

COTEK

Professional Power Solutions
Design and Manufacturing

Pure Sine Wave Inverter / Charger
Empower Your Life



www.cotek.com.tw

COTEK ELECTRONIC IND. CO., LTD

+886 3-389-1999

+886 3-380-2333

No.33, Sec. 2, Renhe Rd., Daxi Dist., Taoyuan City 33548, Taiwan





Why COTEK

<p>One-stop shopping</p> <p>Diverse power product lines that fulfill our business partners' power requirement across multiple sectors (AC/DC, DC/AC, Chargers)</p>	<p>World-Class R&D Team</p> <p>30 years' software & hardware development capability</p>	<p>Product Safety Approvals</p> <p>Meet the global latest safety standards</p>
<p>Flexibility</p> <p>To provide off-the-shelf and customized design service</p>	<p>Prompt Service</p> <p>Authorized distributor partners in over 38 countries to ensure local services in the same time zone</p>	<p>Production Experience</p> <p>Sold more than 20 million pcs to the worldwide market</p>



COTEK is committed to providing proactive service, innovative technology and total quality assurance since COTEK was 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 – 200 Watts~4,000 Watts
- Inverter / Charger
- Battery Charger
- AC / DC Switching Mode Power Supply – 450 Watts~3,000 Watts



COTEK Headquarters, Taiwan







No. 33, Sec. 2, Renhe Rd., Daxi Dist., Taoyuan City
33548, Taiwan
☎ +886 3-389-1999 📠 +886 3-380-2333
<http://www.cotek.com.tw/>

COTEK Factory, Dongguan China

Building No.121, No.13, Xinan Rd., Xintaiyang Industrial Park,
Lincun Village, Tangxia Township, Dongguan City,
Guangdong Province, China
☎ +86 769-81282695 📠 +86 769-81282615


Product Index

Pure Sine Wave Inverter, Inverter / Charger


Photo	Series	Description	Page	Wattages																						
				200	300	350	400	500	600	700	950	1000	1200	1500	1600	2000	2500	3000	3500	4000						
	SR	Rack Mount Pure Sine Wave Inverter	P.9										●	○		●		○								
	SL New Released	Low Frequency Inverter / Charger	P.13																							
	SC New Released	High Frequency Inverter / Charger	P.15																							
	SD	Parallelable Pure Sine Wave Inverter with AC Bypass Function	P.17																							
	SP	High Frequency Pure Sine Wave Inverter 700W~4000W	P.19																							
	SE	High Frequency Pure Sine Wave Inverter 200W~400W	P.21	●			●	●																		









○ = Coming Soon

Pure Sine Wave Inverter, Inverter / Charger

Photo	Series	Description	Page	Wattages																						
				200	300	350	400	500	600	700	950	1000	1200	1500	1600	2000	2500	3000	3500	4000						
	CX	Intelligent Battery Charger with Power mode	P.23	●	●		●	●																		

Accessories

Photo	Series	Description	Series					
			SL	SC	SD	SP	SE	CX
	CR	Remote control for COTEK SL, SC, SD, SP, SE, & CX series	CR-16B, CR-20	CR-16B, CR-20	CR-6, CR-8, CR-10	CR-8, CR-16A	CR-8	CR-1

SP series		CX series		SR-1600			
Transfer switch (TR-40)	Temperature Sensor (TS-01)	Rack	Remote control (CR-21)	SNMP Module (SN-1)	Bypass Switch	Front-end Changeable Fan	iC-HUB
							

Product Benefit

-  **Full Inverter & Charger Product Portfolio**
-  **Wide Range of Power Inverter**
 - ▶ 200W ~ 4000W
-  **Meet the Global Safety Standard**
 - ▶ UL, FCC, CE, TUV, E-Mark, etc...
-  **Go-To-Market Strategy**
 - ▶ Standard Modification Service
 - ▶ ODM Service





