

Combi-3 12/24/48V-1500~6000W

**Invertek**®

## 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



**RICH ELECTRIC**

## Specifications

MODEL	12 Volt System 24 Volt System 48 Volt System	C3-1500-12X <sup>(1)</sup> C3-1500-24X C3-1500-48X	C3-3000-12X <sup>(1)</sup> C3-3000-24X C3-3000-48X
<b>GENERAL</b>			
Ventilation	Forced cooling	Forced cooling	
Temperature – Operation – Storage	-20°C~+70°C -25°C~+80°C	-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)	0~95% (non condensing)	
Power control Function	√	√	
Power assist 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	
Battery voltage sensor	√	√	
<b>INVERTER</b>			
Input Voltage Range (VDC)	9.5 -16V / 19-32V / 38-64V		
Output Voltage (VAC)	185~240 VAC / 90~120 VAC		
Output Frequency	50Hz / 60Hz ± 0.1%		
Output Waveform	Pure sinewave		
Output Voltage THD	< 5%		
Power Factor (All Loads)	√		
No linger load, crest factor	3: 1		
Cont. Power Output (W) Under 70°C (cos θ=1.0)	1500W (No derate)	3000W (No derate)	
Cont. Power Output (W) Over 70°C (cos θ=1.0)	0W (Shutdown)	0W (Shutdown)	
Maximum Power (W)	3000W	6000W	
Maximum Efficiency (%)	82/84/85	84/86/89	
Zero-load Power (W)	8W	12W	

<b>CHARGER</b>	
Input Voltage Range (VAC)	200~250 VAC / 100~125 VAC
Input Frequency	45 - 55 Hz / 55 - 65 Hz
Power Factor	1
Charge Characteristic	4-stage adaptive / Bulk-Absorption-Float-Equalize
Maximum DC Voltage Ripple (Vrms)	< 1.25 V
Charge Current House Battery (A)	70A/40A/20A
Charge Current Starter Battery (A)	140A/70A/40A
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
<b>AC INPUT SWITCH</b>	
AC IN Terminal Circuit Breaker	30A (110V) / 15A (220V) / 60A (110V) / 30A (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
Trip Level AC Input to Inverter	90 VAC / 180 VAC
Trip Level Inverter to AC Input	94 VAC / 187 VAC
Min.~ Max. Frequency Range	45-55 Hz / 55-65 Hz
<b>MECHANICAL</b>	
Cabinet / Protecting Class	Aluminum / IP20
Dimension (HxWxD)	298 x 256 x 368 mm
Weight (kgs)	16 kgs
<b>OPTIONS</b>	
Remote Controller	Remote monitoring available, optional cables: 3M/15M
Battery Temperature Sensor (BTS-3)	Compensation for the battery charging voltage and current

(1) X should be 1, output voltage = 90~120 VAC or 2, output voltage = 185~240 VAC

### Rich Electric Co., Ltd.

31 Keji 5th Rd Annan District, Tainan Technology Industrial Park 70955, Taiwan  
 Tel: 886-6-2541000 Fax: 886-6-2540493  
 E-mail: info@rich-electric.com Http://www.rich-electric.com

