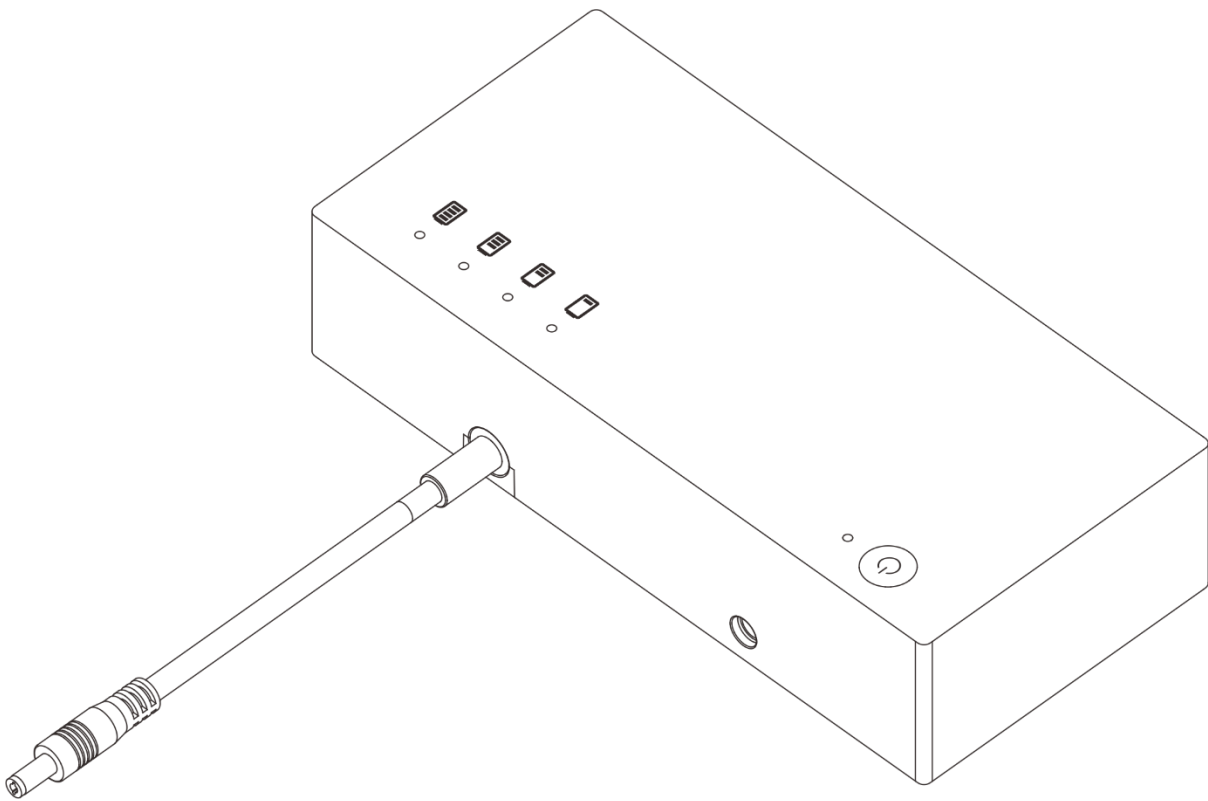


External Battery Backup

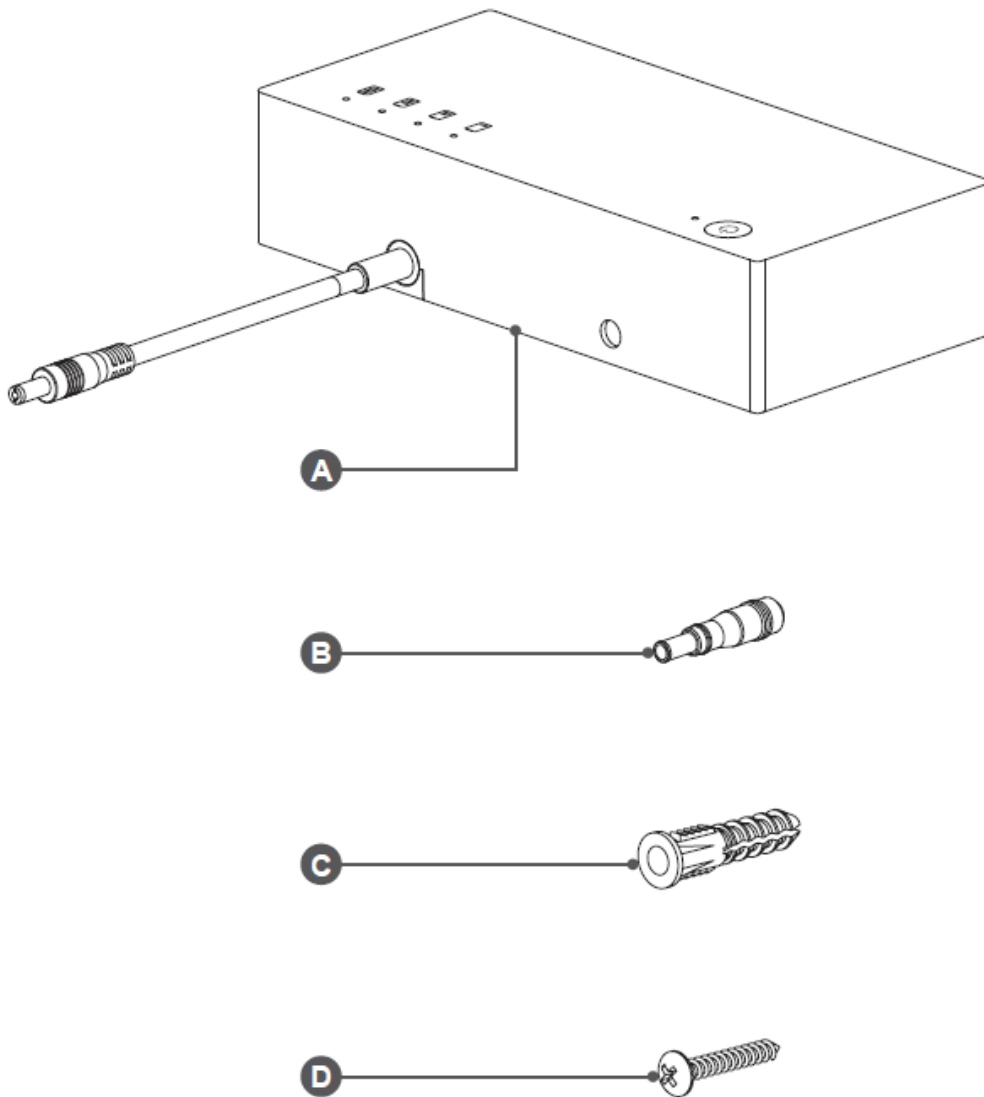
User Manual



INSIDE THE BOX

Inside the product package, you should find the following items. Contact Verizon if any item is missing or damaged.

- A** External Battery Backup x 1
- B** Replaceable Head x 1
- C** Anchor x 2
- D** Screw x 2