Marine



Telecom



Electric Vehicle

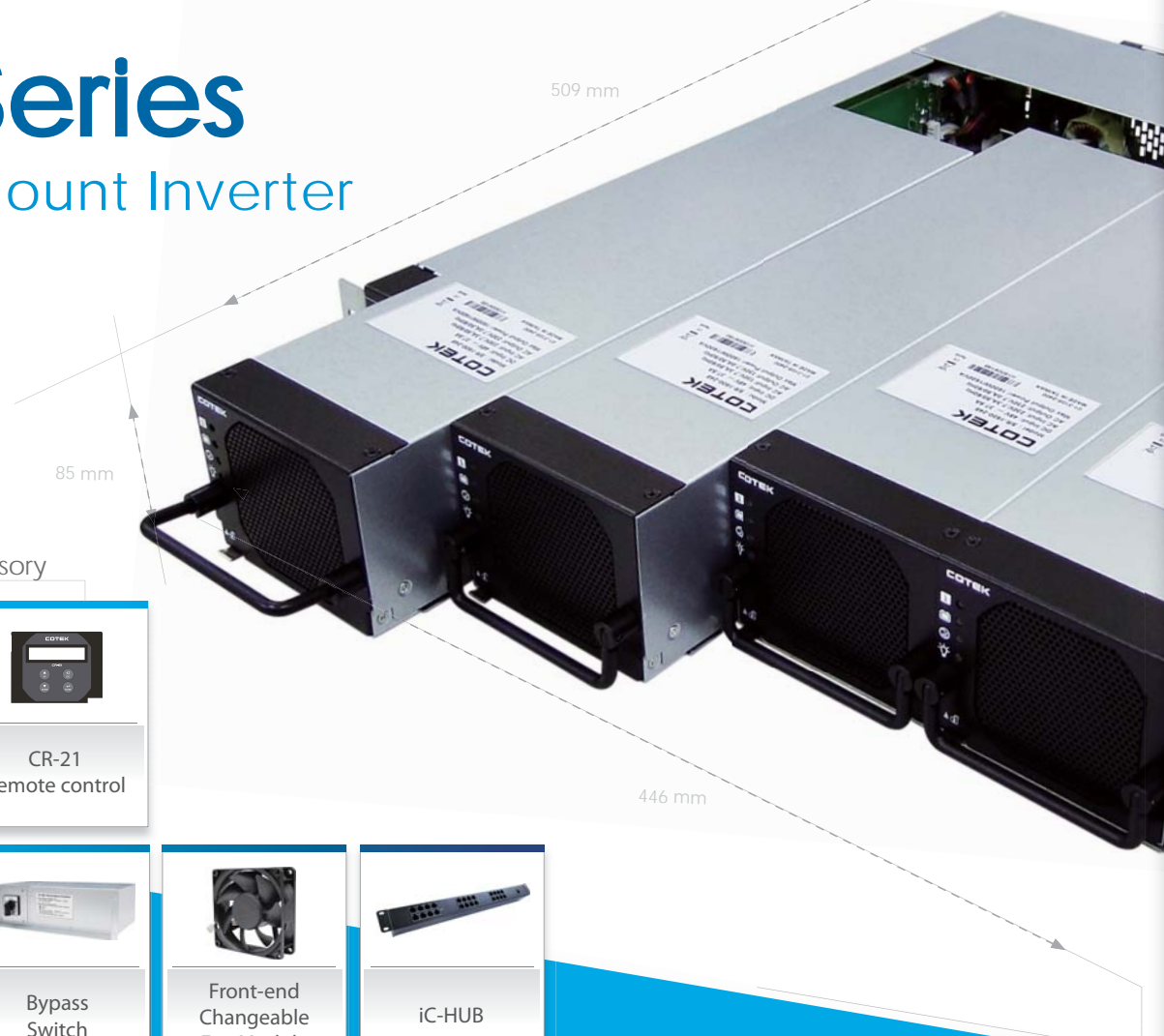


Automatic Guided Vehicle



SR-Series

Rack Mount Inverter



Suggested Accessory

19" 2U high rack (Max. 4 hot-pluggable modules)	CR-21 Remote control
SN-1 SNMP Module	Bypass Switch
Front-end Changeable Fan Module	iC-HUB

Features



6.4KW
Compact size
4 modules in one 2U shelf: 6.4KW



3-in-1 Operating Modes
1. Inverter mode 2. AC mode 3. Power Sharing



Support output parallel connection and redundancy (N+1)



Optional Full Accessories



Scan QR Code to view the User's Manual

	SR-1600-124	SR-1600-148	SR-1600-224	SR-1600-248
AC Output				
Rating Power	1200W / 1600VA	1600W / 1600VA	1200W / 1600VA	1600W / 1600VA
Short Time Overload Capacity	150% rated power (15 seconds)			
Nominal Voltage (AC)	120VAC		230VAC	
Output Voltage Range (AC)	100~120VAC ± 3%		200~240VAC ± 3%	
Efficiency AC Mode	96%		97%	
Efficiency DC Mode	89%	90%	90%	91%
Frequency Range	50 / 60 Hz			
THD (Above 50% Resistive Load)	< 3%			
Turn ON Delay	<10 sec.			
Crest Factor at Nominal Power	DC mode: 3 times nominal current	AC mode: 6 times nominal current	DC mode: 3 times nominal current	AC mode: 10 times nominal current
AC Input				
Nominal Voltage (AC)	120VAC		230VAC	
Voltage Range (AC)	75~132VAC ± 3%		150~265VAC ± 2%	
Power Factor@Rating Power	> 0.99			
Frequency Range	50 / 60 Hz			
Synchronization Range	47~53 Hz, 57~63 Hz			
DC Input				
Nominal Voltage (DC)	24VDC	48VDC	24VDC	48VDC
Voltage Range (DC)	18~34VDC ± 3%	36~68VDC ± 3%	18~34VDC ± 3%	36~68VDC ± 3%
Nominal Current (at 24Vdc/48Vdc)	56A	37A	56A	37A
Max. Input Current (15 Sec.)	90A	60A	90A	60A
Control & Signal				
Indicator	LED			
Advanced Control	RS-485 control module			
Failure Indicator	Buzzer alarm			
Protection				
DC Input Protection	Over Voltage / Under Voltage / Reverse Polarity			
AC Input Protection	Over Voltage / Under Voltage / Over Current			
Output Protection	Short Circuit / Overload / Over Temperature			
Transfer Performance				
Inverter to Utility AC	0 sec.			
Utility AC to Inverter	0 sec.			
Environment				
Operating Temp. Without	-25°C ~ 40°C			
Derating	-40°C ~ 70°C			
Storage Temp.	95% RH non-condensing			
Working Humidity	BS EN 61373			
Safety & EMC				
Safety Standards	----		EN 60950-1	
EMC Standards	FCC class B		EN 55032 class B; ETSI EN 300 386 V2.1.1 EN 55024; EN 61000-3-2, -3-3 IEC 61000-4-2, 3, 4, 5, 6, 8, 11	
Other				
Dimension (WxHxD) - Module	105x83x410 mm / 4.13x3.27x16.14 inch			
Dimension (WxHxD) - Shelf	446x85x509 mm / 17.56x3.35x20.04 inch			
Packing	Module : 3.8kg; 4pcs / 17.2kg; Shelf : 6.5kg; 1pc / 7.5kg			

SR-1600 Product List



SR1000T Rack Mount Inverter

- Standard 19" 1U rack mount
- Pure sine wave output (THD < 2%)
- User-friendly LCM module
- RS-232 communication port
- Selectable on-line / off-line modes

Model Name	Photo	Description	Features	Dimension (WxHxD)
SR-1600		SR-1600 module	<ul style="list-style-type: none"> ▪ Output Power 1600VA Per module ▪ 4 LED lights indicating the status of module / DC input / AC input / Output load ▪ Hot-swappable plug in with the front-end handle ▪ Easy installation and maintenance 	105x83x410 mm 4.13x3.27x16.14 inch
110V : 2U1 230V : 2U2		Rack	<ul style="list-style-type: none"> ▪ 19" 2U high rack mount ▪ High Capacity of maximum 4 modules per rack by total output power 6.4K VA ▪ Parallel connection up to 8 shelves 	44685x509 mm 17.56x3.35x20.04 inch
SN-1		SNMP	<ul style="list-style-type: none"> ▪ Manage the information display and system configuration via Ethernet ▪ LED light indicating real time status ▪ Easy Installation by Plugging in 	—
CR-21		Remote Control	<ul style="list-style-type: none"> ▪ Onsite system management including monitor and control ▪ Easy Operating by 4 buttons panel (UP / Down / Esc / Enter) ▪ The clear display by LCD back-light 	—
Bypass Switch		Bypass Switch	<ul style="list-style-type: none"> ▪ 19" 2U high rack mount ▪ Support up to output power 15K VA ▪ Keep the loads operating when battery maintenance is necessary 	485x132x350 mm 19.09x5.20x13.78 inch
iC-HUB (Coming Soon)		3P4W Module	<ul style="list-style-type: none"> ▪ Support 3P4W and Parallel Connection 	483x44x44 mm 19.02x1.73x1.73 inch
Front-end Changeable Fan Module		Front-end Changeable Fan Module	<ul style="list-style-type: none"> ▪ Removable fan module for the maintenance ▪ 4500 RPM +/- 10% at rated voltage 	—

