CyberPower

Battery Management System

BM100
BP100-12V

Quick Start Guide

INSTALLATION GUIDE

Max. 50 batteries

1. Connect the battery connecting cable (L3) to each battery. Make sure that the ring terminals of the battery connecting cable (L3) are installed above the battery series connection wire.
   Note: Please see below illustration for correct installation.

- Pole screw
- Spring washer
- Washer
- Ring terminal of separate wire
- Battery connector
- Battery pole

2. Connect the cable to each Battery Probe through battery connector (CN3).
3. Fix each Battery Probe to each battery with Loop tape.
   Note: When fixing the Battery Probes to the batteries, make sure it is easy to observe the LED indicators of the Battery Probe.
4. Connect the Battery Manager's 'A' (RJ25) port to the 'Left' ('In') RJ25 port (CN1) of the first Battery Probe with the communication cable (L1).
5. Connect Battery Probes with one another through RJ25 ports (CN1) of Battery Probes with probe communication cables (L2), and up to 50 Battery Probes in a string.
6. Connect an Ethernet cable to the Ethernet port of the Manager.
7. Provide power to the Battery Manager through the DC power (CN4). The required Battery Manager input voltage is **15V min**, **60V max**.

❶

Scenario ①
For **4 or less** batteries per string: Use the included power cable (L4) to connect the Battery Manager. (**Warning:** A battery can present a high risk of short circuit current and electrical shock. Please pay attention to the input voltage.)
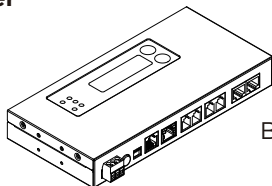
Scenario ②
For **5 or more** batteries per string: Connect the Battery Manager to the utility power with an AC/DC adapter cord.

8. Press the **RESTART** button for one second to restart the system.
9. IP address will show on the LCD interface once the Manager is powered and the system is initialized, or you can find it through [**About →
Network info. → IPv4 address**]. Use the IP address to login to the Web Interface. The factory default Username/Password is **admin/admin**.
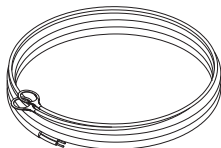
NOTE: Once the number of battery string and connected battery has been changed from last configuration, please configure it via web interface on the **[Battery → Configuration]**, select the number of string(s) and batteries per string, and then click **Apply**. Or you can reset the system to the factory default setting via LCD interface on the **[Reset/Reboot → Reset → Confirm]**.
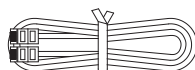
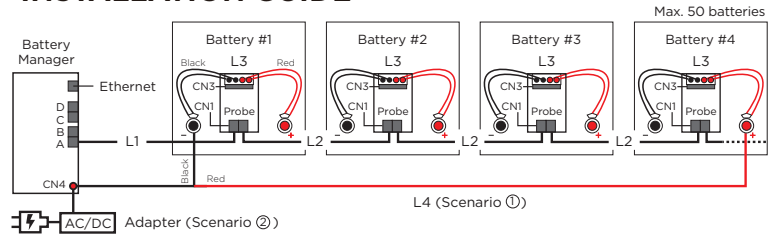## PRODUCT CONTENTS

Battery Manager

Battery Manager BM100

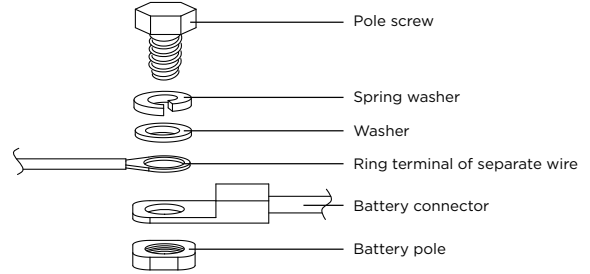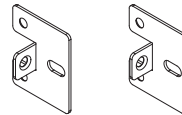Power Cable*
(244cm; L4)

Communication Cable (x4)
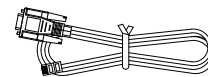(90cm; L1)

*For 4 or less batteries per string.

