

# ICA-3 12/24/48V-1500~6000W

## 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 ICA-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

# ICA-3 12/24/48V-1500~6000W

## Specifications

	12 Volt System	24 Volt System	48 Volt System
<b>MODEL</b>	ICA-15-12X (1)	ICA-15-24X	ICA-15-48X
	ICA-30-12X (1)	ICA-30-24X	ICA-30-48X
<b>GENERAL</b>			
<b>Ventilation</b>	Forced cooling	Forced cooling	
<b>Temperature – Operation</b>	-20°C ~ +70°C	-20°C ~ +70°C	
<b>– Storage</b>	-25°C ~ +80°C	-25°C ~ +80°C	
<b>Protection</b>	Output short circuit, Over load, Battery overvoltage, Battery undervoltage, Battery reverse polarity detection, Over temp., High input voltage ripple		
<b>Humidity</b>	0~95% (non condensing)	0~95% (non condensing)	
<b>Power control Function</b>	√	√	
<b>Power assist Function</b>	√	√	
<b>Uninterrupted AC power</b>	√ (Less than 10 msec)	√ (Less than 10 msec)	
<b>Adaptive 4-stage charge</b>	√	√	
<b>Two output to charge 2 battery banks</b>	√	√	
<b>Auxiliary Relay</b>	X 3	X 3	
<b>Battery voltage sensor</b>	√	√	
<b>INVERTER</b>			
<b>Input Voltage Range (VDC)</b>	9.5 -16V / 19-32V / 38-64V		
<b>Output Voltage (VAC)</b>	185 ~ 240 VAC / 90~120 VAC		
<b>Output Frequency</b>	50Hz / 60Hz ± 0.1%		
<b>Output Waveform</b>	Pure sinewave		
<b>Output Voltage THD</b>	< 5%		
<b>Power Factor (All Loads)</b>	√		
<b>No linger load, crest factor</b>	3: 1		
<b>Cont. Power Output (W) Under 70°C (cos θ=1.0)</b>	1500W (No derate)	3000W (No derate)	
<b>Cont. Power Output (W) Over 70°C (cos θ=1.0)</b>	0W (Shutdown)	0W (Shutdown)	
<b>Maximum Power (W)</b>	3000W	6000W	
<b>Maximum Efficiency (%)</b>	82/84/85	84/86/89	
<b>Zero-load Power (W)</b>	8W	12W	

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

<b>CHARGER</b>	
<b>Input Voltage Range (VAC)</b>	200~250 VAC / 100~125 VAC
<b>Input Frequency</b>	45 - 55 Hz / 55 - 65 Hz
<b>Power Factor</b>	1
<b>Charge Characteristic</b>	4-stage adaptive / Bulk-Absorption-Float-Equalize
<b>Maximum DC Voltage Ripple (Vrms)</b>	< 1.25 V
<b>Charge Current House Battery (A)</b>	70A/40A/20A
<b>Charge Current Starter Battery (A)</b>	140A/70A/40A
<b>Absorption Voltage Default (VDC)</b>	14.4V / 28.8V / 57.6V
<b>Float voltage Default (VDC)</b>	13.8V / 27.6V / 55.2V
<b>Equalize Voltage default (VDC)</b>	13.2V / 26.4V / 52.8V
<b>Output Charge Voltage (min ~ max)</b>	8V~16V / 11V~32V / 22V~64V
<b>Battery Temperature sensor</b>	BTS-3
<b>AC INPUT SWITCH</b>	
<b>AC IN Terminal Circuit Breaker</b>	30A (110V) / 15A (220V) / 60A (110V) / 30A (220V)
<b>Switch-over Time</b>	
a. inverter to AC input	0 msec
b. AC input to inverter	0 msec
<b>Detection Time AC Input Fault</b>	4 ~ 10 msec
<b>Trip Level AC Input to Inverter</b>	90 VAC / 180 VAC
<b>Trip Level Inverter to AC Input</b>	94 VAC / 187 VAC
<b>Min.~ Max. Frequency Range</b>	45-55 Hz / 55-65 Hz
<b>MECHANICAL</b>	
<b>Cabinet / Protecting Class</b>	Aluminum / IP20
<b>Dimension (HxWxD)</b>	298 x 256 x 368 mm    355 x 256 x 368 mm
<b>Weight (kgs)</b>	16 kgs    35 kgs
<b>OPTIONS</b>	
<b>Remote Controller</b>	Remote monitoring available, optional cables: 3M/15M
<b>Battery Temperature Sensor (BTS-3)</b>	Compensation for the battery charging voltage and current

