

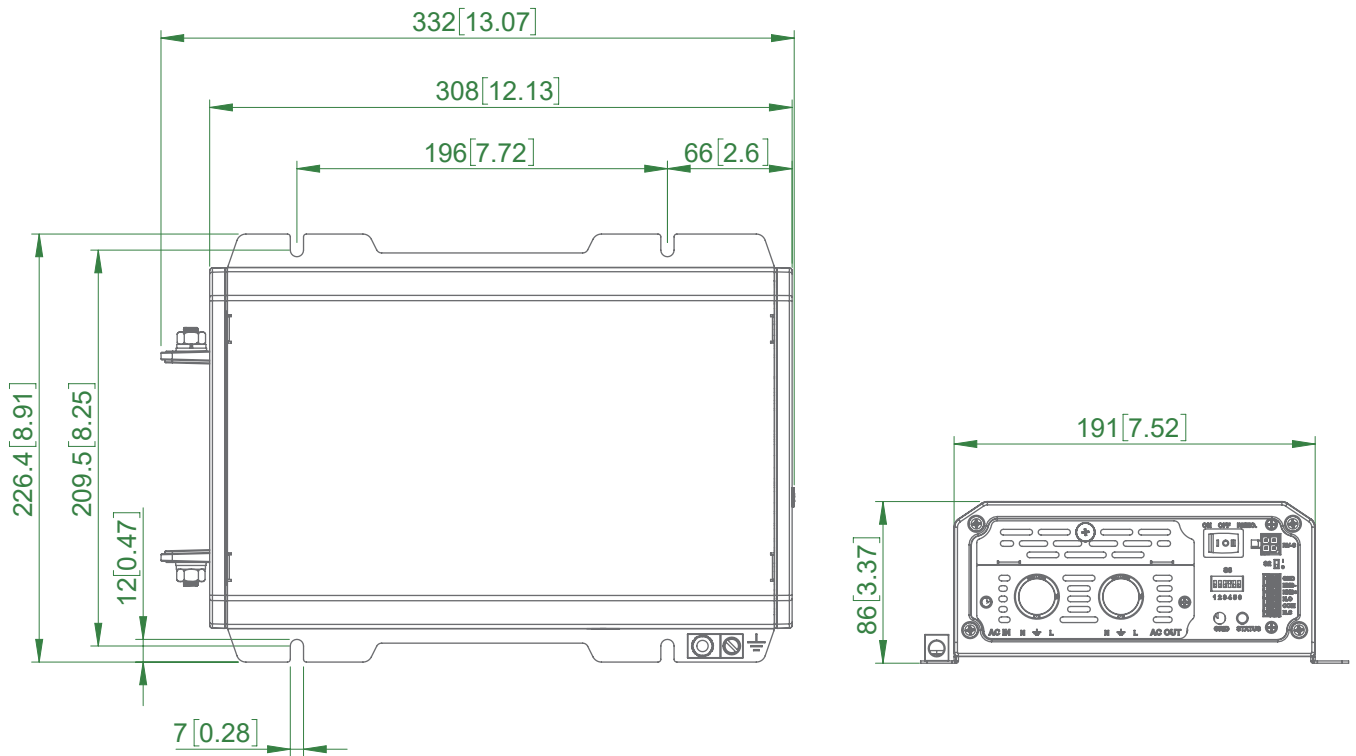
Feature:

- High Power Density & Light Weight
- Built-in transfer switch and AC circuit breaker
- MODBUS(RS485) Protocol communication
- Reverse Protection with Indicator Light
- High Surge Tolerance
- Remote controller CR-8T / CR-22 (optional)
- Input & Output fully isolated

