COTEK

COTEK

Professional Power Solutions Design and Manufacturing

SR - Series

Rack Mount Inverter

Highly reliable, modular design DC-AC inverter system, designed with advanced power electronics and microprocessor technology

Telecom / Datacom

COTEK ELECTRONIC IND. CO., LTD

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www.cotek.com.tw

2021 / 2022 Product Catalog

COTEK

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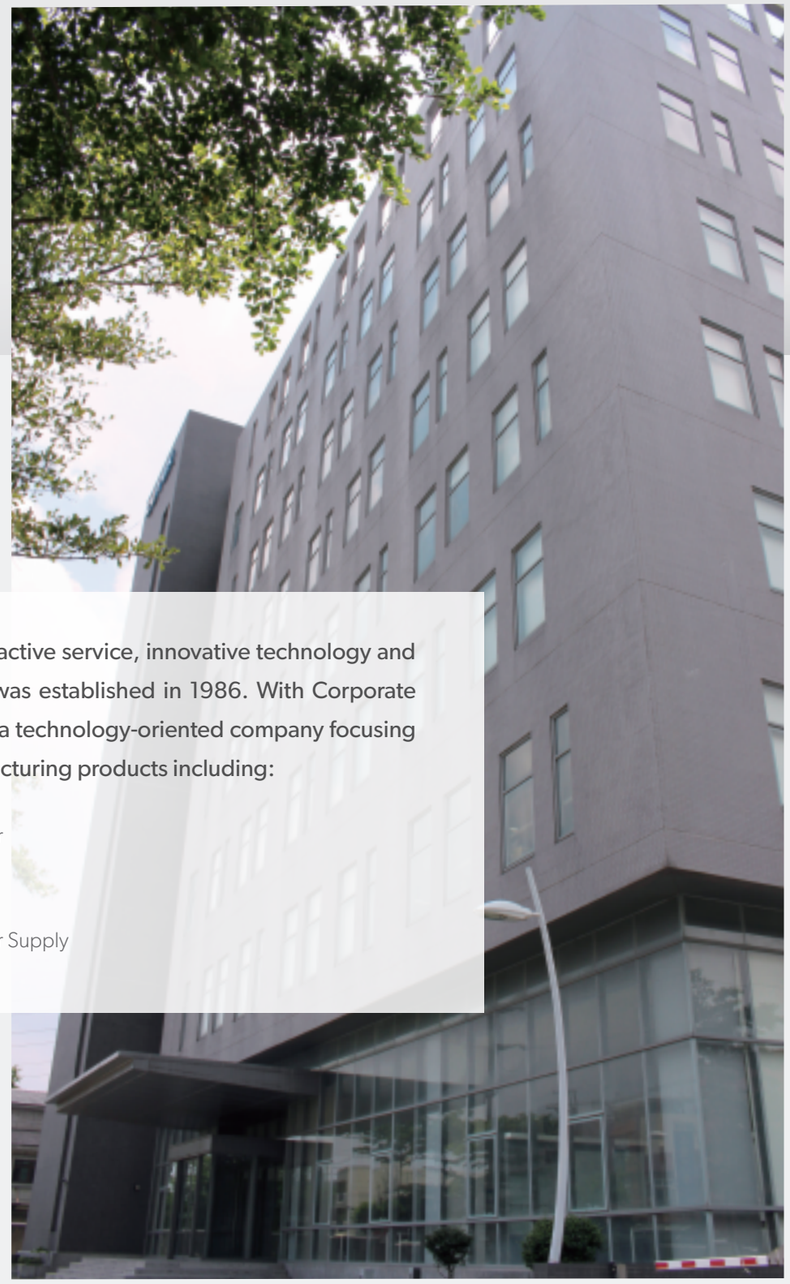

COTEK is committed to providing proactive service, innovative technology and total quality assurance since COTEK was established in 1986. With Corporate Offices in Tao-yuan, Taiwan, COTEK is a technology-oriented company focusing on developing, designing and manufacturing products including:

1. DC / AC Pure Sine Wave Inverter
2. Inverter / Charger
3. Battery Charger
4. AC / DC Switching Mode Power Supply

Why COTEK

One-stop shopping

Diverse power product lines that fulfill our business partner's power requirement across multiple sectors (AC/DC, DC/AC, Chargers and Inverter Chargers)

World-Class R&D Team

30 years' software & hardware development capability

Product Safety Approvals

Meet the global latest safety standards

Flexibility

To provide off-the-shelf and customized design service

Prompt Service

Authorized distributor partners in over 38 countries to ensure local services in the same time zone

Production Experience

Sold more than 20 million pcs to the worldwide market

2018 2019 2020

D&B Top 1000 Elite SME Award

D-U-N-S Number : 65-728-6662

COTEK Headquarters, Taiwan

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

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Building No.121, No.13, Xinan Rd., Xintaiyang Industrial Park, Lincun Village, Tangxia Township, Dongguan City, Guangdong Province, China

