

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 ($< 70^{\circ}\text{C}$)
- **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

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Specifications

MODEL	12 Volt System 24 Volt System 48 Volt System	ICA-15-12X (1) ICA-15-24X ICA-15-48X	ICA-30-12X (1) ICA-30-24X ICA-30-48X
GENERAL			
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	✓	✓	
INVERTER			
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	

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

CHARGER		
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	140A/70A/40A
Charge Current Starter Battery (A)	4A	
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	
AC INPUT SWITCH		
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	
MECHANICAL		
Cabinet / Protecting Class	Aluminum / IP20	
Dimension (HxWxD)	298 x 256 x 368 mm	355 x 256 x 368 mm
Weight (kgs)	16 kgs	35 kgs
OPTIONS		
Remote Controller	Remote monitoring available, optional cables: 3M/15M	
Battery Temperature Sensor (BTS-3)	Compensation for the battery charging voltage and current	