COTEK

3500W Pure Sine Wave

SD3500 series

Features:

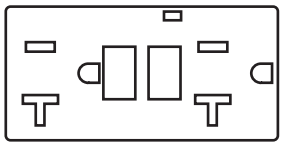
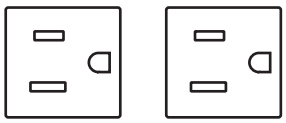
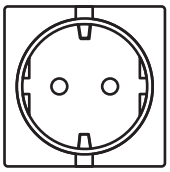
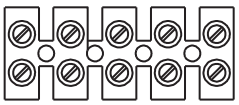
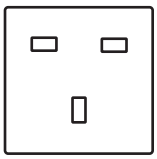
- Parallel redundancy design for power expansion
- Multiple industrial applications that create 1Φ3W / 3Φ4W power systems
- Automatic master mechanism to eliminate single point failure and optimize reliability
- Built-in ATS and AC circuit breaker
- Optional STS module, transfer time less 4ms.
- RS-232 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	3500VA (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)					
	Output Power (Max. 3 min.)	3500 ~ 4500VA					
	Peak Power (Max. 3 sec.)	4500 ~ 6000VA					
	Surge Power (Max. 0.2 sec.)	>6000VA					
	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%					
	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 Input	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 hardwire)			Certified EN62368-1		
	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 EN 62368-1		
	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.						

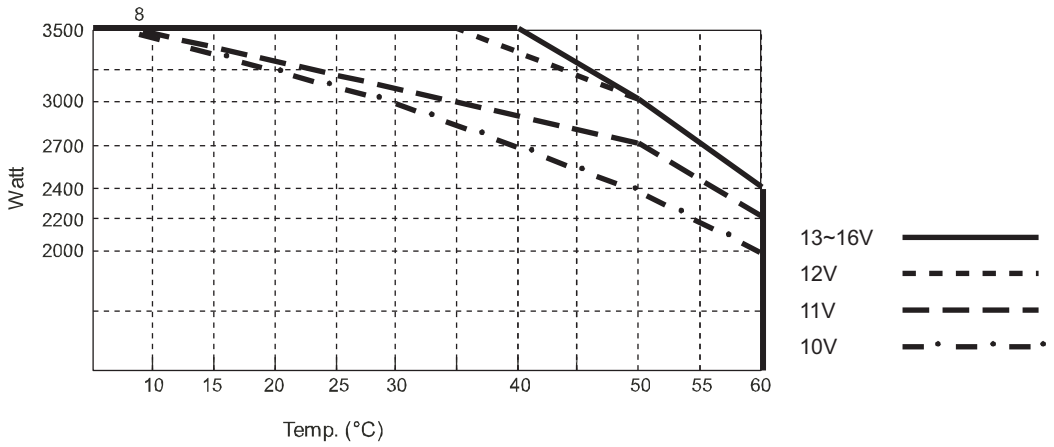
LED Status:

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		
Mode\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]