

# COTEK



Parallel connection generates  
“More power !!”



## SD Series

2500/3500W Pure Sine Wave Inverter

- ★ **Powerful function** - Capacity expansion with parallel function
  - ★ **Robust** - High reliability design
  - ★ **Excellent performance** - Full input/output protection with stable output performance
  - ★ **Convenience** - Compact size and easy operation
-



**Extend**  
your enjoyable time!



# User Benefits



## Wide input DC voltage range (10~16V)

Fulfill major user applications, and accommodate extreme conditions, such as high altitude or high voltage alternator



## Safe and reliable operations

Easy installation and cable wiring will save the system installation cost



## Parallel power design

Easy capacity expansion with parallel function (N+1, N=14)



## Full protection

- Input & output isolation : product safety
- Battery protection : longer battery life
- Output protection : protect customer devices



## User-friendly interface

Optimized I/O sockets, user friendly interface



## Power saving mode selectable

To save energy under different user scenarios



## Output AC voltage selectable

Suitable for different output voltage regions



## Bypass function

Built in ATS and AC circuit breaker could ensure the safety of AC grid power loop through



## Automatic master mechanism

- Eliminate single point failure and optimize reliability
- Free from complicated setup in parallel condition

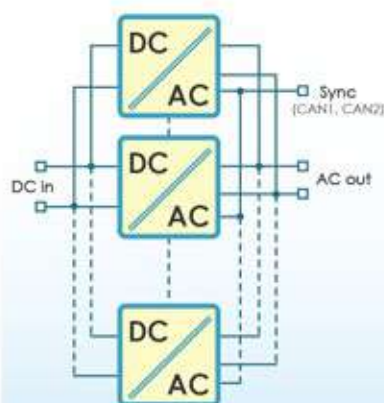


## Multiple industrial applications

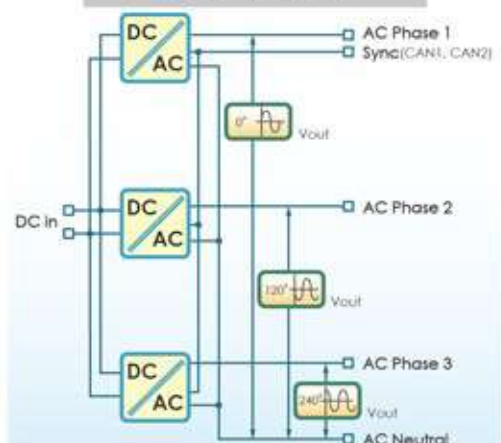
Suitable for commercial & industrial applications (1Φ3W / 3Φ4W power systems)

## More Power — Redundant Parallel Connection

REDUNDANT PARALLEL UNIT (N+1)




THREE-PHASE SYSTEM



# Specification

## SD2500




Model		SD2500-112	SD2500-124	SD2500-148	SD2500-212	SD2500-224	SD2500-248
 Output	Rating Power	2500W (de-rating after 40℃, refer to de-rating curve)					
	Peak Power (3 Sec.)	3000W					
	Surge Power (<0.2 Sec.)	4000W					
	Waveform	Pure Sine Wave					
	Efficiency (Max.)	88%	89%	90%	88%	88%	90%
	Output Voltage (@rated VDC)	100 / 110 / 115 / 120 VAC ± 3%			200 / 220 / 230 / 240 VAC ± 3%		
	Output Frequency	50 / 60 Hz ± 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	0.9A	0.35A	0.3A	1.1A	0.7A	0.4A
	On Mode @ No Load Mode	< 2.9A	< 1.4A	< 0.8A	< 3.6A	< 1.8A	< 1A
	Fuse	40Ax9	20Ax9	15Ax6	40Ax9	20Ax9	15Ax6
AC Input	AC Range	100 / 110 / 115 / 120 VAC ± 25%, recover ± 12.5%			200 / 220 / 230 / 240 VAC ± 25%, recover ± 12.5%		
	Frequency Selectable	50 / 60 Hz					
	Synchronous Frequency	47-57 / 53-63 Hz					
	Circuit Breaker	35A			20A		
	Transfer Switch	Optional STS mode : <4ms. Standard ATS : Inverter to utility AC : 8~10ms; Utility AC to inverter : 16~50ms.					
Protection	BAT. Low Alarm ± 3%	10.5VDC	21.0VDC	42.0VDC	10.5VDC	21.0VDC	42.0VDC
	BAT. Low Shutdown ± 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 Shutdown ± 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 / AC over current (Breaker)					
	Output Protection	Short Circuit / Overload / Over Temperature / Over Voltage					
Environment	Working Temp.	-20 ~ +60℃; refer to SD2500 power de-rating curve					
	Storage Temp.	-40 ~ +70℃					
	Relative Humidity	Max. 90%, non-condensing					
Safety & EMC	Safety Standards	Certified UL 458 (UL only for hard wire)		--	Certified EN60950-1		
	EMC Standards	Certified FCC Class B			Certified EN55014-1 <sup>①</sup> ; EN55014-2 <sup>①</sup> EN61000-3-2, -3-3; EN61204-3 EN61000-6-1, -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 (Optional)	CR-6, CR-8 and CR-10					
Other Information	Dimension (WxHxD)	283x128x436 mm / 11.14x5.04x17.17 inch					
	Packing	8kg; 2pcs / 17kg / 2.86 CUFT					
	Cooling	Load & Thermal control fan					
	Communication Port	RS-232 (RJ-11 type connector), Ethernet (Optional)					

① EN 55014-1, EN 55014-2 Class B: output cable less than 2 meters.



