

Gemini SC-Series

High Frequency Pure Sine Wave Bi-directional
Inverter Charger

SC-1200/2000

251 x 116 x 386mm /
251 x 116 x 453mm

Bi-directional All-in-One Design

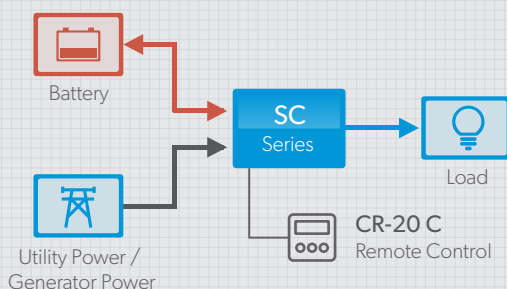
Gemini inverter charger is not just a combination of an inverter but also a battery charger.

There are multi-operating functions which boost up the existed AC output power.

Gemini can also control the input AC grid current and fit your grid restriction. For the charging function, the charging current is powerfully reached by MAX 150A. And user can choose among battery types (GEL, Flooded, AGM) or set up the individual charging parameters (Custom type).

SC-3000

314 x 127.4 x 508.8 mm



Connection Diagram



5-in-1 Operating Modes

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



Features



1 Night Mode

Keep the lowest fan duty/speed, Provide the quiet environment while the system operating.

2 AC Input Current Limit Control

Avoid the shut down of input power breaker system



3 Adjustable charging voltage in each stage

Support various battery types
(GEL / FLOODED / AGM / CUSTOMER)



4 Continual Full Load Operation

Full Load $-20^{\circ}\text{C} \sim 40^{\circ}\text{C}$, Power de-rating
 $60\text{ W} / ^{\circ}\text{C}$, $41 \sim 60^{\circ}\text{C}$.

Control Option

1

Dip-Switch & LED

2

Remote Control

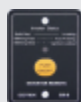
3

RS-232 Protocol
Communication
(Input & Output)

4

Green Terminal

Suggested Accessory



CR-8

Remote Control
(Power on/off)



CR-16B

Remote Control
(Display + Power on/off)



CR-20C

Remote Control
(Display + Setting)



TS-01

Temperature Sensor

Gemini SC-Series Specification

		SC-1200		SC-2000		SC-3000			
AC Output	Continuous Output Power	1200 VA ± 3%		2000 VA ± 3%		3000 VA ± 3%			
	Frequency	50/60 Hz +/- 0.3 Hz (User-selectable)							
Protection	Input Protection	Over / Under Voltage, Reverse Polarity (Internal Fuse) / Battery Temp. protection							
	AC Output Protection	Short-Circuit, Overload							
	Temperature protection	Shutdown							
AC Input	Input Frequency Range	50Hz:47 ~ 53 Hz / 60Hz:57 ~ 63 Hz							
	Efficiency (Max.)	>88%		>88%		>87%			
	Transfer Switch	0 second (from Inverter to Utility AC & Utility AC to Inverter)							
DC source	Output Voltage	Battery Voltage							
	Output Current	20A Max							
DC Output	Battery Control	By 3-stage Battery Charging (Bulk / Absorption / Float)							
Signal and Control		Remote Control Panel / Remote Control Terminal / Dry Contact Terminal / RS-232							
Working Temp.	Full Load	-20°C ~ 50°C		-20°C ~ 40°C		-20°C ~ 40°C			
	Power de-rating	40 W per°C, 51~60°C		60W per°C, 41~60°C		40W per °C, 41~60°C			
Dimension		251 x 116 x 386mm		251 x 116 x 453mm		314 x 127.4 x 508.8 mm			
		SC Series-112		SC Series-124		SC Series-212		SC Series-224	
DC Input	Nominal Voltage	12 VDC		24 VDC		12 VDC		24 VDC	
	Input Voltage Range	10.5~16.5 VDC±0.3V		21 ~ 33 VDC ±0.5V		10.5~16.5 VDC±0.3V		21 ~ 33 VDC ±0.5V	
	Input Current (Max)	SC-1200 : 132A SC- 2000 : 260 A SC- 3000 : 390 A		SC-1200 : 66A SC- 2000 : 130 A SC- 3000 : 195 A		SC-1200 : 132A SC- 2000 : 260 A SC- 3000 : 390 A		SC-1200 : 66A SC- 2000 : 130 A SC- 3000 : 195 A	
AC Output	Output Voltage	100 / 110 / 115 / 120VAC +/-3%				200 / 220 / 230 / 240VAC +/-3%			
	Max. Efficiency (Full Load)	89%		90%		89%		90%	
	INV. AC Output (Max.)	SC-1200:12A, SC-2000:20A, SC-3000:30A				SC-1200:6A, SC-2000:10A, SC-3000:15A			
	AC Output (Max.)	SC-1200:30A, SC-2000:30A, SC-3000:50A				SC-1200:22A, SC-2000:26A, SC-3000:30A			
Protection	AC Input Protection	30 Amp Circuit Breaker				16 Amp Circuit Breaker			
AC Input	Nominal Voltage	110 VAC, 50 / 60Hz (User-selectable)				220 VAC, 50 / 60Hz(User-selectable)			
	Input Voltage Range	90 ~ 132 VAC				180 ~ 264 VAC			
	Nominal Current	SC-1200 : 8.2A , SC-2000 : 16.5A SC-3000 : 24.5A (@110VAC)				SC-1200 : 3.9A , SC-2000 : 7.9A SC-3000 : 11.7A (@230VAC)			
	AC Input	30 A MAX				16 A MAX			
DC Output	Charging Current	SC-1200 SC-2000 SC-3000	12.5/25/37.5/50A 25/50/75/100A 37.5/75/112.5/150A	6.25/12.5/18.75/25 A 2.5/25/37.5/50A	12.5/25/37.5/50A 25/50/75/100A 37.5/75/112.5/150A	6.25/12.5/18.75/25 A 2.5/25/37.5/50A			
	Max. Output Voltage	14.7 VDC		29.4 VDC		14.7 VDC		29.4 VDC	
Bypass Relay	Relay Specification	30 Amp / 250 VAC							
Safety and EMS	Safety Standards	UL458/Supplement SA/UL1741* (SC-3000 certified for UL458 only)				EN 62368-1			
	E-mark	---				Certified CISPR 25 ; ISO7637-2 (SC-1200/2000)			
	EMC Standards	Certified FCC Class A*				EN55032 Class A* , EN55024 Class A* , EN61000-3-2, 3-3 EN61000-4-2, 3, 4, 5, 6, 8, 11			

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
SC - 1200	12V, 24V	90-132V, 180-264V	100-120V, 200-240V	HW	4	18.2	22.2	0.11	64	16
SC - 2000					3	18	21.54	0.09	60	20
SC - 3000					2	20	24.1	0.13	32	16

*Warning : SC series 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.

Applications



Vehicle / Electric Vehicle



Emergency Lighting / Backup Power

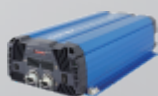


Energy Storage System (ESS)



Marine

Inverter / Charger



SC Series



SL Series

Pure Sine Wave Inverter



SD Series



SP Series



SE Series

Charger



CX Series



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