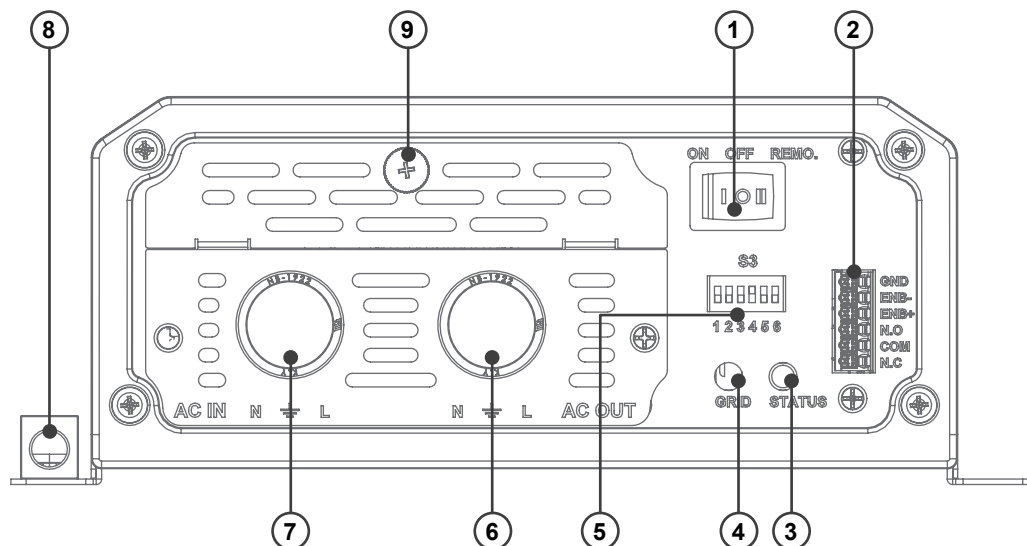


		SPT1200-112	SPT1200-124
Input	Rated input voltage	12.5 VDC	25.0 VDC
	DC input operation range	10.0~16.5±0.3VDC	20.0~33.0±0.3VDC
	Input over voltage protection	> 16.5 ± 0.3 VDC	> 33.0 ± 0.3 VDC
	Input over voltage warning	> 15.5 ± 0.3 VDC	> 31.0 ± 0.3 VDC
	Input under voltage protection	< 10.0 ± 0.3 VDC	< 20.0 ± 0.3 VDC
	Input under voltage warning	< 11.0 ± 0.3 VDC	< 22.0 ± 0.3 VDC
	Input under voltage restart	<12.5 ± 0.3 VDC	<25.0 ± 0.3 VDC
	Input over voltage restart	>13.5 ± 0.3 VDC	>27.0 ± 0.3 VDC
	Input Current (No load)	≤ 1.8 A @12.5VDC	≤ 0.9 A @ 25.0VDC
	Input Current (Max)	133A @10.5VDC	65A @ 21.0VDC
	Power Saving mode	< 0.1 A @12.5VDC	< 0.1 A @ 25.0VDC
	Dark current @ Off mode	<100uA	
Output	Rated Power	1200VA	
	Overload (Max. 1 min.)	1201~1440VA	
	Peak Power (Max. 3 sec.)	1441~2400VA	
	Peak Power (Max. 2 sec.)	>2400VA	
	Frequency	50/60 Hz ± 0.3 Hz (User-selectable)	
	Output Voltage	100 / 110 / 115 / 120 Vac ±3% (Non UL version), Only 120 Vac ±3% (UL version)	
	Max. Efficiency	91%	92%
	Output Waveform	Pure Sine Wave	
	Total Harmonic Distortion (THD)	< 3% (Bat. 12.5V / 25.0V @120Vac, resistive load)	
AC input (Bypass mode)	Nominal Voltage / Frequency	120 VAC, 60Hz (User-selectable)	
	Input Voltage Range	70-150Vac	
	Input Frequency Range	50Hz:47 ~ 53 Hz / 60Hz:57 ~ 63 Hz	
	AC Input current	24A	
Protection	DC Input Protection	OCP(fuse), Reverse Polarity(mosfet), OVP, UVP	
	AC Output Protection	Short-Circuit, Overload	
	AC Input Protection	30A Breaker (Automatically Reset)	
	Temperature protection	Enable by heatsink temperature > 95°C	
Transfer switch	Transfer relay rating	40A continuous	
	Transfer Time	≤ 20mS	
Signal and Control	Remote Control Panel (Optional)	CR-22/ CR-8	
	Communication port	RJ45 x 2	
	Dry Terminal	ENB+, ENB-, GND, COM, N/C, N/O	
Environment	Working Temp.	-20°C ~ 40°C, Power De-rating 41°C ~ 60°C	
	Storage Temp.	-40 ~ 70°C	
	Working Humidity Range	0 ~ 95% RH, non-condensing	
Safety and EMC	Safety Standards	Certified UL458	
	EMC Standards	Certified FCC Class B	
Others	Cooling	Temperature & Load Controlled Cooling Fan	
	Dimension W x H x D (mm)	227 x 86 x 332	
	Net Weight (kg)	3.4	

■ Mechanical Drawings



■ Front panel

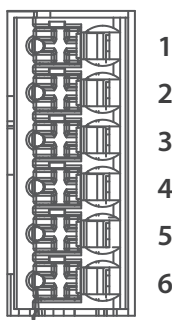


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|-------------------------|----------------------------|------------------|
| ① Main Switch | ④ AC Power Only Status LED | ⑦ AC-IN Terminal |
| ② Remote Black Terminal | ⑤ Function Switch (6-Port) | ⑧ Ground Lug |
| ③ Unit Status LED | ⑥ AC-OUT Terminal | ⑨ Panel Screw |