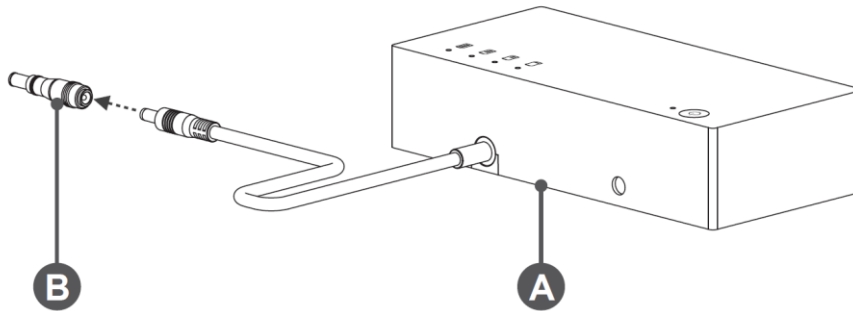


SETTING UP THE EXTERNAL BATTERY BACKUP

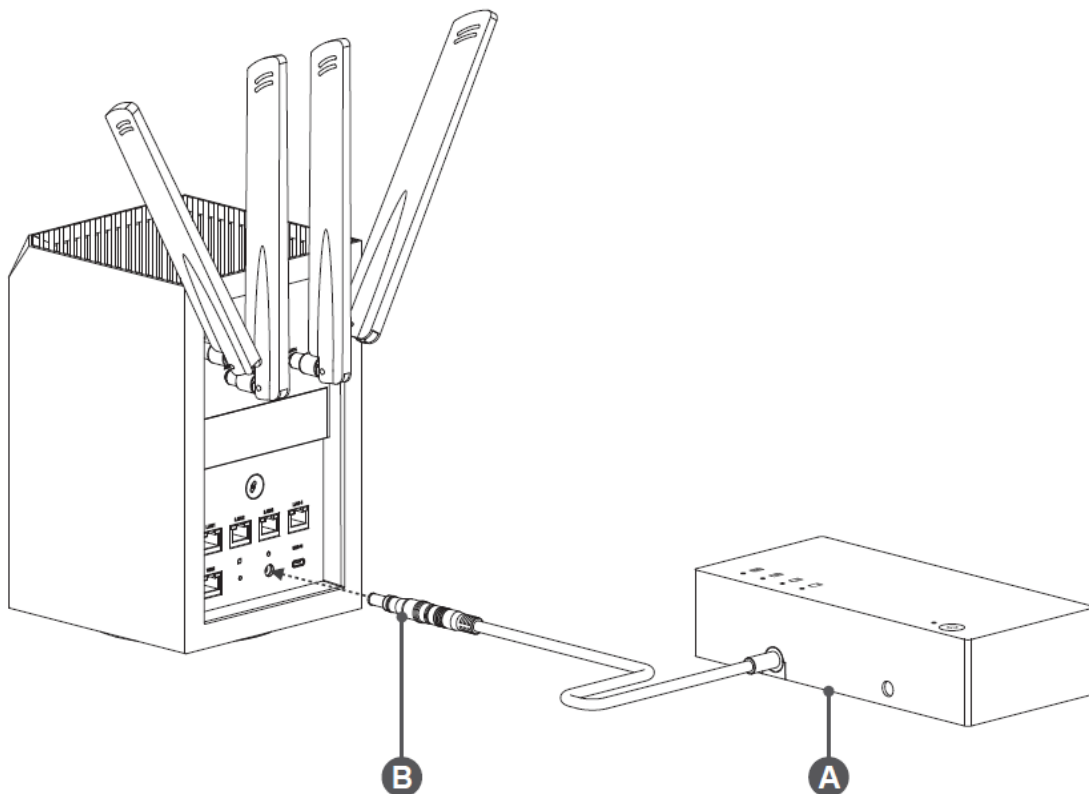
Please note: Before proceeding with these steps, make sure you have read and understood the user manual for your Verizon Business Internet Gateway and power-related instructions to ensure correct and safe operation.

Step 1. Connect the External Battery Backup to your Verizon Business Internet Gateway

- a. Insert the cable from the battery (A) into the replaceable head (B).

