

V102, V103, V107 CORE Solar Batteries

Description

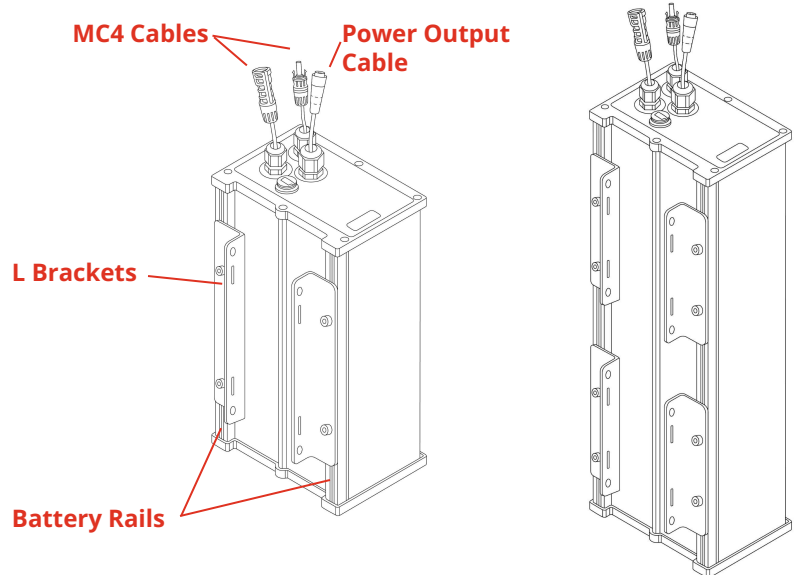
These waterproof batteries are designed to charge from solar panels and provide continuous power to gateways, routers, cameras and other devices. Standard output is an unregulated 12V. PoE and 5V output and data monitoring are optional.

Tools Required

- ⊕ 6mm hex key wrench (included)
- ⊕ Adjustable wrench
- ⊕ Steel strap and ratchet (pole mount)
- ⊕ Zip ties

Parts List

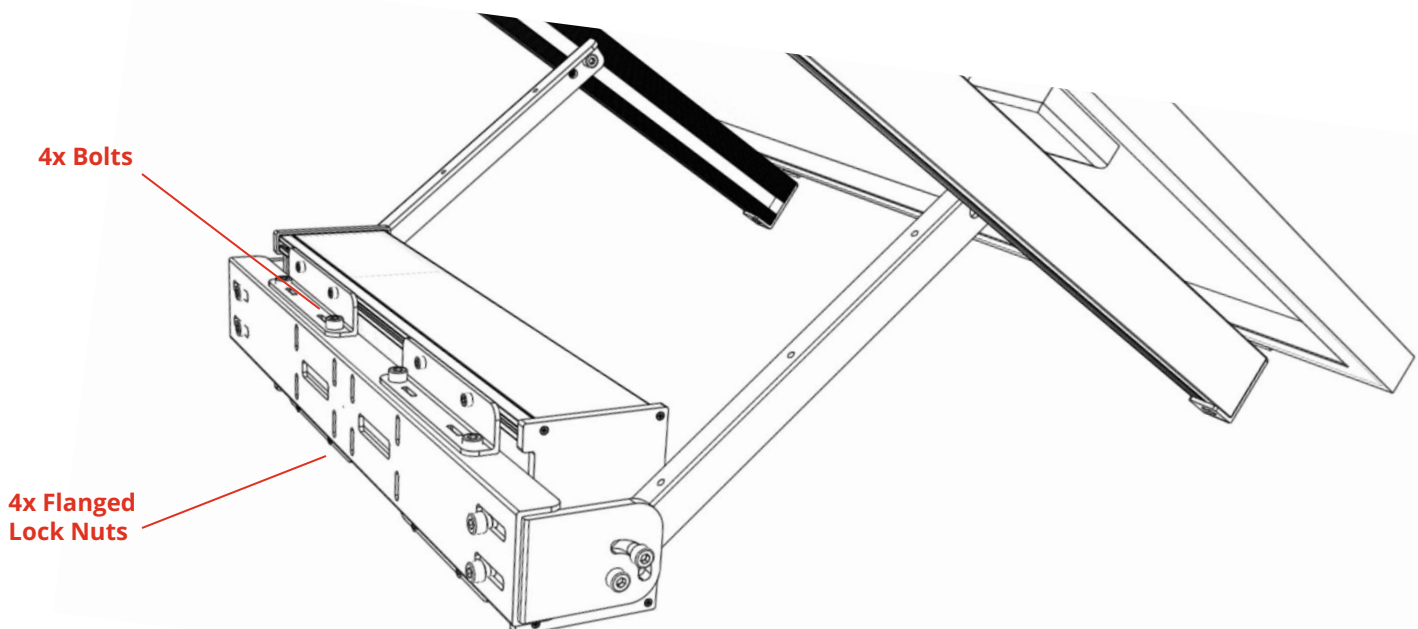
1x Battery (length varies by model)



