

## USER'S MANUAL

### *EXTENDED BATTERY MODULE*

BP48VP2U01

BP48VP2U02



## INTRODUCTIONS

Thank you for purchasing the CyberPower Extended Battery Module **BP48VP2U01/ BP48VP2U02** 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 installation. 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, the additional parallel-connected Extended Battery Modules provide UPS for a longer extended runtime operation.

## 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!** Single AC inlet can only support 10 Extended Battery Modules at most. If users connect more than 10 units, plug more wall receptacle to avoid overload.

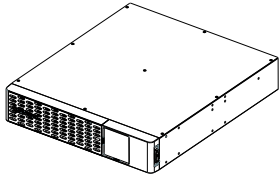
**CAUTION!** Do not connect the Extended Battery Module to itself.

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

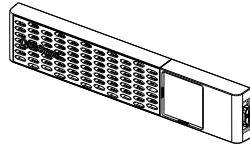
# UNPACKING

When you receive the unit, the package should contain the following items:

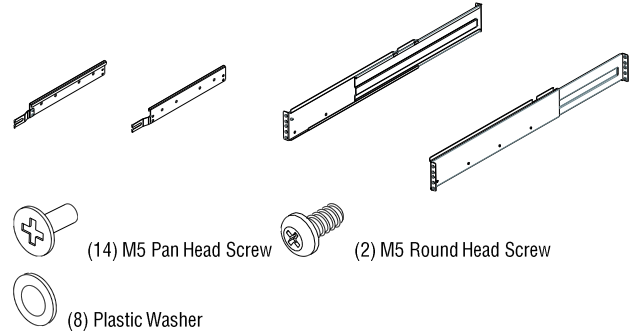
## 1. Extended Battery Module



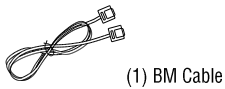
## 2. Faceplate



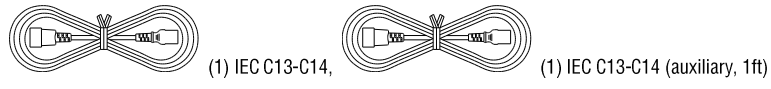
## 3. Rail Kit – CP2RAIL02



## 4. Management Cable

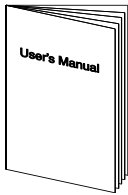


## 5. Power Cord

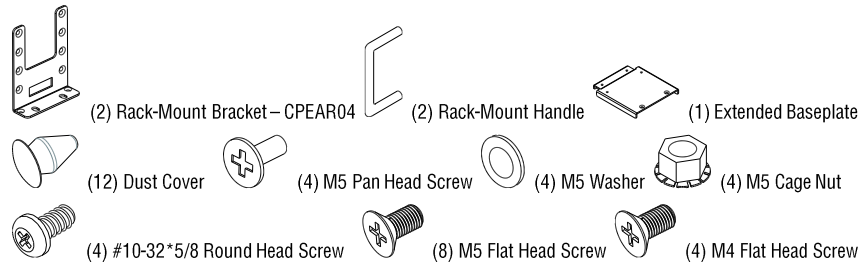


Note: Types and quantity may be different by models and selling regions.

