

### Features:

- Parallel redundancy design for power expansion
- Multiple industrial applications that create 1Φ3W / 3Φ4W power systems
- Automatic master mechanism to eliminate single point failure and optimize reliability
- Built-in ATS and AC circuit breaker
- Optional STS module, transfer time less 4ms.
- RS-232 communication
- Input & output fully isolation
- Output voltage / power saving mode selectable by DIP switch or remote control (CR-10)
- Input Protection: Reverse Polarity (Fuse) / Under Voltage / Over Voltage
- Output Protection: Short Circuit / Overload / Over Temperature / Over Voltage



MODEL		SD3500-112	SD3500-124	SD3500-148	SD3500-212	SD3500-224	SD3500-248
Output	Rating Power	3500W (de-rating after 35°C, refer to de-rating curve for 12V) (de-rating after 40°C, refer to de-rating curve for 24V and 48V)					
	Peak Power (3Sec.)	4500W					
	Surge Power (<0.2Sec.)	6000W					
	Waveform	Pure Sine Wave					
	Efficiency (Max.)	90%	90%	91%	90%	91%	91%
	Output Voltage (@rated VDC)	100 / 110 / 115 / 120VAC ±3%			200 / 220 / 230 / 240VAC ±3%		
	Output Frequency	50 / 60Hz ±0.1%					
DC Input	Total Harmonic Distortion (THD)	< 3% @ under condition : greater than 1.15 times of the rated VDC, 110V / linear load)			< 3% @ under condition : greater than 1.15 times of the rated VDC, 230V / linear load)		
	DC Voltage	12VDC	24VDC	48VDC	12VDC	24VDC	48VDC
	Voltage Range	10.0~16.0VDC	20.0~32.0VDC	40.0~64.0VDC	10.0~16.0VDC	20.0~32.0VDC	40.0~64.0VDC
	No load Power Consumption	@12VDC	@24VDC	@48VDC	@12VDC	@24VDC	@48VDC
	On Mode @ Save Mode	1.4A	0.5A	0.5A	1.4A	0.5A	0.5A
	On Mode @ No Load Mode	< 2.9A	< 1.4A	< 0.8A	< 3.6A	< 1.8A	< 1A
Fuse	40Ax12	20Ax12	20Ax6	40Ax12	20Ax12	20Ax6	
AC Input	AC Range	100 / 110 / 115 / 120VAC±25%, recover±12.5%			200 / 220 / 230 / 240VAC±25%, recover±12.5%		
	Frequency Selectable	50 / 60 Hz					
	Synchronous Frequency	47 - 57 / 53 - 63 Hz					
	Circuit Breaker	35A			20A		
	Transfer Switch ***	Standard ATS : Inverter to utility AC:8~10ms.; Utility AC to inverter: 16~50ms. Optional STS module : Single < 4ms; N+1&1P3W&3P4W < 6ms					
Protection	BAT.Low Alarm ±3%	10.5VDC	21.0VDC	42.0VDC	10.5VDC	21.0VDC	42.0VDC
	BAT.Low Shut-down ±3%	10.0VDC	20.0VDC	40.0VDC	10.0VDC	20.0VDC	40.0VDC
	BAT.Low Restart ±3%	12.5VDC	25.0VDC	50.0VDC	12.5VDC	25.0VDC	50.0VDC
	BAT.High Alarm ±3%	15.5VDC	31.0VDC	62.0VDC	15.5VDC	31.0VDC	62.0VDC
	BAT.High Shut-down ±3%	16.0VDC	32.0VDC	64.0VDC	16.0VDC	32.0VDC	64.0VDC
	BAT.High Restart ±3%	15.0VDC	30.0VDC	60.0VDC	15.0VDC	30.0VDC	60.0VDC
	Input Protection	Reverse Polarity (Fuse) / Under Voltage / Over Voltage Protection / AC over current (Breaker)					
	Output Protection	Short Circuit / Overload / Over Temperature / Over Voltage					
Environment	Working Temp.	-20 ~ +60°C; refer to SD3500 power de-rating curve					
	Storage Temp.	-40 ~ +70°C					
	Relative Humidity	Max. 90%, non-condensing					
Safety & EMC	Safety Standards	**Certified UL 458 (UL only for hardware)			Certified EN60950-1		
	EMC Standards	Certified FCC Class B			**Certified EN 55014-1, EN 55014-2, EN 61000-3-2, 3-3, EN61204-3; EN 61000-6-1, -6-2, -6-3, -6-4 IEC 61000-4-2, 3, 4, 5, 6, 11		
	E-Mark	-			Certified CISPR 25; ISO 7637-2		
Control & Signal	LED Indicator	Input voltage level, faulty status					
	Remote control	CR-6, CR-8 and CR-10					
Others	Dimension (WxHxD)	283x128x496 mm / 11.14x5.04x19.53 inch					
	Parking	10 kg; 2pcs / 21kg / 3.19cuft					
	Cooling	Load & Thermal control fan					
	Communication Port	RS-232 (RJ-11 type connector), Ethernet (optional)					
Note	*UL-458 only support 112 and 124 model. **EN55014-1, EN55014-2 Class B : output cable less than 2 meters. ***Please refer to Transfer - Time Table.						