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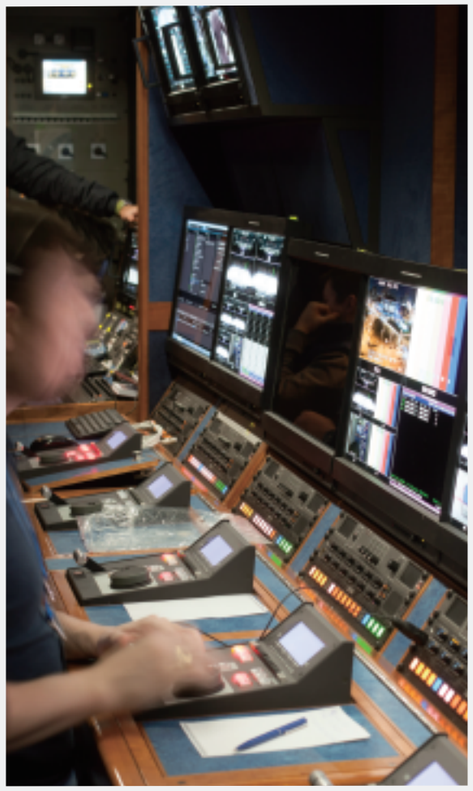
Applications

1. Telecom, Data Center
2. Uninterruptable Power System (UPS)
3. Rack mount Power Backup System

Energy Station System (ESS)

Satellite / Power Station

Railway



Broadcasting Radio Station

COTEK

Modular Inverters

SR-1600 PLUS

Patented technology

US Patent no. : US10-530-267

The SR-1600 PLUS is a highly reliable, modular design DC-AC inverter system, designed with advanced power electronic and microprocessor technology

Features

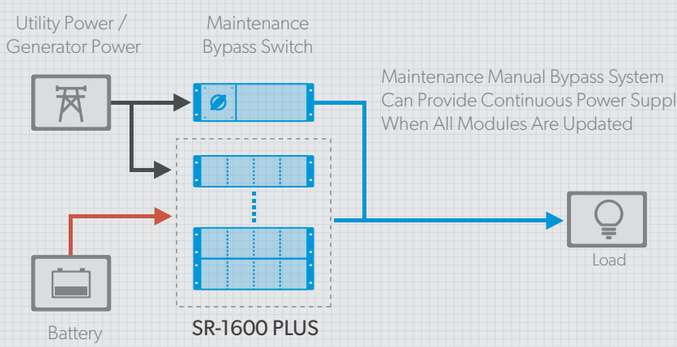
1 Seamless switch between AC and DC

0 Second transfer-switch between AC and DC, avoid damage to the instrument caused by transient voltage

2 Output Efficiency Up to 95%

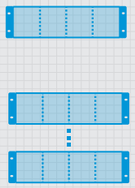
Reduce energy loss and heat dissipation

3 Built-in Static Transfer Switch



Block diagram

Support output parallel connection and redundancy (N+1)