- Remote Control & Green Terminal

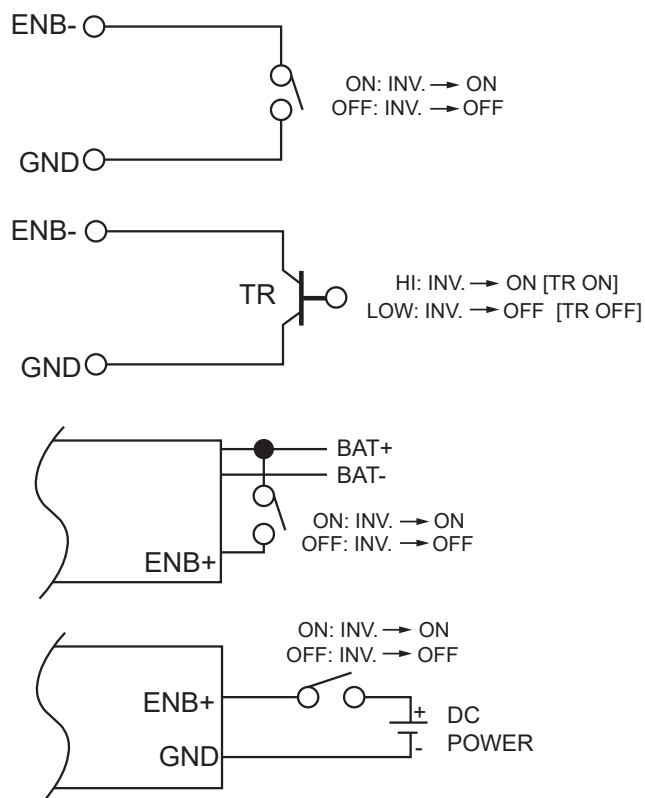
Remote control green terminal may be connected to a Form C relay for "FAULT" indication. When "FAULT" occurs, the relay switches.

Remote control terminal



Item	Description
1	Ground (GND)
2	Enable- (ENB-)
3	Enable+ (ENB+)
4	Dry contact (Normal Open)
5	Common
6	Dry contact (Normal Closed)

Dry contact terminal definition



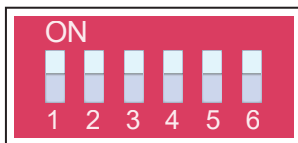
Specifications of the Relay

Maximum Voltage	Load	Contact Rating		Number of operations	Operating/Storage Temperature
		N.O	N.C		
125 VAC	Resistive	0.5 A	---	100,000	-40°C ~ 85°C
125 VAC	Resistive	---	0.5 A	---	
30 VDC	Resistive	2 A	---	100,000	
30 VDC	Resistive	---	2 A	---	

Unit Status LED & AC Power Only LED Status

Unit Status LED	LED Signal	Status
Solid Green		Inverter mode
Slow Blink Green		Bypass mode
Slow Blink Orange		Bat. Over Voltage Alarm
Fast Blink Orange		Bat. Under Voltage Alarm
Intermittent Blink Red		Over Temperature Protection
Intermittent Blink Red		Bat. OVP Shut down
Intermittent Blink Red		Bat. UVP Shut down
Fast Blink Red		Over Load Protection
Solid Red		Hardware fault
AC Power Only LED	LED Signal	Status
Solid Blue		Grid In

Dip switch Function

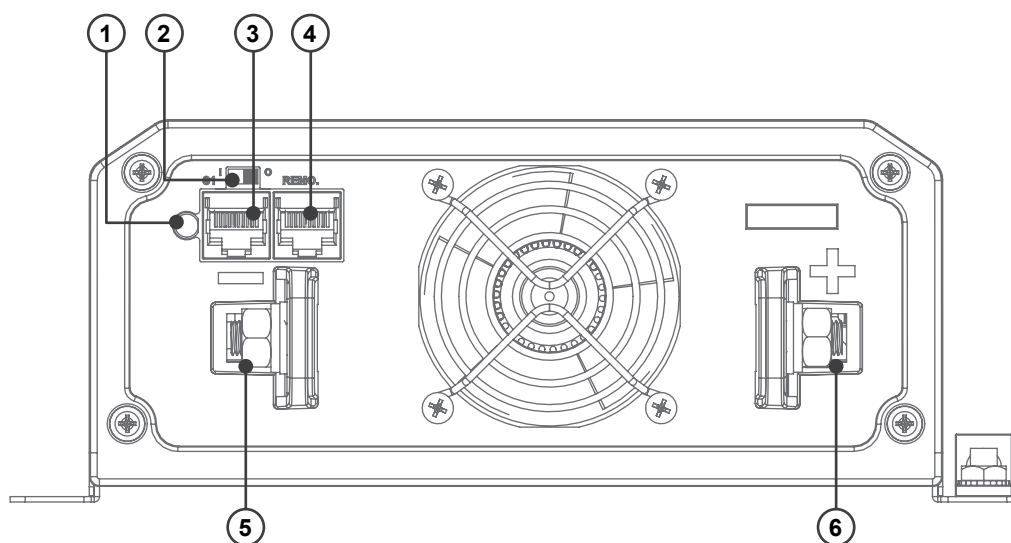


Dip Switch	Function
S1	Output Frequency Selection
S2	Output voltage Selection
S3	
S4	Power Saving Enable Selection
S5	Power Saving Threshold Selection
S6	Power Saving Time Out Selection

Output Voltage switch Function

Dip Switch	S2	S3
100V	ON	ON
110V	ON	OFF
115V	OFF	ON
120V	OFF	OFF

■ Rear panel



① Battery Power in Reverse Status LED

② RS485 Terminator Switch

③ Remote Port (RJ45)

④ Remote Port (RJ45)

⑤ Batt- Input Terminal

⑥ Batt+ Input Terminal