

RP- SP112C series

Solar & PoE Battery Charger

RP-SP112C Solar & PoE Battery Charger equips dual input sources to charge batteries, the first is via PoE source and secondary solar panels in order to provide redundancy and insure 100% uptime for critical applications. The solar panel input takes priority, when receive sunshine, the power usage would be minimized.

RP-SP112C has a built in PoE inserter with DC to DC converter that delivers optional PoE power 24V, 48V, 56V. The device supports full electronic protections for short circuit, reverse current, overvoltage, over charge and over discharge.

RP-SP112C helps users to monitor the current status easily and efficiently by its advanced LED indication. The 5 LEDs Indicate: current is being supplied by a POE source or solar panel, battery is charging, load output is turned on and a warning if battery is connected with reverse polarity.

Solar and Battery Connections are via terminal block for wire size up to 12AWG. PoE Input and Output is via RJ45 shielded connectors. There is a secondary output connector on the back side with terminals for connecting other electronics to the controller using up to 12AWG wire. This secondary output is equal to the battery voltage.



Features

- Dual Input, from solar panel and/or PoE (Solar First) to charge 12V battery, and another two outputs: PoE output on front and/or terminal block on rear
- Built-in DC/DC converter, with various passive PoE output, 24V, 48V, 56V available.
- Active PoE Output support 802.3at handshake (RP-SP112C-56DB, RP-SP112C-56DA)
- DIN Rail Mountable
- Support Gigabit Ethernet

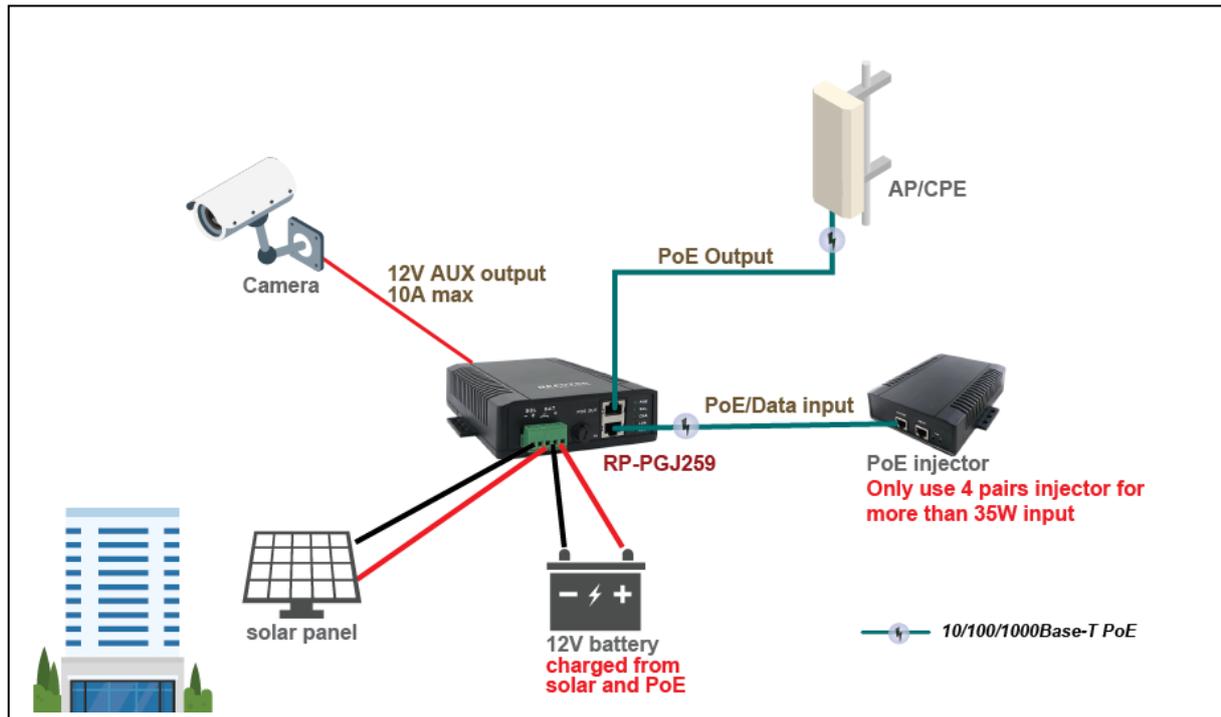
Application

- Remote Power Systems; Surveillance, Sensors
- Wireless Station; AP/Client/Repeaters
- UPS Systems; Lighting, Fences, Gates