	SR1000T-124	SR1000T-148	SR1000T-224	SR1000T-248
Output				
Continuous Output Power	1000W			
Max. Output Power (3 Min.)	1100W			
Surge Power	2000W			
Frequency	47~63 Hz ± 0.5% (User selectable)			
Output Voltage	97~123VAC (User selectable)		194~246VAC (User selectable)	
Efficiency (Full Load)	87%	88%	90%	91%
Output Waveform	Pure Sine Wave (THD<2%)			
Input				
DC Voltage	24VDC	48VDC	24VDC	48VDC
Voltage Range	18~34VDC	36~68VDC/36~60VDC (Only UL)	18~34VDC	36~68VDC/36~60VDC (Only UL)
No Load Current	1.4 A	0.75 A	1.3 A	0.7 A
Control & Signal				
LCD Panel	2-line LCD Panel			
LED Indicator	Input voltage level, output load level and faulty status			
Dry Contact Terminal	By relay			
Remote Control Port	RJ-11			
Protection				
Input Protection	Over Voltage / Under Voltage / Reverse Polarity (Fuse)			
AC Output Protection	Short Circuit / Overload / Over Temperature			
AC Input Protection	12Amp Circuit Breaker		6Amp Circuit Breaker	
Bypass Relay				
Relay Specification	15Amp / 120VAC, 10Amp / 250VAC			
Bypass Relay Selectable	On line / Off line (Haphazard, Normal, Exacting) selectable			
Switching Time	From AC bypass mode (off-line mode): ≤20ms / From DC to AC inverter mode (on-line mode): ≤8ms (exacting mode)			
Environment				
Working Temp. (Full Load)	0°C ~ 50°C			
Storage Temp.	-30°C ~ 70°C			
Safety & EMC				
Safety Standards	UL 60950-1		EN 60950-1	
EMC Standards	FCC class B		EN 55032 class B; EN 61000-3-2, -3-3 EN 55024; IEC 61000-4-2, 3, 4, 5, 6, 8, 11	
Other				
Failure Indication	Buzzer alarm and dry contact			
Dimension (WxHxD)	483x44x345 mm / 19.02x1.73x13.58 inch			
Packing	7.46kg; 2pcs / 15.9kg / 1.74CUFT			
Cooling	Thermal and load control fan			
Application	Focus on telecommunication (base-station), networking (data center) and battery backup systems			



SL-Series

Inverter / Charger

Low Frequency Pure Sine Wave
Inverter / Charger



Suggested Accessory



Features



Bi-directional All-in-One Design



-20°C~40°C full load operation without derating



3 stage charging function



5-in-1 Operating Modes

1. Inverter mode
2. Charger mode
3. Power Sharing
4. Power Generation
5. Power Support



Certified by UL
UL458 & Supplement SA / CSA C22.2 No. 107.1-01



Up to 12KW AC bypass capability



Scan QR Code to view the User's Manual

		SL-2000-112	SL-3000-112	
Inverter				
AC Output	Continuous Output Power	2000 VA ± 3%	3000 VA ± 3%	
	Surge Power	<5 sec. >3200VA, <3400VA	>4800VA, <5100VA	
		<30 sec. >2900VA, <3200VA	>4350VA, <4800VA	
		<5 min. >2300VA, <2900VA	>3450VA, <4350VA	
		<30 min. >2000VA, <2300VA	>3000VA, <3450VA	
	Frequency	60 Hz ± 0.1Hz		
	Output Voltage	120 VAC ± 5% (≤ Continuous Power)		
Max. Efficiency	>90%			
Output Waveform	Pure Sine Wave (THD < 5%@12.5VDC Full Load)			
DC Input				
DC Input	Nominal Voltage	12VDC		
	Input Voltage Range	9~17 VDC±0.3V		
	Input Over-Voltage Protection	Default 17 VDC , 16.5 ~ 17 VDC		
	Input Under-Voltage Protection	Default 9 VDC , 9 ~ 10.5 VDC		
	Max. DC input current	267A	400A	
	AC Relay Transfer Time	<16ms		
	No Load Power Consumption	25W	40W	
	Saving Power Consumption	< 5W		
	Charger			
	AC Input	AC Input Voltage Range	80 ~ 140 VAC ± 5% (120VAC nominal)	
AC Input Frequency Range		50 ~ 70 Hz		
AC Nominal Current		15A	18A	
AC Input Current Range*		5 ~ 50A		
Charger Efficiency (Peak)		85%		
Power Factor Correction (PFC)		> 0.97 (50% Load)		
DC Output	Charging Current Range	0 ~ 100A	0 ~ 125A	
	Battery Temperature Compensation	25 mV per °C		
	Four-Stage Charging*	Bulk, Absorption, Final, Equalize		
Protection	Battery Temperature protection	By a RJ-11 connector to battery temperature sensor		
Equalization	Max. output Voltage	16VDC		
	Max. output Current	10A		
Bypass Switch	Switch Specification (Max. each input)	AC 50Amp		
Environment				
Working Temperature Range	Full Load	-20 °C ~ 40 °C		
	Power de-rating	60 W per °C, 41~60 °C		
	Storage	-30 °C~70 °C		
	Over Temperature Protection	Sensor on Transformer, MOSFETs, Battery, and Internal ambient		
Working Humidity Range	0~95% Non-condensing			
Safety & EMC				
Safety Standards	UL458 Supplement SA / CSA C22.2 No. 107.1-01			
EMC Standards	FCC Class B			
Control & Signal				
Remote Control	CR-20 (optional)			
LED Indicator	Red / Orange / Green LED			
Dry Contact Terminal	By a relay			
Other				
Dimension (WxHxD)	321X203X349mm / 12.64x7.99x13.74 inch			
Net Weight	17.6 Kg (38.71 Lbs)	22.6 Kg (49.82 Lbs)		

*Setting by remote control



SC-Series

Inverter / Charger

High Frequency Pure Sine Wave Inverter / Charger

Suggested Accessory



CR-20 Remote Control

Temperature Sensor



Bi-directional All-in-One Design



5-in-1 Operating Modes

1. Inverter mode
2. Charger mode
3. Power Sharing
4. Power Generation
5. Power Support



Certified by UL

UL458 & Supplement SA / CSA C22.2 No. 107.1-01
UL1741 / CSA C22.2 No. 107.1-01
KKK-A-1822F (For Ambulance)