## 6. User's Manual



## 7. Mechanical Accessory

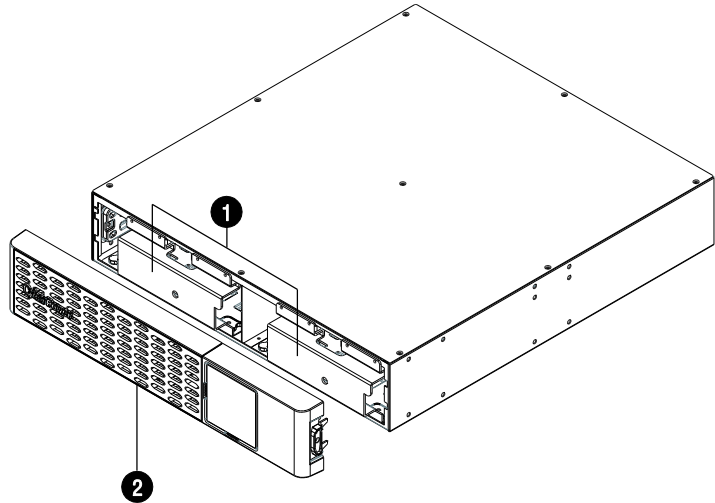


# PRODUCT OVERVIEW

## BASIC CONFIGURATION

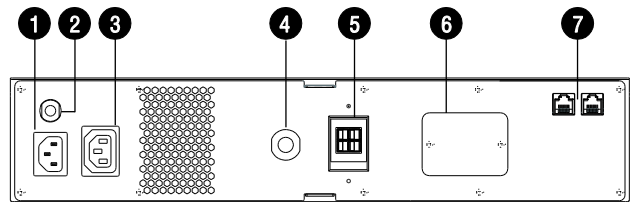
### Front Panel

1. Battery Cover
2. Faceplate

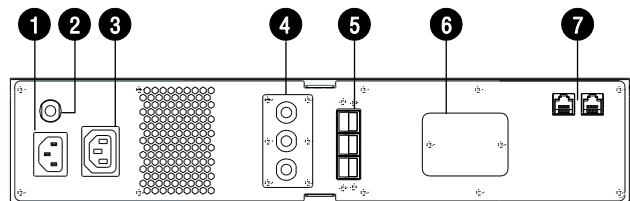


### Rear Panel

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



BP48VP2U01



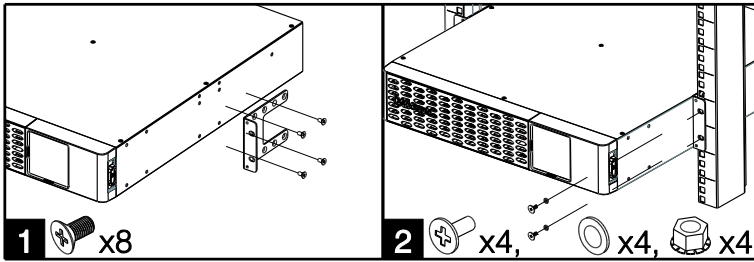
BP48VP2U02

### **BM Port**

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

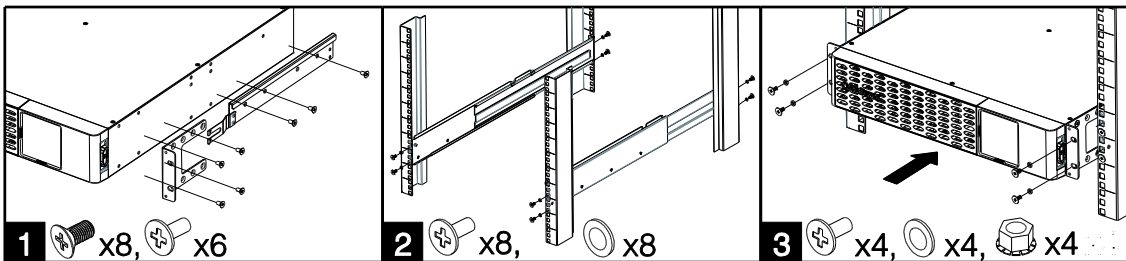
## INSTALLATION

### Rack Installation for 2-post Rack



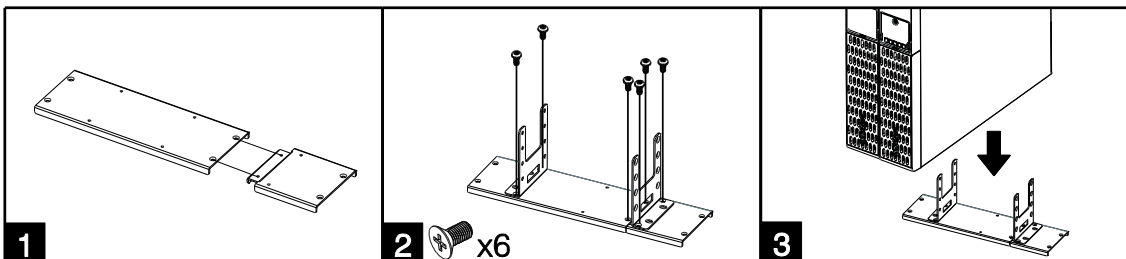
1. Attach the brackets with provided M5 flat head screws.
2. Affix the Extended Battery Module to the rack with provided M5 pan head screws, washers and cage nuts.

