

**World's Fastest, Unique Design with Interactive Bi-Directional Inverter System that Boasts Many Extra Features**



**Features**

- All the functions and performance of CombiPlus included
- As a combi of powerful True Sine Wave Inverter, Battery Charger and high-speed Auto Transfer Switch in one enclosure
- “Green Power Smart Feature” with AC charger timer and generator timer control
- External modules for solar charge, DC charge and DC switches
- Easy-programmable remote panel with LCD display
- Two sets of DC controller, programmable switches that control your DC loads
- DC generator input allows any DC generation device to charge the house batteries
- **PowerControl** – Dealing with limited generator, shore side or grid power to avoid sudden loads on generator causing voltage spikes
- **PowerSupport** – Boosting the capacity of shore or generator power, an innovative feature of the SuperCombi
- Wall Mount and Table Mount available for choices
- Optional remote panel with LCD display for easy operation in distance



## Specifications

	12 Volt System	SC-1500-12X <sup>(1)</sup>	SC-3000-12X <sup>(1)</sup>
MODEL	24 Volt System	SC-1500-24X	SC-3000-24X
	48 Volt System	SC-1500-48X	SC-3000-48X

### GENERAL

Ventilation	Fan Forced cooling	Fan Forced cooling
Temperature – Operation	-20°C ~ +70°C	-20°C ~ +70°C
– Storage	-25°C ~ +80°C	-25°C ~ +80°C
Protection		
a. Output short circuit	✓	✓
b. Over load	✓	✓
c. Battery voltage too high	✓	✓
d. Battery voltage too low	✓	✓
e. DC voltage ripple too high	✓	✓
f. Temperature Sensor		
Transformer	(105°C)	(105°C)
Electronic & Powerstage	(70°C)	(70°C)
Battery Temp BTS-3	(50°C)	(50°C)
Humidity	0~95% (non condensing)	0~95% (non condensing)
Power Support Function	✓	✓
Power Shifting Function	✓	✓
Uninterrupted AC Power	(Less than 10 msec)	(Less than 10 msec)
Adaptive 4-stage Charge	✓	✓
Two output to charge 2 battery banks	✓	✓
Auxiliary Relay	X 3	X 3
Parallel Operation (Requires optional SC-PX)	(Max. 5 sets)	(Max. 5 sets)
3-phase Capacity (Requires optional SC-3PX)	✓	✓
Battery Voltage Sensor	✓	✓
Battery Temperature Sensor (BTS-3 Optional)	✓	✓
Remote Control Port	✓	✓
Extension Port (Port C)	✓	✓

### INVERTER

Input Voltage Range (VDC)	12V-(9.5-16V) / 24V-(19-32V) / 48V-(38-64V)	
Output Voltage (VAC)	210 ~ 245 VAC / 94~128 VAC	
Output Frequency	50Hz / 60Hz ± 0.1%	
Output Waveform	True Pure Sinewave	
Output Voltage THD	< 5%	
Power Factor (All Loads)	✓	
No linger load, crest factor	3: 1	
Cont. Power Output @70°C (W)	1500Watt	3000Watt
Under 70°C (cos θ=1.0)	(No derate 70°C)	(No derate 70°C)
Cont. Power Output (W)	0W	0W
Over 70°C (cos θ=1.0)	(Shutdown)	(Shutdown)
Maximum Power (W)	3000Watt	6000Watt
Maximum Efficiency (%)	82/84/85	84/86/89
Zero-load Power (W)	(8W Power Save) 12W(Normal) (12W Power Save) 18W(Normal)	

### CHARGER

Input Voltage Range (VAC)	180~265 VAC / 94~138 VAC	
Input Frequency	45-55 Hz / 55-65 Hz	
Power Factor	1	
Charge Characteristic	4-stage adaptive / Bulk-Absorption-Float-Equalize+ Safe	
Maximum DC Voltage Ripple (Vrms)	< 1.25 V	
Charge Current House Battery (A)	70A/40A/20A	140A/70A/40A
Charge Current Starter Battery (A)	4A	
Output Charging Voltage (VDC)	12~16V / 24~32V / 48~64V	
Absorption Voltage Default (VDC)	14.4V / 28.8V / 57.6V	
Float Voltage Default (VDC)	13.8V / 27.6V / 55.2V	
Equalize Voltage Default (VDC)	13.2V / 26.4V / 52.8V	
Output Charge Voltage (min ~ max)	8V~16V / 11V~32V / 22V~64V	
Battery Temperature Sensor	BTS-3 (optional)	

### AC INPUT SWITCH

AC IN Internal Terminal Circuit Breaker	1500W: 30A -(110V) 15A -(230V) 3000W: 60A -(110V) 30A -(230V)
AC IN Auto Transfer Switch Current	1500W: 32A -(110V) 16A -(230V) 3000W: 63A -(110V) 32A -(230V)
Switch-over Time	
a. inverter to AC input	0 msec
b. AC input to inverter	0 msec
Detection Time AC Input Fault	4 ~ 10 msec
Trip Level AC Low Input to Inverter	Default Setting: 94 VAC (94~120V) 110V Model 180 VAC (180~230V) 230V Model
Trip Level Inverter to AC Low Input	Default Setting: 101 VAC (95~121V) 110V Model 187 VAC (181~231V) 230V Model
Trip Level Inverter to AC High Input	Default Setting: 138 VAC (119~142V) 110V Model 265 VAC (229~269V) 230V Model
Trip Level AC High Input to Inverter	Default Setting: 143 VAC (120~143V) 110V Model 270 VAC (230~270V) 230V Model
Min.~Max. Frequency Range	45-55 Hz / 55-65 Hz

### MECHANICAL

Cabinet / Protecting Class	Aluminum / IP20	
Dimension (HxWxD) mm	362 x 258 x 370	424 x 258 x 370
Weight (kgs)	21	27

### OPTIONS

Solar Charger (SunStar Series)	SS-45C/SS-60C (Max.10)
Remote Controller (RCP-5)	Remote monitoring available, optional cables: 3M/15M
Battery Temperature Sensor (BTS-3)	Compensation for the battery charging voltage and current
PC Programming Unit (PPU-SC)	Programming and monitoring the values displayed in PC
Parallel Box Package (CP-PX)	Stackable power (Max. 5 sets for parallel connection)
2-/3-Phase Box Package (CP-3PX)	2-Phase or 3-Phase output
DC Generator Input (DC-SW-70 & DC-SW-140)	DC generator module for extra source input Max. 5 sets for parallel connection
DC Load Control (SW1) (DC-SW-70 & DC-SW-140)	Low voltage disconnect/low voltage reconnect (programmable) Max. 5 sets for parallel connection
DC Load Control (SW2) (DC-SW-70 & DC-SW-140)	Low voltage disconnect/low voltage reconnect/ timer cut-in/timer cut-out (programmable) Max. 5 sets for parallel connection

※ (1) X should be 1, output voltage = 94~128 VAC or 2, output voltage = 210~245 VAC