Compact Size

Highly Integration = Installation hassle-free

Features

	SC-1200-112	SC-1200-124	SC-1200-212	SC-1200-224	SC-2000-112	SC-2000-124	SC-2000-212	SC-2000-224
Inverter Mode								
DC Input	Nominal Voltage	12VDC	24VDC	12VDC	24VDC	12VDC	24VDC	24VDC
	Input Voltage Range	10.5~16.5VDC ±0.3V	21~33VDC ±0.5V	10.5~16.5VDC ±0.3V	21~33VDC ±0.5V	10.5~16.5VDC ±0.3V	21~33VDC ±0.5V	21~33VDC ±0.5V
	No Load Current	3.0A	1.5A	3.0A	1.5A	4.0A	2.0A	2.0A
	Input Current (Max.)	130A	65A	130A	65A	260A	130A	260A
	Stand-By Current	0.4A	0.2A	0.4A	0.2A	0.4A	0.2A	0.2A
	Input Over Voltage Protection	16.5VDC±0.3V	33VDC±0.5V	16.5VDC±0.3V	33VDC±0.5V	16.5VDC±0.3V	33VDC±0.5V	33VDC±0.5V
	Input Under Voltage Protection	10.5VDC±0.3V	21VDC±0.5V	10.5VDC±0.3V	21VDC±0.5V	10.5VDC±0.3V	21VDC±0.5V	21VDC±0.5V
AC Output	Output Voltage	100/110/115/120 VAC ± 5%			200/220/230/240 VAC ± 3%		100/110/115/120 VAC ± 5%	
	Continuous Output Power	1200 VA ± 3%			2000 VA ± 3%		2000 VA ± 3%	
	Surge Power	Load 101~115% (1 min.), 2400W (VA) (2 sec.)			Load 101~115% (1 min.), 4000W (VA) (2 sec.)		Load 101~115% (1 min.), 4000W (VA) (2 sec.)	
	Output Waveform	Pure Sine Wave (THD < 3%) @ 12.5V / 25V Linear Load						
	Frequency	50 / 60 Hz ± 0.3% (User-selectable)						
	Efficiency (Peak)	≥ 90%						
	Short-Circuit Protection (2 sec.)	Yes						
	INV. AC Output	12A Max.	6A Max.	20A Max.	10A Max.	20A Max.	10A Max.	10A Max.
	AC Output / With Grid	42A Max.	22A Max.	50A Max.	26A Max.	50A Max.	26A Max.	26A Max.
Protection	Input Protection	Over Voltage / Under Voltage / Reverse Polarity (Internal Fuse)						
	AC Input Protection	30 Amp Circuit Breaker@115 VAC, 16 Amp Circuit Breaker@ 230 VAC						
	AC Output Protection	Short Circuit / Overload						
	Temperature Protection	Shutdown, auto restart						
	Battery Temp. Protection	By a RJ11 connector to battery temperature sensor						
Charger Mode								
AC Input	Nominal Voltage / Frequency	110VAC, 50/60Hz		230VAC, 50/60Hz		110VAC, 50/60Hz		230VAC, 50/60Hz
	AC Input Voltage Range	90~132VAC		180~264VAC		90~132VAC		180~264VAC
	AC Input Frequency Range	50Hz: 47~53Hz 60Hz: 57~63 Hz		47~63Hz		50Hz: 47~53Hz 60Hz: 57~63 Hz		47~63Hz
	AC Nominal Current	8.2A (@110VAC)		3.9A (@230VAC)		16.5A (@110VAC)		7.9A (@230VAC)
	Efficiency (Full Load)	≥ 90%						
	AC Input (Max.)	30A Max.						
	Power Factor Correction (PFC)	> 0.95 (Max.)						
DC Output	4 Option Current Range	Max. 50A	Max. 25A	Max. 50A	Max. 25A	Max. 100A	Max. 50A	Max. 100A
	Second Charger Output	20A						
	Max. Output Voltage	14.7VDC	29.4VDC	14.7VDC	29.4VDC	14.7VDC	29.4VDC	14.7VDC
	Battery Temp. Compensation	-25 mV per °C	-50 mV per °C	-25 mV per °C	-50 mV per °C	-25 mV per °C	-50 mV per °C	-25 mV per °C
Battery Control (3-Stage Battery Chargers)	Bulk Voltage	14.7VDC	29.4VDC	14.7VDC	29.4VDC	14.7VDC	29.4VDC	14.7VDC
	Absorption Voltage	14.3VDC	28.6VDC	14.3VDC	28.6VDC	14.3VDC	28.6VDC	14.3VDC
	Float Voltage	13.1VDC	26.2VDC	13.1VDC	26.2VDC	13.1VDC	26.2VDC	13.1VDC
Environment	Working Temp. Range	Full Load -20 °C ~ 40 °C						
		Power de-rating 40 W per °C, 41~60 °C						
		Storage -30 °C ~ 70 °C						
	Working Humidity Range	10~95% RH non-condensing						
Safety & EMC								
Safety Standards		UL458/UL1741	EN 62368-1	UL458/UL1741	EN 62368-1	UL458/UL1741	EN 62368-1	EN 62368-1
EMC Standards		FCC Class A*	EN 55032 class A*	FCC class A*	EN 55032 class A*	FCC class A*	EN 55035 class A*	EN 55035 class A*
			EN 55035 class A*		EN 55035 class A*		EN 61000-3-2, 3-3	EN 61000-3-2, 3-3
			EN 61000-3-2, 3-3		EN 61000-3-2, 3-3		IEC 61000-4-2, 3, 4, 5, 6, 8, 11	IEC 61000-4-2, 3, 4, 5, 6, 8, 11
			IEC 61000-4-2, 3, 4, 5, 6, 8, 11		IEC 61000-4-2, 3, 4, 5, 6, 8, 11		IEC 61000-4-2, 3, 4, 5, 6, 8, 11	IEC 61000-4-2, 3, 4, 5, 6, 8, 11
E-mark		---	CISPR 25; ISO7637-2	---	CISPR 25; ISO7637-2	---	CISPR 25; ISO7637-2	CISPR 25; ISO7637-2
Control & Signal	Remote Control	CR-16B / CR-20 (optional)						
	Cooling	Temperature & load controlled cooling fan						
	Dimension(WxHxD)	251X116X386 mm / 9.88x4.57x15.20 inch			251X116X453 mm / 9.88x4.57x17.83 inch			
	Packing Weight	5.5 kg			7.5 kg			

*In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

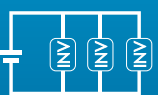


SD Series

Pure Sine Wave Inverter

Parallelable Pure Sine Wave Inverter with AC Bypass Function

Suggested
Accessory



Parallel redundancy design



Simple Network Management Protocol (SNMP) model (Optional)



Built-in ATS and AC circuit breaker



Static Transfer Switches (STS) model (Optional)



1Φ / 3Φ for multiple industrial applications

Features

Scan QR Code to view the User's Manual



	SD1500	SD2500	SD3500
Output			
Rated Power	1500 VA	2500 VA	3500 VA
Peak Power (3 Sec.)	1800 VA	3000 VA	4500 VA
Surge Power (<0.2 Sec.)	2400 VA	4000 VA	6000 VA
Frequency	50 / 60 Hz ± 0.1%		
Protection			
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°C ~ 40°C, refer to power de-rating curve		
Storage Temp.	-40°C ~ 70°C		
Storage Temp. & Humidity	Max. 90%, RH non-condensing		
Control & Signal			
Remote Control (Optional)	CR-6 / CR-8 / CR-10		
LED Indicator	Input voltage level, faulty status		
Control & Signal			
Dimension (WxHxD)	283x128x351 mm / 11.14x5.04x13.82 inch	283x128x436 mm / 11.14x5.04x17.17 inch	283x128x496 mm / 11.14x5.04x19.53 inch
Packing	5.5kg	8kg; 2pcs / 17kg / 2.86CUFT	10kg; 2pcs / 21kg / 3.19CUFT
Cooling	Load & thermal control fan		
Communication Port	RS-232 (RJ-11 type connector), Ethernet (Optional)		

