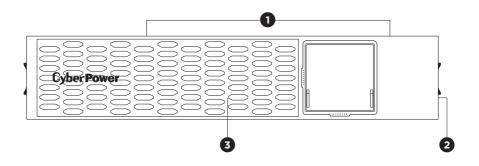
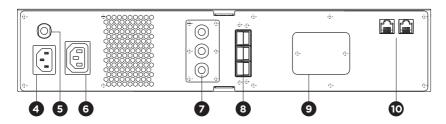
YOUR ULTIMATE ALLY IN POWER

# **EXTENDED BATTERY MODULE**

BP48VP2U03

# **USER MANUAL**





# **FEATURES**

- 1. Battery Cover (behind faceplate)
- 2. Front Panel Access Tabs (behind faceplate)
- 3. Faceplate

- 4. AC Inlet
- 5. Input Circuit Breaker
- 6. AC Outlet
- 7. Extended Battery Module Connector Plug
- 8. Extended Battery Module Connector Socket
- 9. Fuse Cover
- 10. BM Port

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

# PRODUCT REGISTRATION

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-and-play DC connector for easy installation. When combined with a UPS system, the Extended Battery Module provides extended runtime with a 48VDC external connection. Furthermore, additional parallel-connected Extended Battery Modules will provide a longer extended runtime for the UPS.

# **IMPORTANT SAFETY WARNINGS** (SAVE THESE INSTRUCTIONS)

This manual contains important instructions that should be followed during installation and maintenance of the UPS and batteries. Please read and follow all instructions thoroughly before and during the installation and operation of the product.

**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.

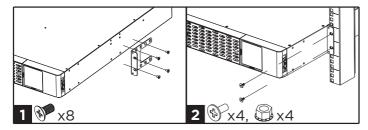
# UNPACKING

Inspect the unit upon receipt. The box should contain the following:

- (a) Extended Battery Module
- (b) Faceplate
- (c) Rail Kit CP2RAIL02, includes:
  - 14 x M5 Pan Head Screws
  - 2 x M5 Round Head Screws
  - 8 x Plastic Washers
- (d) Management Cable
  - 1 x BM Cable
- (e) Power Cords
  - 1 x IEC C13-C14, 1-ft., (auxiliary)
  - 1 x IEC C13-NEMA 5-15P, 10-ft.
  - 1 x IEC C13-C14, 6-ft.
- (e) User's Manual
- (f) Mechanical Accessory, includes:
  - 4 x Rack-Mount Brackets CPEARO4
  - 2 x Rack-Mount Handles
  - 2 x Extended Baseplates
  - 12 x Dust Covers
  - 4 x M5 Pan Head Screws
  - 8 x M5 Flat Head Screws
  - 4 x M4 Flat Head Screws
  - 4 x Rubber Feet
  - 4 x M4 Round Head Screws

# INSTALLATION

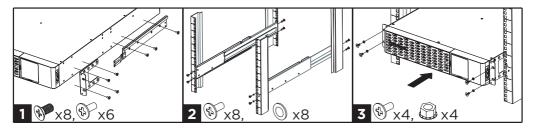
#### **Rack Installation for 2-Post Rack**



- 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.

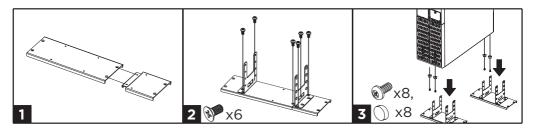
# INSTALLATION

# 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.
- 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**



- 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**

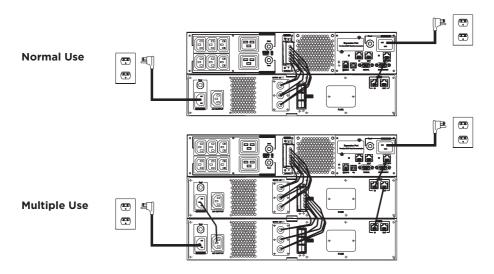
#### **Normal Use**

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



#### **BASIC OPERATION**

#### 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.

# **OPERATION AND STORAGE ENVIRONMENT**

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.

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.

Operation	Temperature	32°F - 104°F / 0°C - 40°C
	Relative Humidity	0% - 95% Non-condensing
	Elevation	0 - 10,000 ft. / 0 - 3,000 m
Storage	Temperature	5°F - 113°F / -15°C - 45°C
	Relative Humidity	0% - 95% Non-condensing
	Elevation	0 - 50,000 ft. / 0 - 15,000 m













# **BATTERY REPLACEMENT**

Read and follow the important safety instructions before servicing the batteries. 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.