We suggest testing your battery and end device prior to mounting the bracket and panel.

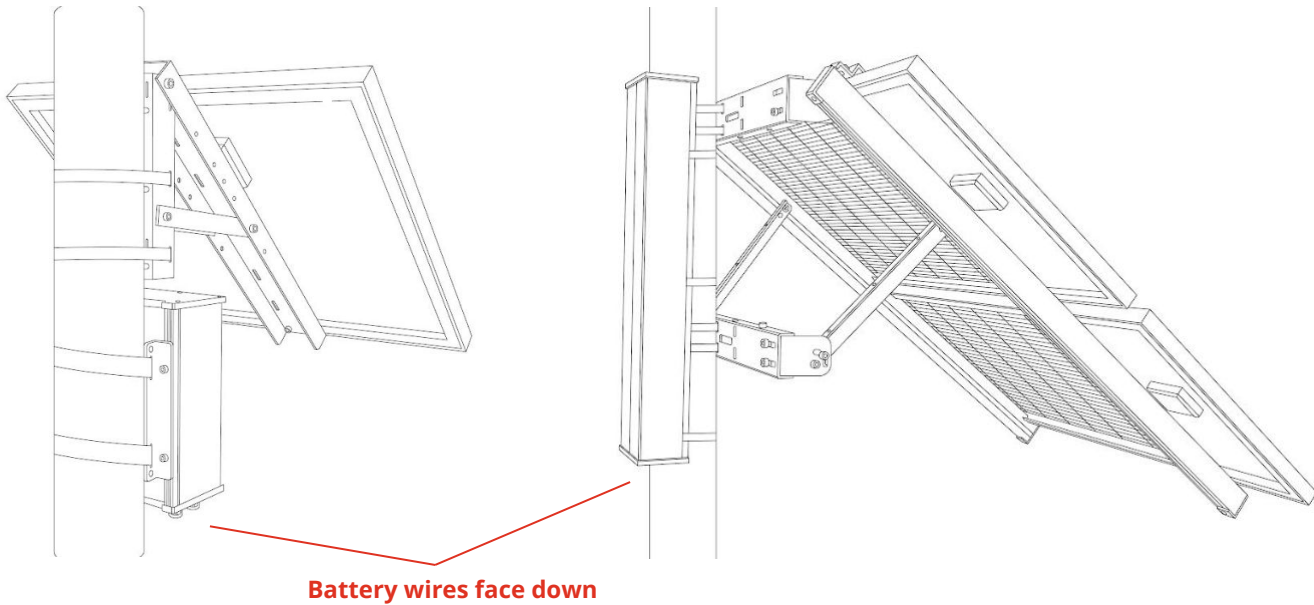
Step 1 - Install solar panel and bracket. Instructions included with bracket.

Step 2 - Bracket Mount for V107 on BK110 - Remove long bolts from back of battery. Line up battery on solar panel bracket so that the L brackets line up with holes. L brackets can shift on battery rails if needed. Reinsert bolts. Tighten flanged lock nuts.