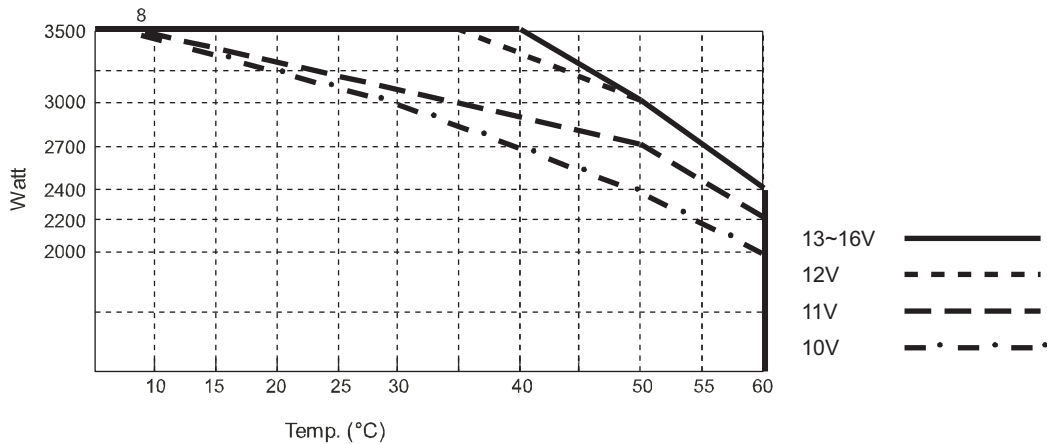
### LED Status:

Green LED	LED Signal	Status
Solid		Power OK
Slow Blink		Power Saving
Intermittent Blink		Bypass
Orange LED	LED Signal	Status
Fast Blink		OVP
Slow Blink		UVP
Red LED	LED Signal	Status
Intermittent Blink		OTP
Fast Blink		OVP- Shut-down
Slow Blink		UVP- Shut-down
Solid		OLP
Intermittent Blink		Fan Failure
Intermittent Blink		Component Failure

### Output Socket:

North America (GFCI)	NEMA 5-15R	Continental European	UL458
United Kingdom	Australia / New Zealand	Universal	

### De-rating Curve:



### Transfer Time :

Transfer-Time Table		
Model\Transfer Switch	ATS	STS
Haphazard	Inverter to utility AC : 8 ~ 10ms.; Utility AC to inverter : 16 ~ 50ms.	Frequency is synchronized : <4ms Frequency is not synchronized : Inverter to utility AC : <4ms.; Utility AC to inverter : 16 ~ 50ms.
Normal	Inverter to utility AC : 8 ~ 10ms.; Utility AC to inverter : 16 ~ 25ms.	<4ms
Exacting	Inverter to utility AC : 8 ~ 10ms.; Utility AC to inverter : 16 ~ 50ms.	Inverter to utility AC : <4ms.; Utility AC to inverter : 16 ~ 50ms.
Online	Inverter to utility AC : 8 ~ 10ms.; Utility AC to inverter : 16 ~ 25ms.	<4ms

### Mechanical Drawings:

Unit : mm [inch]