# SD3500



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 (3 Sec.)	4500W					
	Surge Power (<0.2 Sec.)	6000W					
	Waveform	Pure Sine Wave					
	Efficiency (Max.)	90%	90%	91%	90%	91%	91%
	Output Voltage (@rated VDC)	100 / 110 / 115 / 120 VAC ± 3%			200 / 220 / 230 / 240 VAC ± 3%		
	Output Frequency	50 / 60 Hz ± 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 / 120 VAC ± 25%, recover ± 12.5%			200 / 220 / 230 / 240 VAC ± 25%, recover ± 12.5%		
	Frequency Selectable	50 / 60 Hz					
	Synchronous Frequency	47-57 / 53-63 Hz					
	Circuit Breaker	35A			20A		
	Transfer Switch	Optional STS mode : <4ms. Standard ATS : Inverter to utility AC : 8~10ms.; Utility AC to inverter : 16~50ms.					
Protection	BAT. Low Alarm ± 3%	10.5VDC	21.0VDC	42.0VDC	10.5VDC	21.0VDC	42.0VDC
	BAT. Low Shutdown ± 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 Shutdown ± 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 / 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 hard wire)		--	Certified EN60950-1		
	EMC Standards	Certified FCC Class B			Certified EN55014-1 <sup>①</sup> ; EN55014-2 <sup>①</sup> EN61000-3-2, -3-3; EN61204-3 EN61000-6-1, -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 (Optional)	CR-6, CR-8 and CR-10					
Other Information	Dimension (WxHxD)	283x128x496 mm / 11.14x5.04x19.53 inch					
	Packing	10kg; 2pcs / 21kg / 3.19 CUFT					
	Cooling	Load & Thermal control fan					
	Communication Port	RS-232 (RJ-11 type connector), Ethernet (Optional)					

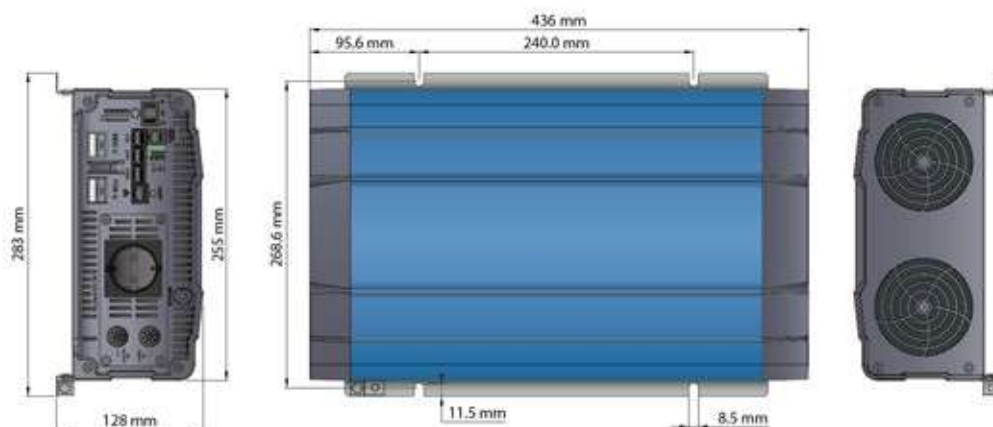
SD Series Accessories • Standard-User manual/Accessories • Optional-Remote control/Ethernet module/STS module • Subject to change without prior notice

① EN 55014-1, EN 55014-2 Class B; output cable less than 2 meters.

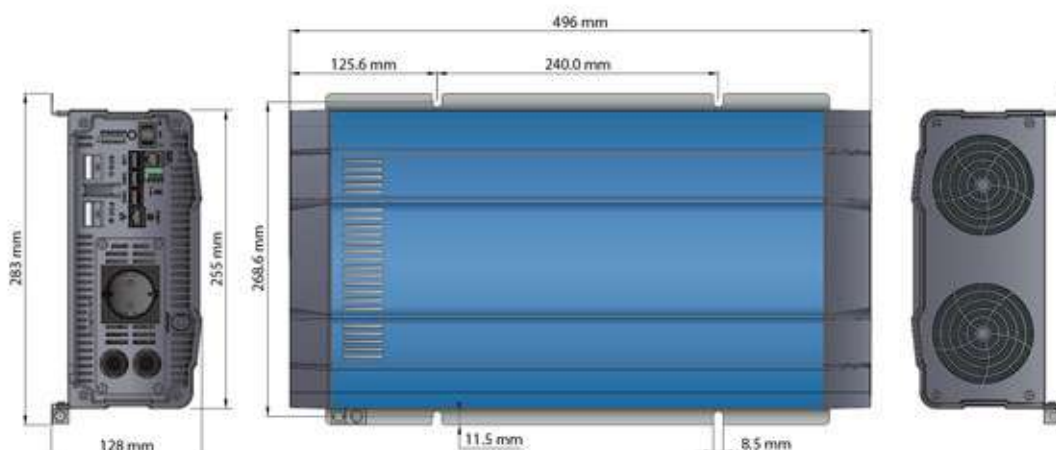


## Dimension

SD2500



SD3500



## About COTEK



COTEK is committed to providing proactive service, innovative technology and total quality assurance since we were established in 1986. With Corporate Offices in Tao-yuan, Taiwan, COTEK is a technology-oriented company focusing on developing, designing and manufacturing products including:

- DC/AC Pure Sine Wave inverter-150 Watts ~ 4,000 Watts
- Inverter/Charger
- Battery Charger
- AC/DC Switching Mode Power Supply-5 Watts ~ 3,000 Watts
- LED Driver

### Contact Us

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