" x 24.8" / 433 x 86.5 x 630 (mm) |
| Weight | 90.6lbs / 41.1kg |
| **Conformance** | |
| Approvals | UL1778, cUL107.1, FCC Part15 Class B, VCCI Class B, CE, RCM |
| Environmental | RoHS Compliant |

# TROUBLESHOOTING

| Problem | Possible Cause | Solution |
|---|---|---|
| UPS does not perform expected runtime. | UPS does not recognize the correct quantity of Extended Battery Modules. | Adjust the setting of Extended Battery Module Quantity on your UPS to correct numbers via UPS LCD module, PowerPanel® Business Edition software or RMCARD interface (if installed). |
| | Batteries are degraded. | Contact CyberPower about replacement batteries. |
| The Extended Battery Module does not work. | Batteries are not fully charged. | Allow the Extended Battery Module to charge for at least 12 hours. |
| | Batteries are degraded. | Contact CyberPower about replacement batteries. |
| | The fuse blew. | Contact CyberPower for repair. |

Additional troubleshooting information can be found at www.cyberpower.com.

# REGULATORY COMPLIANCE

**FCC Compliance Statement** This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

*Note:* This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

*Important:* Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**Canadian Compliance Statement** CAN ICES-3 (B)/NMB-3(B)

**VCCI Compliance Statement** この装置は、クラス B 情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。取扱説明書に従って正しい取り扱いをして下さい。 VCCI－B

Read the following terms and conditions carefully before using the CyberPower **BP48VP2U03** (the "Product"). By using the Product you consent to be bound by and become a party to the terms and conditions of this Limited Warranty and Connected Equipment Guarantee (together referred to as this "Warranty"). If you do not agree to the terms and conditions of this Warranty, you should return the Product for a full refund prior to using it.

### Who is providing this warranty?

CyberPower Systems (USA), Inc. ("CyberPower") provides this Limited Warranty.

### What does this warranty cover?

This warranty covers defects in materials and workmanship in the Product under normal use and conditions. It also covers equipment that was connected to the Product and damaged because of the failure of the Product.

### What is the period of coverage?

This warranty covers the Product for three years and connected equipment for as long as you own the Product.

### Who is covered?

This warranty only covers the original purchaser. Coverage ends if you sell or otherwise transfer the Product.

### How do you get warranty service?

1. Before contacting CyberPower, identify your Product model number, the Purchase Date, and each item of Connected Equipment (E.G. Computer tower, Computer Monitor, Cable Modem, etc).
2. Visit our web site at https://www.cyberpowersystems.com/support or Call us at (877) 297-6937.
3. If your product requires warranty service you must provide a copy of your dated purchase receipt or invoice.

### How do you open a connected equipment claim?

1. Call us at (877) 297-6937 or write to us at Cyber Power Systems (USA), Inc., 4241 12th Ave. E., STE 400, Shakopee, MN 55379, or send us an e-mail message at claims@cpsww.com for instructions, within 10 days of the occurrence.
2. When you contact CyberPower, identify the Product, the Purchase Date, and the item(s) of Connected Equipment. Have information on all applicable insurance or other resources of recovery/payment that are available to the Initial Customer and Request a Claim Number.
3. You must provide a dated purchase receipt (or other proof of the original purchase) for the CyberPower unit and connected equipment. You also need to provide a description of the damage to your connected equipment.
4. Pack and ship the product to CyberPower and, if requested, the item(s) of Connected Equipment, a repair cost estimate for the damage to the Connected Equipment, and all claim forms that CyberPower provides to you. Show the Claim Number on the shipping label or include it with the product. You must prepay all shipping costs, you are responsible for packaging and shipment, and you must pay the cost of the repair estimate.

### How long do I have to make a claim?

All claims must be made within ten days of the occurrence.

### What will we do to correct problems?

CyberPower will inspect and examine the Product.
If the Product is defective in material or workmanship, CyberPower will repair or replace it at CyberPower's expense, or, if CyberPower is unable to or decides not to repair or replace the Product (if defective) within a reasonable time, CyberPower will refund to you the full purchase price you paid for the Product (purchase receipt showing price paid is required).
If it appears that our Product failed to protect any equipment plugged into it, we will also send you forms for making your claim for the connected equipment. We will repair or replace the equipment that was damaged because of the failure of our Product or pay you the fair market value (NOT REPLACEMENT COST) of the equipment at of the time of the damage. We will use Orion Blue Book, or another a third-party valuation guide, or eBay, craigslist, or other source to establish that amount.

### Who pays for shipping?

We pay when we send items to you; you pay when you send items to us.