	SD Series - 112	SD Series - 124	SD Series - 148	SD Series - 212	SD Series - 224	SD Series - 248
Output						
AC Voltage	100 / 110 / 115 / 120 VAC			200 / 220 / 230 / 240 VAC		
AC Regulation	± 3%					
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	10~16VDC	20~32VDC	40~64VDC	10~16VDC	20~32VDC	40~64VDC
No Load Power Consumption	@12VDC	@24VDC	@48VDC	@12VDC	@24VDC	@48VDC
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					
Protection						
Efficiency (Max.)	90%	90%	91%	90%	91%	91%
BAT. Low Alarm ± 3%	10.5VDC	21VDC	42VDC	10.5VDC	21VDC	42VDC
BAT. Low Shutdown ± 3%	10VDC	20VDC	40VDC	10VDC	20VDC	40VDC
BAT. Low Restart ± 3%	12.5VDC	25VDC	50VDC	12.5VDC	25VDC	50VDC
BAT. High Alarm ± 3%	15.5VDC	31VDC	62VDC	15.5VDC	31VDC	62VDC
BAT. High Shutdown ± 3%	16VDC	32VDC	64VDC	16VDC	32VDC	64VDC
BAT. High Restart ± 3%	15VDC	30VDC	60VDC	15VDC	30VDC	60VDC
Safety & EMC						
Safety Standards	UL 458 (UL only for hard wire)	----	----	EN 60950-1 (SD1500 : Certified EN 62368-1)		
EMC Standards	FCC class B	----	----	EN 55014-1* ; EN 55014-2* EN 61000-3-2, -3-3 EN 61000-6-1, -6-2, -6-3, -6-4 IEC 61000-4-2, 3, 4, 5, 6, 11 (SD1500 : Certified EN55032, EN55024)		
E-mark	----	----	----	Certified CISPR 25; ISO 7637-2 (SD1500 : Certified CISPR 25; ISO 7637-2)		

*EN55014-1, EN55014-2 Class B : Output cable less than 2 meters.

Socket Type	North America (GFCI)	North America (NEMA 5-15R)	Continental European	Australia / New Zealand	United Kingdom	Universal	Hard Wire
	SD1500 / SD2500 / SD3500	SD1500 / SD2500 / SD3500	SD1500 / SD2500 / SD3500	SD1500 / SD2500 / SD3500	SD1500 / SD2500 / SD3500	SD1500	SD1500 / SD2500 / SD3500



SP-Series Pure Sine Wave Inverter

Suggested Accessory



Features



Wide input voltage range (10.5~16.5V)
Fulfill the majority user applications



Remote Control Green Terminal
Control "Fault" alarm and Power ON/OFF remotely



Low profile design
Saving space for installation



Output voltage and frequency selectable
Applicable range: 100~120V 200~240V 50 / 60Hz



RS-232 Protocol communication
Alternative solution to set the parameters



Input & output fully isolation
Prevent from electrical shock

Scan QR Code to view the User's Manual



	SP-700	SP-1000	SP-1500	SP-2000	SP-3000	SP-4000
Output						
Rated Power	700 VA	1000 VA	1500 VA	2000 VA	3000 VA	4000 VA
Surge Power (1 Sec.)	<1230 VA	<1750 VA	<2650 VA	<3500 VA	<6000 VA	<8000 VA
Maximum Output Power (<3 Sec)	>700 VA, <810 VA	>1000 VA, <1150 VA	>1500 VA, <1730 VA	>2000 VA, <2300 VA	>3000 VA, <3450 VA	>4000 VA, <4600 VA
Frequency	50 / 60 Hz ± 0.5% (Dip Switch Selectable)					
Protection						
Output Overload	Shutdown output voltage, restart to recovery					
Output Short	Shutdown output voltage, restart to recovery					
Over Temperature	Heat sink temperature over 80°C ± 5°C, shutdown output voltage, recover automatically after heat sink temperature goes down to 60°C ± 5°C					
DC input Reverse Polarity	down to 60°C ± 5°C					
Environment						
Working Temp.	-20°C ~ 40°C, (-40W/°C, 41~70°C)					
Storage Temp.	-30°C ~ 70°C					
Storage Temp. & Humidity	10 ~ 95 % RH non-condensing					
Control & Signal						
Accessory (Optional)	Remote Control : CR-8 / CR-16A; Transfer Switch : TR-40					
LED Indicator	Input voltage level, output load level and faulty status					
Dry Contact Terminal	By relay					
Remote Control	6-port green terminal Terminal					
Other						
Dimension (WxHxD)	200x83x330 mm / 7.87x3.27x12.99 inch	200x83x372 mm / 7.87x3.27x14.65 inch	248x83x421 mm / 9.76x3.27x16.57 inch	248x83x443 mm / 9.76x3.27x17.44 inch	255x158x442 mm / 10.04x6.22x17.40 inch	255x158x462 mm / 10.04x6.22x18.19 inch
Packing	2.6kg; 6pcs / 16.6kg / 3.59 CUFT	3.26kg; 4pcs / 14kg / 2.65 CUFT	4.14kg; 4pcs / 17.56kg / 3.58 CUFT	5.24kg; 4pcs / 21.96kg / 3.58 CUFT	8.2kg; 2pcs / 17.4kg / 3.05 CUFT	10kg; 2pcs / 21kg / 3.05 CUFT
Cooling	Temperature & load controlled cooling fan					
Application	Home and office appliances, portable power equipment, vehicle, yacht and off-grid solar power systems....etc.					