Specifications

Standard	<ul style="list-style-type: none"> • IEEE 802.3 10Base-T Ethernet • IEEE 802.3u 100Base-TX Fast Ethernet • IEEE 802.3ab 1000Base-T Gigabit Ethernet • IEEE 802.3af PoE • IEEE 802.3at PoE+ 																		
Interface	<ul style="list-style-type: none"> • 1 x 10/100/1000Mbps RJ-45 port PoE/Data Input • 1 x 10/100/1000Mbps RJ-45 port PoE Output • Fuse: for output over current protection, limiting the battery output current $\leq 10A$ • SOL/BAT Terminal block: for Solar Panel & Battery • LOA Terminal block: for wire size up to 12AWG 																		
Input Source type	<ul style="list-style-type: none"> • Solar Panel • PoE 																		
Input Voltage	<ul style="list-style-type: none"> • Solar Panel: 18V~45Vmax. • POE: 36V~57V (only use 4 pairs injector for more than 35W input.) 																		
Output	<table border="1"> <thead> <tr> <th>Model</th> <th>SP112C-24B</th> <th>SP112C-48A</th> <th>SP112C-48B</th> <th>SP112C-56DA</th> <th>SP112C-56DB</th> </tr> </thead> <tbody> <tr> <td>Output 1 (Terminal)</td> <td colspan="5">12V/10A (as Bat. Volt.)</td> </tr> <tr> <td>Output 2 (PoE Pin Assignment)</td> <td>24V/1.25A (45+/78-) (regulated)</td> <td>48V/0.625A (12-/36+) (regulated)</td> <td>48V/0.625A (45+/78-) (regulated)</td> <td>56V/0.625A (12-/36+) (regulated)</td> <td>56V/0.625A (45+/78-) (regulated)</td> </tr> </tbody> </table>	Model	SP112C-24B	SP112C-48A	SP112C-48B	SP112C-56DA	SP112C-56DB	Output 1 (Terminal)	12V/10A (as Bat. Volt.)					Output 2 (PoE Pin Assignment)	24V/1.25A (45+/78-) (regulated)	48V/0.625A (12-/36+) (regulated)	48V/0.625A (45+/78-) (regulated)	56V/0.625A (12-/36+) (regulated)	56V/0.625A (45+/78-) (regulated)
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Battery Charge Type	<ul style="list-style-type: none"> • Solar Panel: depends on the solar panel, 10A max • PoE: fixed current, 2.0A max 																		
Battery Type	<ul style="list-style-type: none"> • 12V AGM Battery 																		
Protection	<ul style="list-style-type: none"> • Battery Polarity Reverse Protection • Battery Over Charge Protection • Battery Over Discharge Protection • Solar Panel Polarity Reverse Protection • Solar Panel Over Charge Protection • Output Short Circuit Protection • Battery Output Current Limit • Load Output Voltage Limit 																		
POE Charge Voltage	<ul style="list-style-type: none"> • Float = 13.4V \pm 0.2V Equalize = 14.2V \pm 0.2V 																		
SOLAR Charge Voltage	<ul style="list-style-type: none"> • Charge Voltage = 14.4 V \pm 0.2V 																		
LED Indications	<ul style="list-style-type: none"> • POE: PoE power input indicator • SOL: Solar power input indicator • CHA: Charging indicator • LOA: Loading indicator • REV: Battery polarity reverse indicator 																		
Environment	<ul style="list-style-type: none"> • Operation Temperature: -40 ~ +50°C • Storage Temperature: -40 ~ +85°C • Operation Humidity: 5% ~ 90% 																		
Cooling	<ul style="list-style-type: none"> • Free air cooling 																		
Dimension	<ul style="list-style-type: none"> • 118 x 150 x 40 mm (WxHxD), DIN rail mountable 																		

Application



Ordering information

RP-SP112C-24B	Solar & PoE Battery Charger with 24V passive PoE output (Mid-Span mode B)
RP-SP112C-48A	Solar & PoE Battery Charger with 48V passive PoE output (Mid-Span mode A)
RP-SP112C-48B	Solar & PoE Battery Charger with 48V passive PoE output (Mid-Span mode B)
RP-SP112C-56DA	Solar & PoE Battery Charger with 56V 802.3at PoE output (Mid-Span mode A)
RP-SP112C-56DB	Solar & PoE Battery Charger with 56V 802.3at PoE output (Mid-Span mode B)