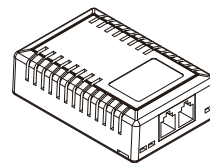❷

---

2 Mounting Brackets
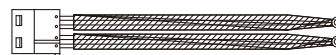
4 Bracket Mounting Screws
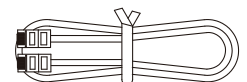

DB9/RJ45 Communication Cable (183cm)

Battery Probe

Battery Probe
BP100-12V

Battery Connecting Cable
(30cm; L3)

Probe Communication Cable
(30cm; L2)

⚠**WARNING:** This product can expose you to chemicals including Styrene, which is known to the State of California to cause cancer, and Bisphenol-A, which is known to the State of California to cause birth defects or other reproductive harm.
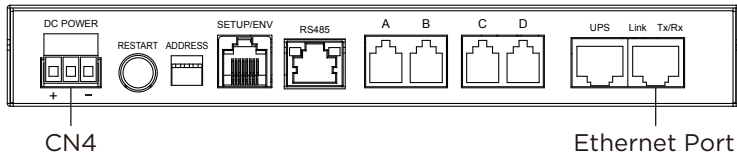For more information go to www.P65Warnings.ca.gov.

❸

PANEL DESCRIPTION

Battery Manager

CN4

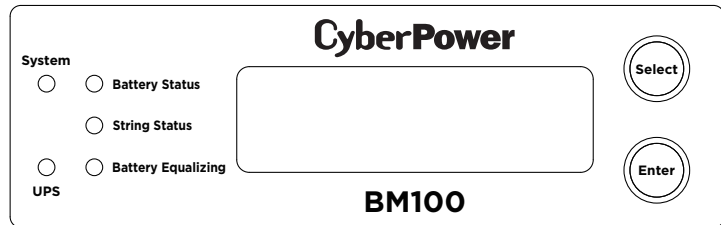Ethernet Port

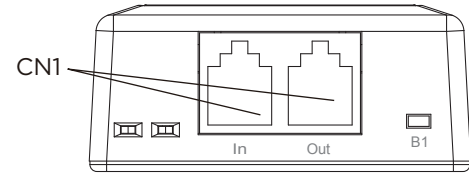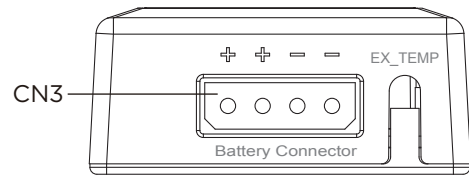| Name	Description
DC POWER (CN4)	Power input of the Battery Manager
RESTART	Button to restart the system and detect the battery setting
ADDRESS	Battery Manager RS485 communication address, LSB is on the left
SETUP/ENV	Port for firmware upgrade and an environmental sensor
RS485	Reserved for future use
STRING A/B/C/D	Port connected to Battery Probes
UPS	Port connected to UPS (Future use)
Ethernet Port	Port connected the Ethernet cable

Battery Probe

CN3

EX_TEMP

Battery Connector

CN1

In   Out   B1

Name	Description
Battery Connector (CN3)	Connected to battery
EX_TEMP	Port for external temperature sensor (Future use)
In/Out (CN1)	Port connected to Battery Manager through the 'In' port, and to another Battery Probe (Left side is 'In' and right side is 'Out')
B1	Button (Future use)

LED INDICATORS

Battery Manager

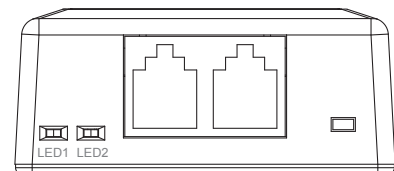| LED Name	Condition
System	Battery Manager is supplied power and works normally
UPS	The communication of the UPS is normal (Future use)
Battery Status	The condition of the connected batteries
String Status	The condition of the string current (Future use)
Battery Equalizing	The equalization function is active

Battery Probe

LED1 LED2

LED Name	Condition
LED1 (Red)	The battery is abnormal
LED2 (Green)	Flash: Powered but there is a communication problem (Flash in a second period) Blink: Powered and the communication is normal, and datagram is receiving or transmitting

CyberPower