

Pure Sine Wave Inverter/Charger with Intelligent Shore, Generator, Battery Power Management and Control for Strongest Power Backup Support



Features

- As pure sine wave inverter for all purposes
- As PFC battery charger for typed battery
- Automatic bypass function
- Uninterrupted AC power (UPS function)
- Continuous output power without derating (< 70 °C)
- **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 Combi-3
- Four stage adaptive charger and dual battery charging
- LCD display for parameter setting and error messages
- Programming auxiliary relay (X 3)
- Programming input current limit for power share
- User friendly parameters setting for power control and sharing
- Wall Mount and Table Mount available for choices
- Optional remote panel with LCD display for easy operation in distance

Specifications

Model No.	12 Volt System 24 Volt System 48 Volt System	C3-1500-12X ⁽¹⁾ C3-1500-24X C3-1500-48X	C3-3000-12X ⁽¹⁾ C3-3000-24X C3-3000-48X	C3-6000-24X ⁽¹⁾ C3-6000-48X
GENERAL				
Ventilation	Forced cooling			
Temperature – Operation – Storage	- 20°C ~ + 70°C - 25°C ~ + 80°C			
Protection	Output short circuit, Over load, Battery overvoltage, Battery undervoltage, Battery reverse polarity detection, Over temp., High input voltage ripple			
Humidity	0 ~ 95 % (non condensing)			
Power Control Function	✓			
Power Assist Function	✓			
Uninterrupted AC Power	✓ (Less than 10 msec)			
Adaptive 4-stage Charge	✓			
Two output to charge 2 battery banks	✓			
Auxiliary Relay	X 3			
Battery Voltage Sensor	✓			
INVERTER				
Input Voltage Range (VDC)	12V-(9.5 -16V) 24V-(19-32V) 48V-(38-64V)		24V-(19-32V) 48V-(38-64V)	
Output Voltage (VAC)	210 ~ 245 V / 94 ~ 128 V		210 ~ 245 V	
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) Under 70°C (cos φ=1.0)	1500Watt (No derate 70°C)	3000Watt (No derate 70°C)	6000Watt (No derate 70°C)	
Cont. Power Output (W) Over 70°C (cos φ=1.0)	0W (Shutdown)			
Maximum Power (W)	3000W	6000W	12000W	
Maximum Efficiency (%)	82 / 84 / 85	84 / 86 / 89	88 / 90	
Zero-load Power (W)	(8W Power Save) 12W (Normal)	(12W Power Save) 18W (Normal)	(18W Power Save) 36W (Normal)	

CHARGER

Input Voltage Range (VAC)	180 ~ 265 VAC / 94 ~ 138 VAC		180 ~ 265 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)	< 1.25V		
Charge Current House Battery (A)	70A / 40A / 20A	140A / 70A / 40A	140A / 70A
Charge Current Starter Battery (A)	4A		
Output Charging Voltage (VDC)	12V~16V / 24V~32V / 48V~64V		24V ~ 32V 48V ~ 64V
Absorption Voltage Default (VDC)	14.4V / 28.8V / 57.6V		28.8V 57.6V
Float Voltage Default (VDC)	13.8V / 27.6V / 55.2V		27.6V 55.2V
Equalize Voltage Default (VDC)	13.2V / 26.4V / 52.8V		26.4V 52.8V
Output Charge Voltage (min ~ max)	8V~16V / 11V~32V / 22V~64V		11V ~ 32V 22V ~ 64V
Battery Temperature Sensor	BTS-3 (optional)		

AC INPUT SWITCH

AC IN Terminal Circuit Breaker	30A (110V) 15A (220V)	60A (110V) 30A (220V)	60A (220V)
AC IN Auto Transfer Switch Current	32A (110V) 16A (220V)	63A (110V) 32A (220V)	64A (220V)
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		

MECHANICAL

Cabinet / Protecting Class	Aluminum / IP20		
Dimension (H x W x D) mm	298 x 256 x 368	355 x 256 x 368	460 x 290 x 400
Weight (kgs)	21	27	44

OPTIONS

Remote Controller	Remote monitoring available, optional cables: 3M / 15M
Battery Temperature Sensor (BTS-3)	Compensation for the battery charging voltage and current
PC Programming Unit (PPU-C3)	Programming and monitoring the values displayed in PC

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