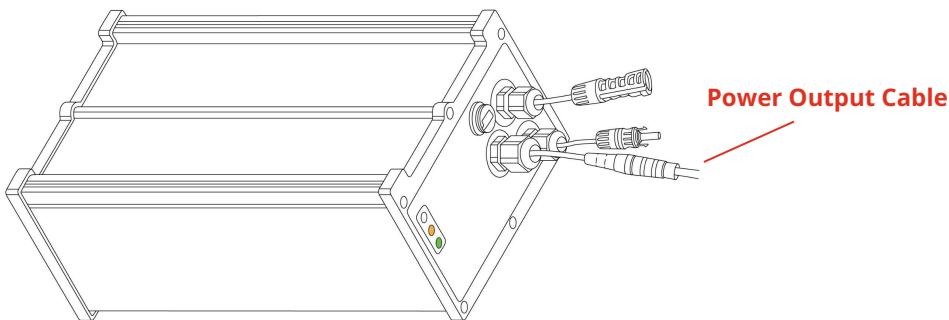


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Step 2 - Pole Mount for V102, V103 or V107 Batteries - Attach battery to pole using stainless steel straps through L brackets on backside of battery. Confirm solar panel cables reach battery. Wires on battery should face down.

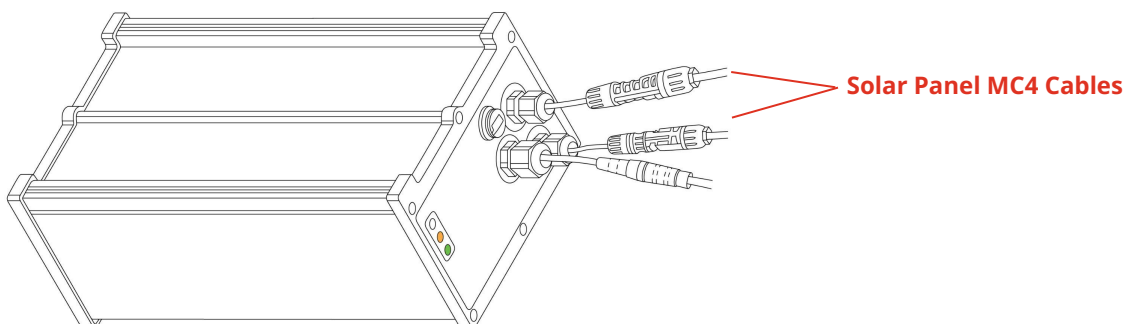


Step 3 - Connect Device to Power Output Cable - This step turns on the charge controller. Orange light should turn on. If using PoE, see page 4.



Step 4 - Connect Solar Panel - Ensure Power Output Cable is connected and charge controller is on before connecting solar panel. MC4 solar panel connectors are keyed to the proper positive (+) and negative (-) connection. Connect each until it clicks.

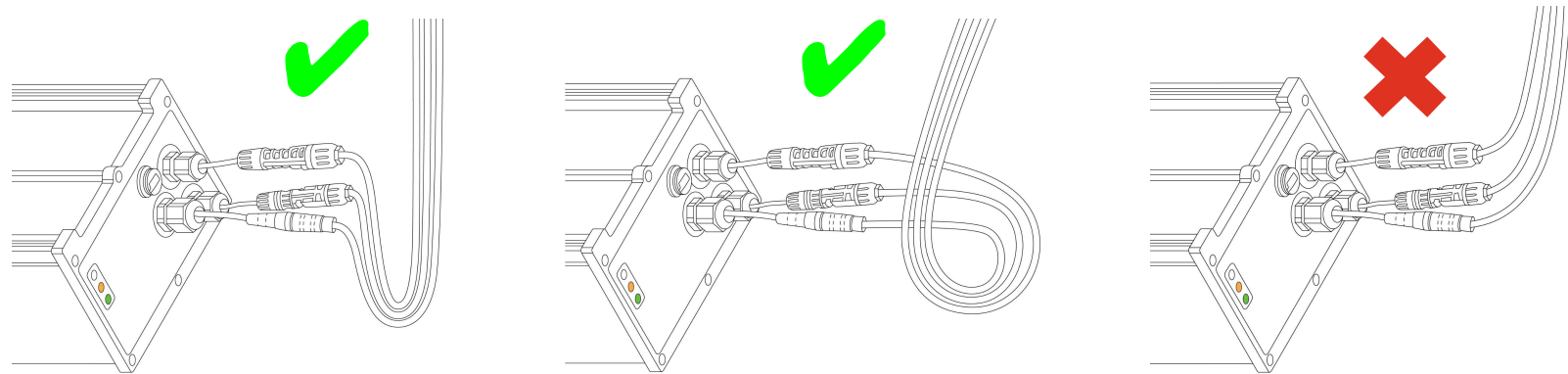
Green light on the charge controller will blink to indicate that it is charging when solar panels are outside in the sun.