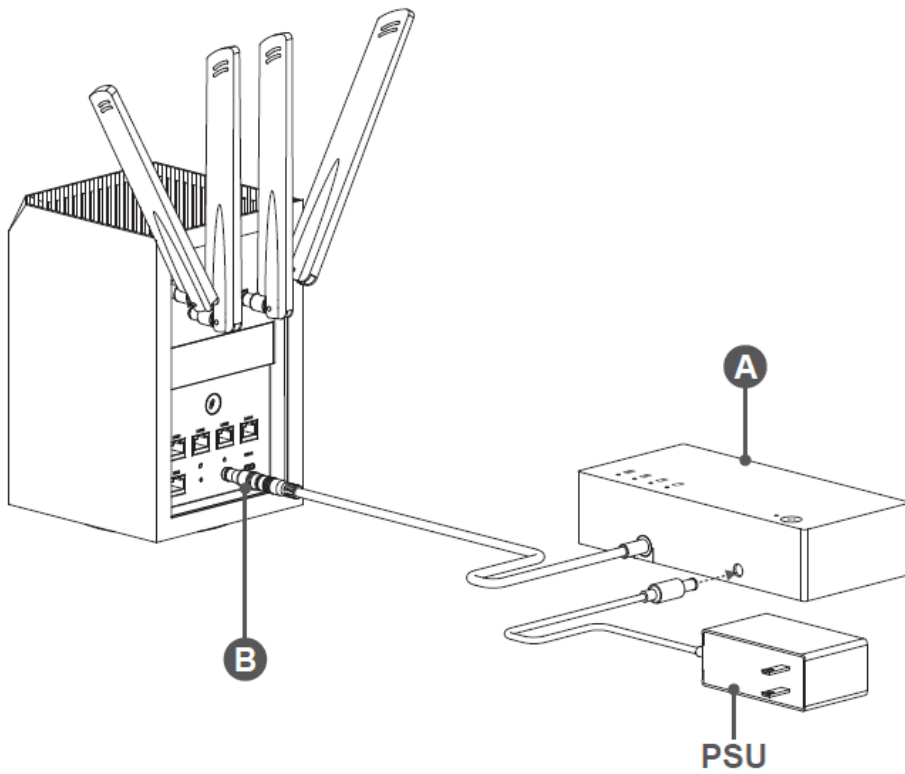


- b. Insert the replaceable head (B) into Verizon Business Internet Gateway.