	SP Series - 112	SP Series - 124	SP Series - 148	SP Series - 212	SP Series - 224	SP Series - 248
Output						
AC Voltage	100 / 110 / 115 / 120 VAC (Dip Switch Selectable)			200 / 220 / 230 / 240 VAC (Dip Switch Selectable)		
AC Regulation	± 5%			± 3%		
Output Waveform	Pure Sine Wave (THD<5% @ Normal Load)			Pure Sine Wave (THD<3% @ Normal Load)		
Input						
DC Voltage	12VDC	24VDC	48VDC	12VDC	24VDC	48VDC
Voltage Range	10.5~16.5VDC	21~33VDC	42~66VDC	10.5~16.5VDC	21~33VDC	42~66VDC
No Load Current	≤ 1.5A@12VDC	≤ 0.8A@24VDC	≤ 0.5A@48VDC	≤ 1.5A@12VDC	≤ 0.8A@24VDC	≤ 0.5A@48VDC
Power Saving Mode	<0.1A@12VDC	<0.06A@24VDC	<0.05A@48VDC	<0.1A@12VDC	<0.06A@24VDC	<0.05A@48VDC
Protection						
Efficiency (Max.)	92%	93%	94%	94%	94%	95%
Input Under-Voltage Protection	10.5 ± 0.3VDC	21 ± 0.5VDC	42 ± 1.0VDC	10.5 ± 0.3VDC	21 ± 0.5VDC	42 ± 1.0VDC
Input Under-Voltage Recovery	12.5 ± 0.3VDC	25 ± 0.5VDC	50 ± 1.0VDC	12.5 ± 0.3VDC	25 ± 0.5VDC	50 ± 1.0VDC
Input Over-Voltage Protection	16.5 ± 0.3VDC	33 ± 0.5VDC	66 ± 1.0VDC	16.5 ± 0.3VDC	33 ± 0.5VDC	66 ± 1.0VDC
Input Over-Voltage Recovery	14.5 ± 0.3VDC	29 ± 0.5VDC	58 ± 1.0VDC	14.5 ± 0.3VDC	29 ± 0.5VDC	58 ± 1.0VDC
Safety & EMC						
Safety Standards	UL 458 (UL only for GFCI & Hard Wire)		----	EN 60950-1		
EMC Standards	FCC class B*			EN 55032 class B* ; EN 55024 EN 61000-3-2, -3 EN 61000-4-2, 3, 4, 5, 6, 8, 11		
E-mark	----			CISPR 25; ISO 7637-2		

*Warning : SP-2000/3000/4000 is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Socket Type	North America (GFCI)	North America (NEMA 5-15R)	North America (NEMA 5-20R)	Continental European	Australia / New Zealand	United Kingdom	Universal	France Connector	Hard Wire
	SP-700 / SP-1000 / SP-1500 / SP-2000	SP-700 / SP-1000 / SP-1500 / SP-2000	SP-1500 / SP-2000	SP-700 / SP-1000 / SP-1500 / SP-2000 / SP-3000	SP-700 / SP-1000 / SP-1500 / SP-2000 / SP-3000	SP-700 / SP-1000 / SP-1500 / SP-2000 / SP-3000	SP-700 / SP-1000 / SP-1500 / SP-2000 / SP-3000	SP-700 / SP-1000 / SP-1500 / SP-2000 / SP-3000	SP-3000 / SP-4000



SE-Series Pure Sine Wave Inverter

Suggested
Accessory



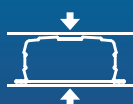
Features



Wide input voltage range (10.5~16.5V)
Fulfill the majority user applications



Power saving mode selectable
Suitable for different user scenario to active power saving mode



Low profile design
Saving space for installation



Output voltage and frequency selectable
Applicable range: ■ 100~120V ■ 200~240V ■ 50 / 60Hz



Remote Control Green Terminal
Control Power ON/OFF remotely



Input & output fully isolation
Prevent from electrical shock

Scan QR Code to view
the User's Manual



	SE200	SE350	SE400
Output			
Rated Power	200 VA	350 VA	400 VA
Surge Power (Max1 Sec.)	250 VA (3Sec.)	<700 VA	<800 VA
Frequency	50 / 60 Hz ± 0.5% (Dip Switch Selectable)		
Protection			
Protection	Overload, Short circuit, DC over / Under voltage, Over temperature		
DC Input Reverse Polarity	By fuse		
Environment			
Working Temp.	-20°C ~ 60°C, refer to the power de-rating curve		
Storage Temp.	-30°C ~ 70°C		
Storage Temp. & Humidity	10 ~ 95 % RH non-condensing		
Other			
Dimension (WxHxD)	150x68x187 mm / 5.91x2.68x7.36 inch		
Packing	1.6kg; 6pcs / 10.6kg / 1.45 CUFT		Per Product 1.22kgs ; Per Carton 9pcs / 13.93kg
Cooling	Temperature & load controlled cooling fan		
Application	Home and office appliances, portable power equipment, vehicle, yacht and off-grid solar power systems...etc.		

	SE Series - 112	SE Series - 124	SE Series - 148 (SE350 / SE400)	SE Series - 212	SE Series - 224	SE Series - 248 (SE350 / SE400)
Output						
AC Voltage	100 / 110 / 115 / 120 VAC ± 5%			200 / 220 / 230 / 240 VAC ± 5%		
Input						
DC Voltage	12VDC	24VDC	48VDC	12VDC	24VDC	48VDC
Voltage Range	10.0~16.0VDC(SE200) 10.0~15.5VDC(SE350) 10.5~16.0VDC(SE400)	20.0~32.0VDC(SE200) 20.0~31.0VDC(SE350) 21.0~32.0VDC(SE400)	40.0~62.0VDC(SE350) 42.0~64.0VDC(SE400)	10.0~16.0VDC(SE200) 10.0~15.5VDC(SE350) 10.5~16.0VDC(SE400)	20.0~32.0VDC(SE200) 20.0~31.0VDC(SE350) 21.0~32.0VDC(SE400)	40.0~62.0VDC(SE350) 42.0~64.0VDC(SE400)
No Load Current	≤1.8A@12VDC	≤1.0A@24VDC	≤0.5A@48VDC	≤1.8A@12VDC	≤1.0A@24VDC	≤0.5A@48VDC
Power Saving Mode	<90 mA	<60 mA	<40 mA	<90 mA	<60 mA	<40 mA
Efficiency (Max.)	89%	91%	90%	91%Polarity	93%	91%
Safety & EMC						
Safety Standards	UL 458 (UL only for SE400 GFCI receptacles) ----			EN 60950-1, EN 62368-1(SE400)		
EMC Standards	FCC class B (only for SE200, SE400)			EN 55032 class B ; EN 55024 EN 61000-3-2, -3-3 IEC 61000-4-2, 3, 4, 5, 6, 8, 11		
E-mark	----			Certified CISPR 25; ISO 7637-2		

Socket Type

North America
(GFCI)



SE200 / SE350 /
SE400

North America
(NEMA 5-15R)