### 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, washers 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 came from UPS accessory.
2. Screwing the baseplates and attach the brackets to the combined baseplate with the provided M4 flat head screws, which came from accessory of both UPS and Extended Battery Module.
3. 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.

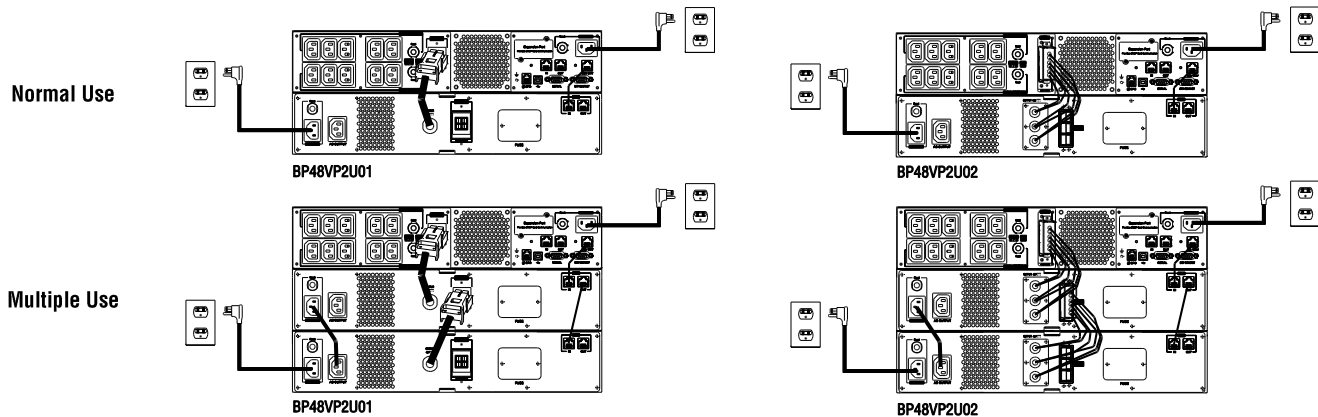
## BASIC OPERATION (continued)

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



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

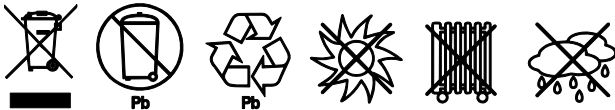
To store your Extended Battery Module for an extended period, cover it and store with the battery fully charged. Recharge the battery every three months to ensure battery life.

## BASIC OPERATION (continued)

### 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.

Operation	Temperature	32°F to 104°F (0°C to 40°C)
	Relative Humidity	0% - 95% Non-condensing
	Elevation	0 - 10000 feet (0 - 3000 meters)
Storage	Temperature	5°F to 113°F (-15°C to 45°C)
	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](http://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 RBP0128 for BP48VP2U01, CyberPower RBP0129 for BP48VP2U02.

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

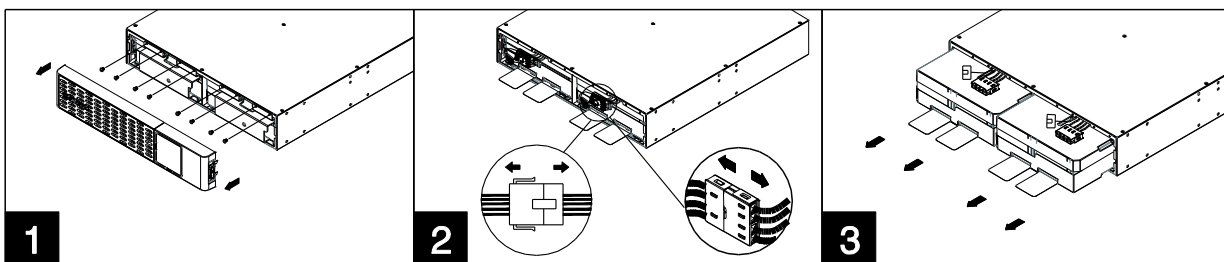
**CAUTION!** The used batteries are considered hazardous waste and must be disposed through recycling. Most retailers that sell lead-acid batteries collect used batteries for recycling, as required by local regulations. Do not dispose of batteries in a fire. The batteries may explode.

**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 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 setting of Extended Battery Module Quantity on your UPS through LCD module, PowerPanel® Business Edition software or RMCARD interface (if installed) to ensure the UPS performs expected runtime.

## 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](http://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







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