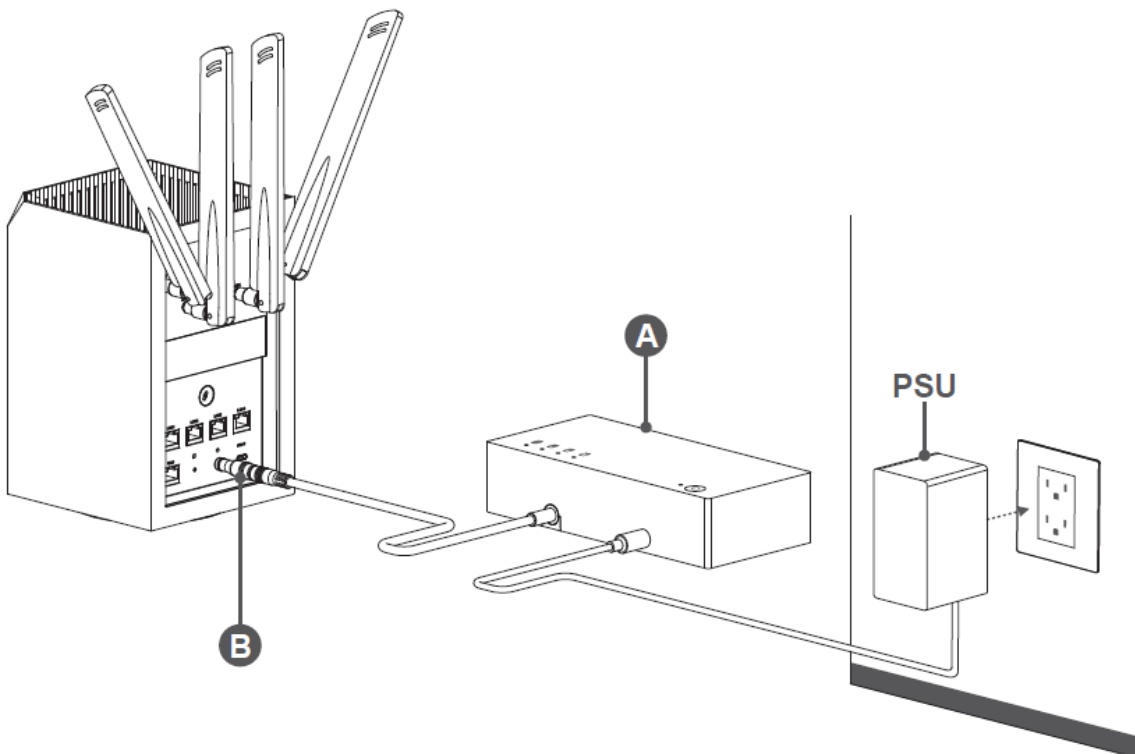


Step 2. Connect to AC Power

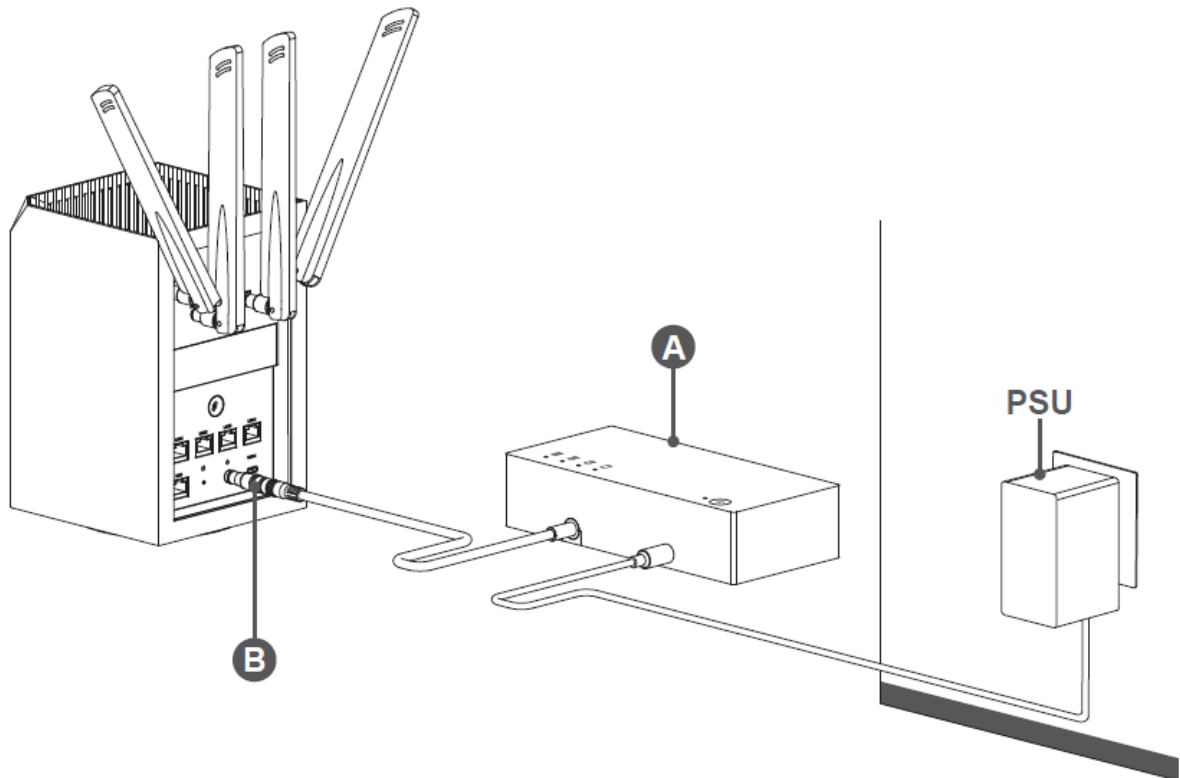
- a. Plug the connector of the power supply unit that you received with the Verizon Business Internet Gateway into the battery (A) as shown below.



- b. Insert the Power Supply Unit into a Wall outlet



c. Check all connection points to ensure all connections are fully inserted, avoiding any looseness.