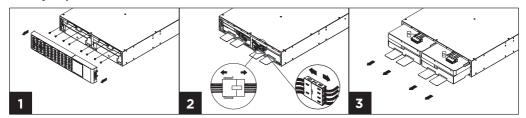
**CAUTION!** The used batteries are considered hazardous waste and must be disposed through recycling. Most retailers that sell lead-acid batteries collect used batteries for recycling, as required by local regulations. Do not dispose of batteries in a fire. The batteries may explode.

**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**



- 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			
ОИТРИТ				
Output Voltage	48 Vdc			
Rated Output Current	70 A			
Overload Protection	Fuse			
BATTERY				
Battery Type	Sealed Maintenance Free Lead Acid Battery			
Replaceable Battery Pack	2 x RB1260X8			
Typical Recharge Time	6 hours			
Built-In Charger	Yes			
User-Replaceable	Yes			
Hot-Swappable	Yes			
Compatible UPS Models	PR2200RTXL2UAN, PR3000RTXL2UAN, PR2200RTXL2UHVAN, PR3000RTXL2UHVAN, PR2200RTXL2UACN, PR3000RTXL2UACN			
PHYSICAL				
Dimensions (Width/Height/Depth)	2U rack / 17.1 x 3.4 x 24.8 in / 433 x 86.5 x 630 mm			
Weight (lb/kg)	90.6 lbs / 41.1 kg			
SAFETY				
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 LCD module, PowerPanel Business Edition software or RMCARD interface (if installed).
	Batteries are degraded.	Contact CyberPower Systems at: cyberpowersystems.com for 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 Systems at: cyberpowersystems.com for replacement batteries.
	The fuse blew.	Contact CyberPower Systems at: cyberpowersystems.com for repair.

# CYBERPOWER GREENPOWER UPS™ TECHNOLOGY

# Advanced Energy-Saving Patented Bypass Technology

CyberPower's patented GreenPower UPS™ with Bypass Technology reduces UPS energy costs by up to 75% compared to conventional UPS models. Even when utility power is normal, conventional UPS models constantly pass power through a transformer. By contrast, under normal conditions the advanced circuitry of a GreenPower UPS™ bypasses the transformer. As a result, the power efficiency is significantly increased while decreasing waste heat, using less energy, and reducing energy costs. When an abnormal power condition occurs, the GreenPower UPS™ automatically runs power through its transformer to regulate voltage and provide "safe" power. Since utility power is normal over 88% of the time, the GreenPower UPS™ operates primarily in its efficient bypass more conditions.



through its transformer to regulate voltage and provide "safe" power. Since utility power is normal over 88% of the time, the GreenPower UPS™ operates primarily in its efficient bypass mode. The GreenPower UPS™ is also manufactured in accordance with the Restriction on Hazardous Substances (RoHS) directive making it one of the most environmentally-friendly on the market today.

# **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 A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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 (A)/NMB-3(A) VCCI Compliance Statement - VCCI-A

# LIMITED WARRANTY AND CONNECTED EQUIPMENT GUARANTEE

Please visit www.CyberPowerSystems.com for a copy of the Limited Warranty and Connected Equipment Guarantee.

#### 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: Cyber Power Systems (USA), Inc. 4241 12th Ave E., STE 400, Shakopee, MN 55379; call us at (877) 297-6937; or submit a web ticket online at cyberpowersystems.com/support.

#### Disposal

Cyber Power Systems (USA), Inc. encourages environmentally sound methods for disposal and recycling of its UPS products. Please dispose and/or recycle your UPS and batteries in accordance to the local regulations of your state.



The Waste Electrical and Electronic Equipment (WEEE) Directive aims to contribute to sustainable production and consumption by contributing to the efficient use of resources and the retrieval of secondary raw materials through re-use, recycling, and other forms of recovery. The symbol on this product and/or its packaging indicates that the product must be disposed of separately from ordinary household wastes at its end of life. Contact your related WEEE management authority, local office, or your household waste disposal service about information on the recycling drop off site.

This product contains non-spillable lead acid batteries. The used batteries are considered hazardous waste and must be disposed through recycling. Do not dispose of used batteries with your ordinary household wastes. Dispose of the batteries according to local regulations. Note: Most retailers that sell lead-acid batteries collect used batteries for recycling, as required by local regulations.

**WARNING:** This product can expose you to chemicals including bisphenol A (BPA) and styrene, which is known to the State of California to cause reproductive harm and cancer. For more information, go to www.P65Warnings.ca.gov.