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Step 4 - Secure wires with zip ties - Cables should be secured so that they do not move in the wind. Bundle wires together neatly and zip tie to the bracket.

Important: If battery is horizontal, create a drip loop with the solar panel and power wires to minimize water flowing into the glands.



LED Indicators - Charge controller lights are visible through the front of the battery. They provide information about whether the system is receiving power from solar panels, providing power to a device, and other systems faults. Reminder, a cable or cap needs to be connected to the power output cable to turn the system on.

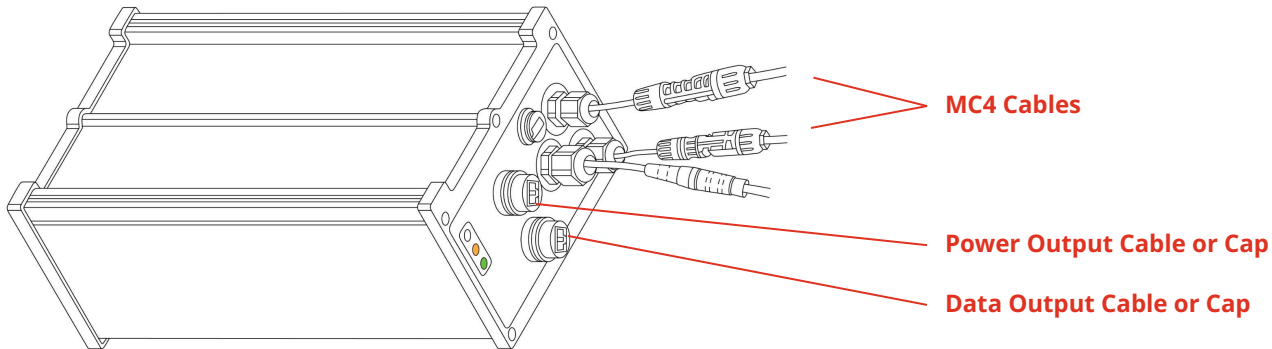
Green	Solid	System On, Not Charging
	Flashing Slow	Charging
	Flashing Fast	MPPT/Fast Charging
Amber	Solid	System On
	Flashing Slow	Low Battery Voltage
	Flashing Fast	Low Voltage Protection
Red	Solid	No Output
	Flashing Slow	Over Temperature
	Flashing Fast	Short Circuit Protection

Optional Remote Monitoring - Upon request, a cellular module that provides remote battery monitoring can be pre-installed inside the battery's enclosure. If the module is pre-ordered, scan the QR code attached to the side of the battery to see the battery status: charge level, solar panel output, device power output.

Optional PoE

A PoE injector can be installed inside the battery enclosure upon request. The injector has both a power and data port.

Connect Power Cable or Cap to Output and Solar Panels - The cap or power cable step turns on the charge controller. Orange light should turn on when charge controller is connected. Green light will blink when solar panels are connected outside in the sun.



Connect Ethernet Cables - Two compatible cables are included. If more length is needed, use outdoor rated patch cables without any strain relief or boot as not all ethernet cables will fit into the waterproof housing.

Remove caps on PoE ports and pass cable through the waterproof housing. Reassemble housing and tighten securely.

If not using data port, plug port to prevent water ingress.