Note 1: For the first time use, please connect the PSU with the External Battery Backup before pressing the wake-up button.

Note 2: Always keep the Battery (A) and PSU at least 1 foot away from the Business Internet Gateway.

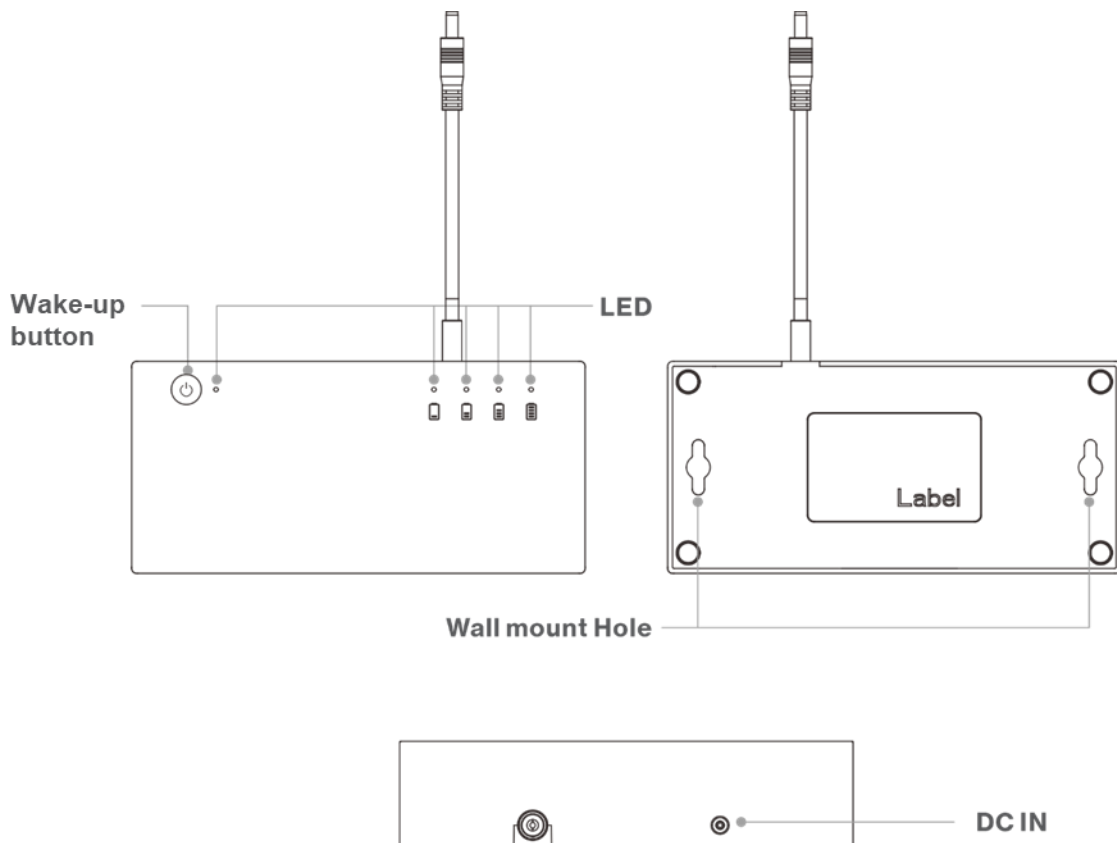
d. The battery will be fully charged **after 20 hrs.**