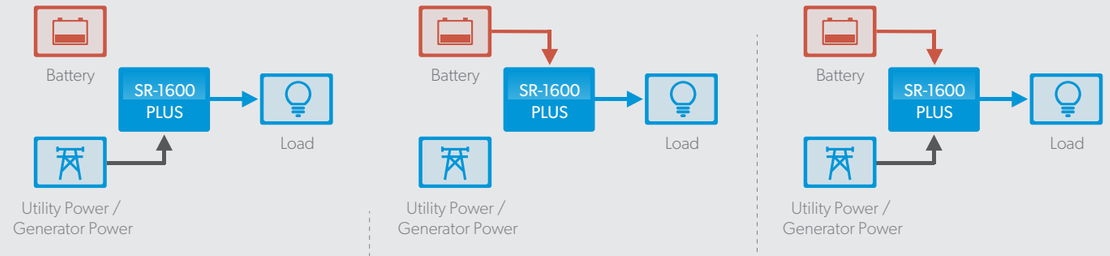


4 modules in one 2U shelf :
6.4KW

Support up to 8 shelves :
51.2KW

Easy Maintenance by Hot Plug and Swappable Module

3-in-1 Operating Modes



Scan QR Code to view the User's Manual

SR-1600 PLUS System Packs

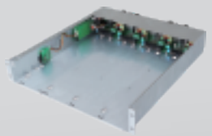
1 2U 1 rack + 4 module

2 2U + CR-21 PLUS
1 rack + 3 module + CR-21 PLUS + SN-1 PLUS

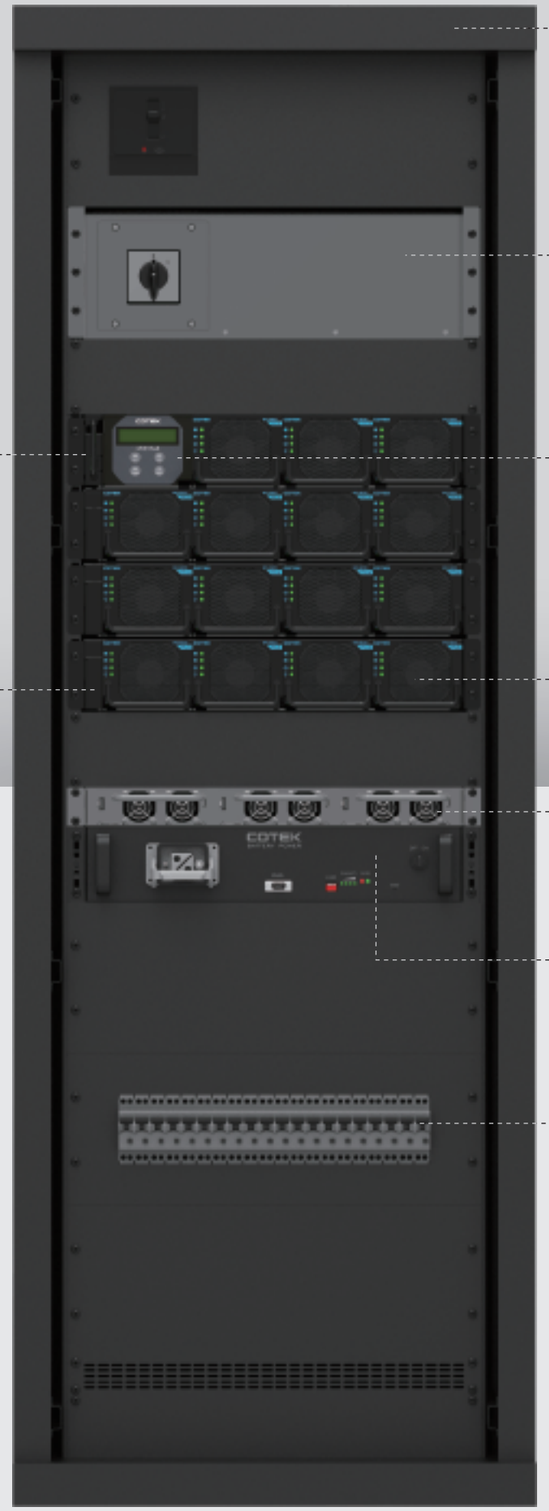
3 4U + CR-21 PLUS
2 rack + 7 module + CR-21 PLUS + SN-1 PLUS

SR-1600 PLUS System

SN-1 PLUS
Display and Setting via SNMP Ethernet
(NMS / Web Browser)



Rack
2U 19" Rack by models of SR-2U1 Plus & SR-2U2 Plus



Cabinet with Power Distribution
(Built at the request)

MBS
Maintenance Manual Bypass Switch (65A, 130A, 260A)

CR-21 PLUS
Display & Setting via LCM Controller

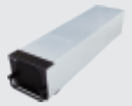
Module
1600VA inverter module support
1 100-120Vac & 200-240Vac 2 24Vdc / 48Vdc version

Rectifier (Built at the request)

Modular Battery (Built at the request)

19" Power Distribution Cabinet

FAN Module
Front-end changeable fan module



Dummy Module
For the empty module space fulfillment

Rack height	Present		Future (Expandability)		Maximum	
	No. Module	VA	No. Module	VA	No. Module	VA
1 2U	1	1600	3	4800	4	6400
	2	3200	2	3200		
	3	4800	1	1600		
	4	6400	0	0		
2 2U + CR-21 PLUS	1	1600	2	3200	3	4800
	2	3200	1	1600		
	3	4800	0	0		
3 4U+ CR-21 PLUS	1	1600	6	9600	7	11200
	2	3200	5	8000		
	3	4800	4	6400		
	4	6400	3	4800		
	5	8000	2	3200		
	6	9600	1	1600		
	7	11200	0	0		

SR-1600 PLUS Specification

	SR-1600-124 PLUS	SR-1600-148 PLUS	SR-1600-224 PLUS	SR-1600-248 PLUS-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 ± 2%	
Efficiency AC Mode	94%		95%	
Efficiency DC Mode	89%	90%	90%	91%
Frequency Range	50 / 60 Hz			
THD (Above 80% 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)	90~130VAC ± 3% (adjustable from 75V to 132.5V)		180~260VAC ± 2% (adjustable from 150V to 265V)	
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, Buzzer Alarm, Event Log			
Advanced Control	RS-485 (Modbus) embedded, CR-21 Plus (Optional), SN-1 Plus SNMP (Optional)			
Protection				
Input / Output Protection	Over Voltage, Under Voltage, Overload, Over Temperature, Reverse Polarity, Short Circuit			
Transfer Performance				
Inverter / Utility AC	0 sec.			
Environment				
Operating Temp.	Full Load -25°C ~ 40°C ; Power De-rating from 40°C to 60°C			
Storage Temp.	-40°C ~ 70°C , 95% RH non-condensing			
Safety & EMC				
Safety Standards	Meet UL62368-1		EN62368-1	
EMC Standards	FCC class B		EN55032 Class B; EN55024; EN300386 EN 61000-3-2, -3-3, -6-1, -6-3; 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			

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
SR -1000	24V, 48V		97-123V, 194-246V	IEC, HW	2	15	16	0.08	64	32
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	16	16

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

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

	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	UL62368-1		EN62368-1	
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			