SE200 / SE350 /
SE400

Continental
European



SE200 / SE350 /
SE400

Australia /
New Zealand



SE200 / SE350 /
SE400

United
Kingdom



SE200 / SE350 /
SE400

Universal

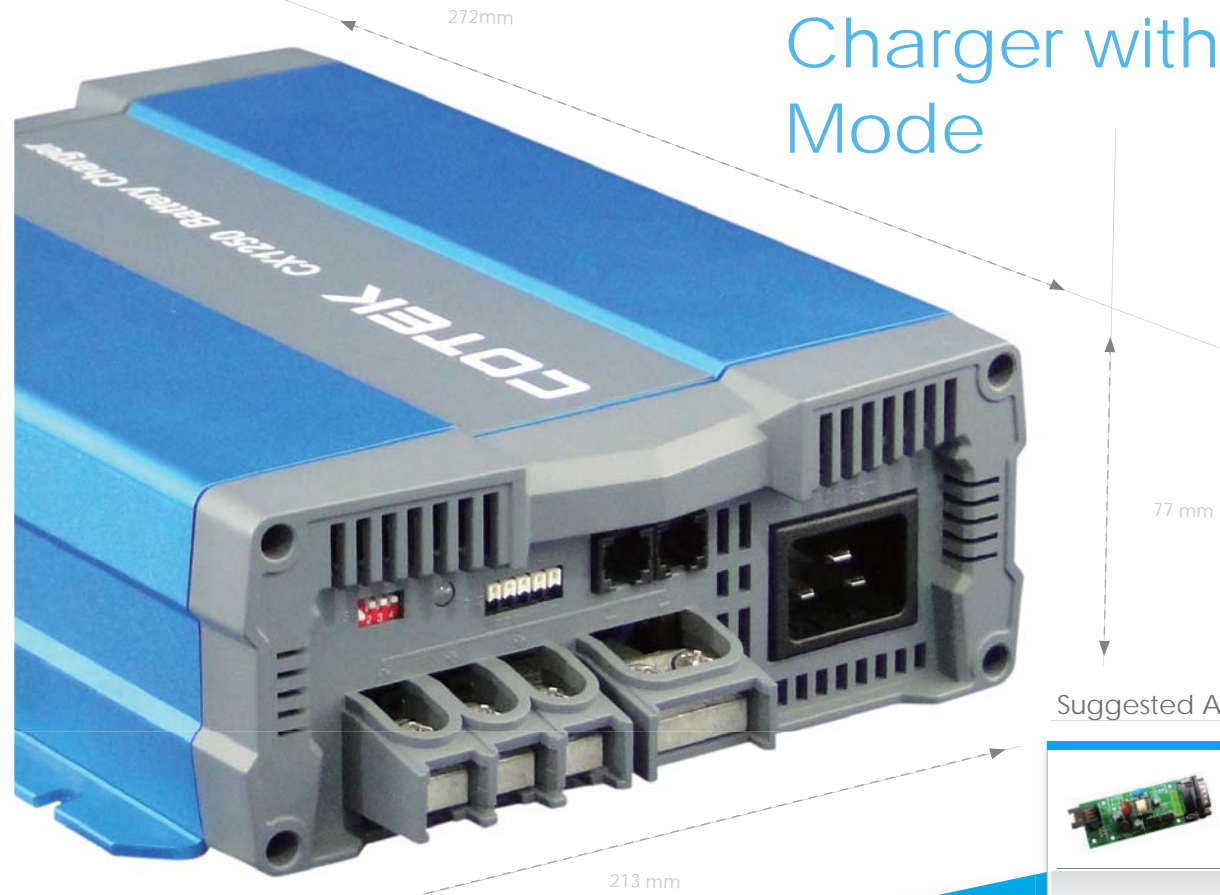


SE200 / SE350 /
SE400

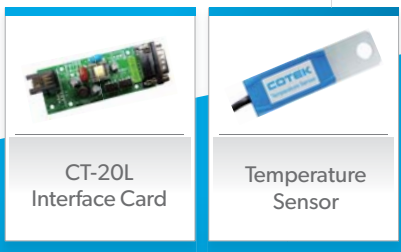


CX-Series

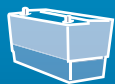
Intelligent Battery Charger with Power Mode



Suggested Accessory



Features



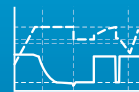
ESB maintenance function

Keep ESB (Engine Start Battery) in good condition



Temperature compensation

Extend batteries' life and reduce life cycle cost



User programmable charging curve

Provide flexibility for various battery types



-20~50°C operation temperature

Operate under tough conditions

Scan QR Code to view the User's Manual



	CX12	CX24
Output		
Battery Type	Lead Acid / Li-ion / Gel / AGM	
Standard Boost Charge Voltage	14.4 V / 14.7 V (select by switch)	28.8 V / 29.4 V (select by switch)
Standard Float Charge Voltage	13.8 V / 13.5 V (select by switch)	27.6 V / 27 V (select by switch)
Battery Charging Mode	3 stage charging capability	
Input		
Voltage Range	90~264VAC	
Power Factor (Typ.)	PF > 0.92 at full load	
Frequency Range	47~63 Hz	
Leakage Current	For earth < 1mA / 240VAC	
Protection		
Short Circuit	Current limit < 1A (30 seconds)	
Over Voltage	17.5 V ± 1%, protection type : shutdown output	35 V ± 1%, protection type: shutdown output
Over Temperature	Charger over temperature 100 ± 5°C detected by heat sink Battery over temperature 52 ± 5°C (optional device-COTEK temperature sensor), connect on CN3 Protection type : Auto recovery after heat sink temperature goes down to 50°C	
Function		
Alarm Signal	NC. / NO. relay contact output	
Power Mode	Supply 13.2 V current limit output voltage	Supply 26.4 V current limit output voltage
Temperature Compensation	-10mV / 0.5°C with COTEK temperature sensor	
Charging Sleep Mode	By remote controller and S1-4 DIP switch	
Remote Controller	CR-1	
Environment		
Working Temp.	-20°C ~ 50°C (refer to output load de-rating curve)	
Working Humidity	20~90% RH non-condensing	
Storage Temp., Humidity	-40°C ~ 85°C, 20 ~ 90% RH	-40°C ~ 75°C, 20 ~ 90% RH
Temperature Coefficient	± 0.03% (0~50°C)	
Vibration	10~500Hz, 2G 10 min. / 1cycle period for 60 min. each along X, Y, Z axes	
Safety & EMC		
Safety Standards	UL 458 (UL only for CX1250, CX1280, CX2425, CX2440), EN 60335-1, EN 60335-2-29	
Withstand Voltage	I/P-O/P: 4242VDC, I/P-FG: 1768VDC, O/P-FG: 707VDC	
Isolation Resistance	I/P-O/P: 100M Ohms / 500VDC	
EMC Standards	Certified EN 55022; EN 61204-3; EN 55014-1; EN 61000-3-2, -3-3; EN 61204-3; EN 61000-6-3; EN 55024; IEC 61000-4-2, 3, 4, 5, 6, 8, 11; ENV 50204; EN 61000-6-1; EN 55014-2	

Output	CX1215	CX1225	CX1235	CX1250	CX1280
Main Rated Current	15A	25A	35A	50A	80A
Current Range	0~15A	0~25A	0~35A	0~50A	0~80A
Main Output	1	2	2	3	3
Single Output Current Limit	15A	25A	35A	40A	40A