GETTING TO KNOW THE EXTERNAL BATTERY BACKUP

This External Battery Backup is suitable for charging electronic digital products with a DC-12V input

Operating Instructions:

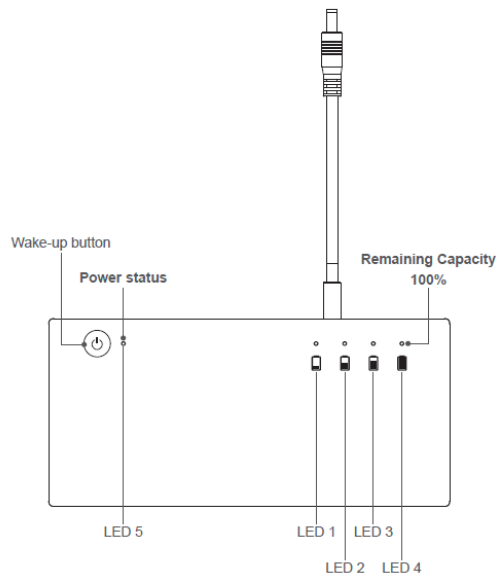
- To ensure maximum capacity, please charge this product until the battery capacity shows full before the first use.
- This product has simultaneous charging and discharging functions.
- Discharge mode: Connect the External Battery Backup discharge port (DC-Output) to the device using the cable, and press the Wake-up Button to enable output. The External Backup Battery will automatically turn off when the Wake-up Button is pressed for 3-5 seconds.
- Charging mode: Connect the External Battery Backup charging port (DC-In) to the power supply unit using the connecting cable to charge the External Battery Backup. Refer to the “LEDs” section for the charging status.
- When the External Battery Backup is in charging or discharging mode, a slight temperature increase is normal.



LEDS

From LEDs on top of the battery, you can identify the status and remaining Power level for External Battery Backup

Status	LED number	Remaining capacity (%)
Battery Charge (Green LED)	LED 1 is blinking	Battery capacity less than 25%
	LED 1 is solid, LED 2 is blinking	Battery capacity less than 26% ~50%
	LED 1/2 are solid, LED 3 is blinking	Battery capacity less than 51% ~75%
	LED 1/2/3 are solid, LED 4 is blinking	Battery capacity 76% ~100%
	All LEDs are solid	100% capacity
Battery Discharge (Green LED)	LED 1 is solid	Remaining capacity less than 25%
	LED 1/2 are solid	Remaining capacity 26% ~50%
	LED 1/2/3 are solid	Remaining capacity 51% ~75%
	LED 1/2/3/4 are solid	Remaining capacity 76~100%
Error (Red LED)	LED 5 display(Red)	Error (Over Current Protection, Over Temperature Protection, Over Voltage Protection, charge fail)
Wake-up Button	Press over 1 seconds	Turns on Battery status check if the battery is not powered or powering any device. It will re-enter sleep mode after 30 seconds to save the battery capacity.
Replace Battery Alarm	LED 5 display (Yellow)	After 24hrs State of Health < 60%