### What isn't covered by the warranty?

1. This Warranty does not cover any software that was damaged or needs to be replaced due to the failure of the Product or any data that is lost as a result of the failure or the restoration of data or records, or the reinstallation of software.
2. This Warranty does not cover or apply to: misuse, modification, operation or storage outside environmental limits of the Product or the equipment connected to it, nor for damage while in transit or in storage, nor if there has been improper operation or maintenance, or use with items not designed or intended for use with the Product, such as laser printers, appliances, aquariums, medical or life support devices, etc.

### What are the limitations?

The sole and exclusive remedies of the Initial Customer are those provided by this Warranty.

1. This Warranty does not apply unless the Product and the equipment that was connected to it were connected to properly wired and grounded outlets (including compliance with electrical and safety codes of the most current electrical code), without the use of any adapters or other connectors.
2. The Product must have been plugged directly into the power source and the equipment connected to the Product must be directly connected to the Product and not "daisy-chained" together in serial fashion with any extension cords, another Product or device similar to the Product, surge suppressor, or power tap. Any such installation voids the Limited Warranty.
3. The Product and equipment connected to it must have been used properly in a suitable and proper environment and in conformance with any license, instruction manual, or warnings provided with the Product and the equipment connected to it.
4. The Product must have been used at all times within the limitations on the Product's VA capacity.

The Product was designed to eliminate disrupting and damaging effects of momentary (less than 1ms) voltage spikes or impulses from lightning or other power transients. If it can be shown that a voltage spike lasting longer than 1ms has occurred, the occurrence will be deemed outside the rated capabilities of the Product and the Limited Warranty is void. CyberPower Does Not Cover or Undertake Any Liability in Any Event for Any of the Following:

1. Loss of or damage to data, records, or software or the restoration of data or records, or the reinstallation of software.
2. Damage from causes other than AC Power Line Transients, spikes, or surges on properly installed, grounded and code-compliant 120 volt power lines in the United States and Canada; transients, surges or spikes on standard telephone land lines, PBX telephone equipment lines or Base 10T Ethernet lines, when properly installed and connected. (This exclusion applies, for example, to fluctuations in data transmission or reception, by CATV or RF transmission or fluctuations, or by transients in such transmission.)
3. Damage from any circumstance described as excluded above with respect to the Product.
4. Damages from fire, flood, wind, rain, rising water, leakage or breakage of plumbing, abuse, misuse or alteration of either the product or the Connected Equipment.
5. CyberPower excludes any liability for personal injury under the Limited Warranty and Connected Equipment Guarantee. CyberPower excludes any liability for direct, indirect, special, incidental or consequential damages, whether for damage to or loss of property [EXCEPT FOR (AND ONLY FOR) the specific limited agreement of CyberPower to provide certain warranty benefits regarding "Connected Equipment" under this Warranty], loss of profits, business interruption, or loss of information or data. NOTE: Some States or Provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

6. The Product is not for use in high-risk activities or with aquariums. The Product is not designed or intended for use in hazardous environments requiring fail-safe performance, or for use in any circumstance in which the failure of the Product could lead directly to death, personal injury, or severe physical or property damage, or that would affect operation or safety of any medical or life support device (collectively, "High Risk Activities"). CyberPower expressly disclaims any express or implied warranty of fitness for High Risk Activities or with aquariums. CyberPower does not authorize use of any Product in any High Risk Activities or with Aquariums. ANY SUCH USE IS IMPROPER AND IS A MISUSE OF THE PRODUCT.

**Where can I get more information?**

The application of the United Nations Convention of Contracts for the International Sale of Goods is expressly excluded. CyberPower is the warrantor under this Limited Warranty.
For further information please feel free to contact CyberPower at CyberPower Systems (USA), Inc. 4241 12th Ave E., STE 400, Shakopee, MN 55379; call us at (877) 297-6937; or send us an e-mail message at claims@cpsww.com.

# CUSTOMER SUPPORT

Visit our website at https://www.cyberpowersystems.com/support to access extensive service and in-depth support to gain the information you need about power protection. Use the website links to find answers to common questions, obtain troubleshooting tips, learn about our power management software, view warranty details, and examine product literature. Our online, self-service resources are available 24/7. CyberPower also offers assistance from our expert team of sales, technical, and product support associates.

**Technical Support**

Our Technical Support team will be happy help you with technical questions during business hours. Choose the ways described below you would like us to help you.

- Chat Live: Monday – Friday, 7am – 6pm CST. Visit https://www.cyberpowersystems.com/support.
- Submit a Form (recommended): Monday – Friday, 24 Hours. Visit https://www.cyberpowersystems.com/support.
- Email: Monday – Friday, 7am – 6pm CST. Contact tech@cpsww.com.
- Call Toll Free: Live Monday – Friday, 7am – 6pm CST. Call 1-877-297-6937 (press 1).

Customer Support is available on our website.

Visit CyberPower at www.cyberpower.com to get more information.