Input	CX1215		CX1225		CX1235		CX1250		CX1280	
Efficiency (Typ.) at 230VAC	87%		87%		87%		87%		87%	
AC Current (Typ.)	2.5A / 100VAC 1.07A / 240VAC		4.1A / 100VAC 1.8A / 240VAC		6.2A / 100VAC 2.8A / 240VAC		8.24A / 100VAC 3.6A / 240VAC		13.3A / 100VAC 5.4A / 240VAC	
Other										
Dimension (WxHxD)	183x72x243 mm		183x72x243 mm		183x72x263 mm		213x77x272 mm		213x77x312 mm	
Weight	1.6kg		1.7kg		1.9kg		3.1kg		4.0kg	

Output	CX2415	CX2425	CX2440
Main Rated Current	12.5A	25A	40A
Current Range	0~12.5A	0~25A	0~40A
Main Output	2	3	3
Single Output Current Limit	12.5A	25A	40A

Input	CX2415		CX2425		CX2440	
Efficiency (Typ.) at 230VAC	90%		90%		90%	
AC Current (Typ.)	4.2A / 100VAC 1.7A / 240VAC		8.3A / 100VAC 3.6A / 240VAC		13.3A / 100VAC 5.4A / 240VAC	
Other						
Dimension (WxHxD)	183x72x243 mm		213x77x272 mm		213x77x312 mm	
Weight	1.6kg		2.9kg		3.9kg	



TR-40

Transfer Switch

- Transfer switch box for SP series
- Power consumption < 1.4W
- Universal AC input / Full range
- Cooling by free air convection
- Bypass current up to 40 amps



TR-40A	
Contact Rating	
Max. Switching Voltage	277VAC
Max. Switching Current	40A
Max. Switching Power	11000VA
Switching time	Inverter to GRID 10mS GRID to Inverter 60mS
Control	
Voltage Range	100~240VAC
AC Current (Typ.)	21mA / 100VAC, 16mA / 240VAC
Frequency Range	47~63Hz
Power Consumption	<1.4W (at no load)
Protection	
Wiring Errors	LED
Grid Overload	Circuit breaker (40A)
Environment	
Working Temp.	-20°C ~ 40°C
Working Humidity	20~85% RH non-condensing
Storage Temp. & Humidity	-40°C ~ 85°C, 20 ~ 85 % RH
Vibration	10~500Hz, 2G 10 min. / 1 cycle, period for 60 min. each along X,Y,Z axes
Safety & EMC	
Safety Standards	Certified EN 60947-1; EN 60947-6-1
EMI	Certified EN 55032 class B
Power Harmonic & Voltage Fluctuation and Flicker	Certified EN 61000-3-2, EN 61000-3-3
EMS Immunity	Certified EN 55024, IEC 61000-4-2, 3, 4, 5, 6, 8, 11
Other	
Relay Quantity	2
Dimension (WxHxD)	220x71x194 mm / 8.66x2.80x7.64 inch
Packing	0.96kg; 6pcs / 8kg / 2.51CUFT

Packing Information

	DC Input	AC Input	AC Output	Connection Type	PCS/CTN	N.W./CTN (KGS)	G.W./CTN (KGS)	CBM /CTN	PCS /PLT	CARTONS/ PLT
SL Series										
SL - 2000	12V	80-140V	120V	HW	1	18.5	21	0.06	30	30
SL - 3000	12V		120V	HW	1	22.6	25	0.06	30	30
SC Series										
SC - 1200	12V, 24V	90-132V, 180-264V	100-120V, 200-240V	HW	2	9	11	0.07	40	20
SC - 2000	12V, 24V	90-132V, 180-264V	100-120V, 200-240V	HW	2	11	12	0.07	40	20
SD Series										
SD - 1500	12V, 24V, 48V			GFCI, NEMA / UK, AU, SCHUKO, HW	2	11	12.4	0.08	60	20
SD - 2500	12V, 24V, 48V				2	16	19	0.08	60	20
SD - 3500	12V, 24V, 48V				2	20	22.4	0.08	60	20
SP Series										
SP - 700	12V, 24V, 48V		100-120V, 200-240V	GFCI, NEMA / UK, AU, SCHUKO, Univ.,	6	15.6	16.6	0.10	108	18
SP - 1000	12V, 24V, 48V		100-120V, 200-240V		4	13	14	0.08	80	20
SP - 1500	12V, 24V, 48V		100-120V, 200-240V		4	16.56	17.56	0.08	80	20
SP - 2000	12V, 24V, 48V		100-120V, 200-240V		4	20.96	21.96	0.08	80	20
SP - 3000	12V, 24V, 48V		100-120V, 200-240V	HW / UK, AU, SCHUKO, Univ., HW	2	16.4	17.4	0.08	36	18
SP - 4000	24V, 48V		100-120V, 200-240V	HW	2	20	21	0.08	36	18
SE Series										
SE - 200	12V, 24V		100-120V, 200-240V	GFCI, NEMA / UK, AU, SCHUKO, Univ.,	6	15.6	21.6	0.05	180	30
SE - 350	12V, 24V, 48V		100-120V, 200-240V		6	9	12	0.05	180	30
SE - 400	12V, 24V, 48V		100-120V, 200-240V		6	9	12	0.05	180	30
SR Series										
SR - 1000	24V, 48V		97-123V, 194-246V	IEC, HW	2	15	16	0.08	60	30
SR - 1600 Module	24V, 48V	75-132V, 150-265V	100-120V, 200-240V	HW	4	15.2	16.8	0.09	80	20
SR - 1600 Rack		75-132V, 150-265V	100-120V, 200-240V	HW	1	6.5	7.5	0.08	30	30
CX Series										
CX-1215		90-264V	12V, 15A	NEMA, SCHUKO, UK, AU	6	10.38	12.88	0.06	144	24
CX-1225		90-264V	12V, 25A		6	11.1	13.6	0.06	144	24
CX-1235		90-264V	12V, 35A		6	12.6	15.1	0.06	144	24
CX-1250		90-264V	12V, 50A		6	18.6	21.1	0.08	120	20
CX-1280		90-264V	12V, 80A		6	24	26.6	0.09	120	20
CX-2415		90-264V	24V, 12.5A		6	10.38	12.88	0.06	144	24
CX-2425		90-264V	24V, 25A		6	18.72	21.22	0.08	120	20
CX-2440		90-264V	24V, 40A		6	23.4	26	0.09	120	20

*The above information is for reference only, subject to change without notice

Professional Power Solutions Design and Manufacturing

COTEK is committed to providing proactive service, innovative technology and total quality assurance since we were established in 1986. COTEK is a technology-oriented company focusing on developing, designing and manufacturing products.

Please contact with our sales representative to request for our new catalog, or visit our website:

www.cotek.com.tw