TROUBLE SHOOTING

- If there is no response on the External Battery Backup, it might be following reason
 - The Remaining capacity of this battery is too low, please recharge the battery.
 - The battery output voltage does not fit to the target gateway. Please check the compatibility.
 - The connection between the battery and the target gateway may be incorrect, please refer to the "SETTING UP THE EXTERNAL BATTERY BACKUP" section.
 - Power supply unit is damaged, please replace the charging cable or power supply unit.
 - Battery internal circuit failure, battery output cable is damaged, please call customer service.
- If encounter Over Current Protection, Over Temperature Protection, Over Voltage Protection, charge fail (LED 5 display red). Please follow below steps:
 - Step 1. Remove the power supply unit and Verizon Business Internet Gateway.
 - Step 2. Press wake-up button for 5 seconds, the External Battery Backup will enter sleep mode.
 - Step 3. Press wake-up button for 1 to 2 seconds to wake up the External Battery Backup.
 - Step 4. Connect the External Battery Backup with Verizon Business Internet Gateway to confirm whether it can be discharged normally.
 - Step 5. Reattach the power supply unit to External Battery Backup and check whether the charging function is normal. If the issue remains, please call customer service
- If External Battery Backup State of health <60% (LED 5 display yellow), please call customer service.
- When the External Battery Backup is unable to supply power, the remaining capacity may be too low. It is recommended to recharge this product when it reaches below 25% of capacity.

MAINTENANCE AND PRECAUTION

To extend the lifespan of this product, please take note of the following:

- Store it in a dry environment, away from moisture and corrosive substances.
- If not used for an extended period, please follow below steps to recharge and discharge the External Battery Backup at least every six months.
Step 1. Connect the Verizon Business Internet Gateway to discharge the External Battery Backup to empty.
Step 2. Use the power supply unit to fully charge the External Battery Backup.
Step 3. Connect the External Battery Backup to the Verizon Business Internet Gateway again to discharge to 50% capacity (LED 1 is solid, LED 2 is blinking)
- Avoid storing External Battery Backup in excessively hot or cold environments.

**If you encounter any problems, ensure to disconnect both the power supply unit and the Verizon Business Internet Gateway from the External Battery Backup, and call customer service.

WARNING AND SAFETY

- Do not disassemble, open, throw, crush, or use External Battery Backup in a destructive manner.
- Do not use batteries or store the External Battery Backup near fire, stoves, or places with temperatures exceeding 60°C.
- Do not throw, knock, or subject External Battery Backup to strong vibrations.
- The External Battery Backup is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or who lack experience and knowledge, unless they have been given supervision or instruction concerning use of the External Battery Backup by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the External Battery Backup.

BASIC INFORMATION

- Rated Capacity: 21Ah / 189Wh
- Input Voltage/Current: DC 12V / 5A
- Output Voltage/Current: DC 9V / 5.5A
- Power cable length: 1.5 meter
- Dimensions: 210x98.25x48.45mm
- Weight: 1.5kg
- Operating Temperature: 0-40°C (32-104°F)
- Full charging from empty state: 16~20 hrs
- Protection Mechanisms:

Item	Condition	Unit	Standard
Over Charge Current Protection	Detect Current	A	$> 3 \pm 0.3$
	Delay Time	sec	4 ~ 8
	Release Protection		Recover when current is equal to or less than 20mA, and time greater than 30 seconds.
Over Temperature Protection (Blown FUSES)	Detect Cell Voltage	°C	$\geq 85 \pm 3$
	Active time	sec	9~13
Over Voltage Protection	Detect Cell Voltage	V	$> 4.15 \pm 0.05$
	Delay Time	sec	4 ~ 8
	Release Cell Voltage	V	$< 4.0 \pm 0.05$
Under Voltage Protection (Blown FUSES)	Detect Cell Voltage	V	2 ± 0.05
	Active time	sec	4~8
Cell Imbalance Protection (Blown FUSES)	Detect Cell Voltage	V	> 3.8
	Detect Cell Voltage Difference	V	> 0.3
	Detect Charge Current	A	< 0.02
	Active Time	sec	1650 ~ 1950