Overview

The QI series inverter charger is a residential energy storage system that integrates grid/generator charging, solar charging, utility bypass, inverter output, and intelligent energy management.This series features advanced DSP control technology, ensuring superior quality, stability, and reliability. With flexible configuration options, users can seamlessly switch between solar energy and utility power, optimizing energy utilization for maximum efficiency.

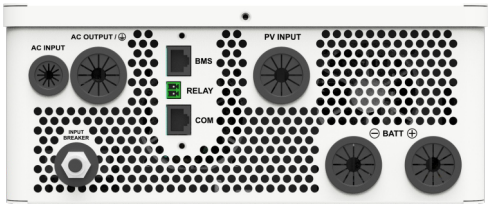
Designed to enhance power supply reliability, the QI series is superb option for solar and utility/generator hybrid power generation systems, delivering highly stable and dependable electricity for residential needs.

Features

- Pure sine wave output
- Digitalized energy storage system with multi-energy management
- Support battery mode & non battery mode
- Max. MPPT tracking efficiency >99.5%
- Support multiple generator and automatic start/stop control
- Battery charge/discharge current limits are compatible with various types of batteries
- Max. utility charging current settings: Flexibly configure utility charging power
- Prolong battery lifespan: Energy-saving mode & Low-voltage protection
- Historical data recording: Storage capacity of 25000 records(the interval time of 1-3600 seconds settable)
- One-button AC output control
- Large color LCD display for real-time monitoring
- RS485 interface:Optional 4G, WiFi, or TCP modules for remote monitoring
- Independent BMS communication interface
- Operating temperature range: -20°C~+50°C







Technical Specifications

Model	QI1012-0610C	QI1021-0415C
Battery		
Rated Voltage	12V	24V
Working Voltage Range	10.6V–16V	21.2V–32V
Inverter/charger Charging Current		
Maximum Charging Current	90A	45A
Utility Input		
Rated Voltage	220/230VAC	110/120VAC
Input Voltage (V)	170–280	80–140
Input Frequency	45Hz–65Hz	
Rated Input Power (Charging + Bypass)	1.5*Rated output power	
Maximum Charging Current	60ADC	30ADC
Inverter Output		
Rated Output Power	1,000W	
Surge Output Power (5S)	2*Rated output power	
Rated Output Voltage	220VAC ± 3%	110VAC ± 3%
Rated Output Frequency	50Hz	60Hz
	50/60Hz ± 0.2%	
Output Voltage Waveform	Pure Sine Wave	
Output Voltage THD	⩽ 3% (Resistive load)	
Output Soft Start	Supported	
Switch Response Time	⩽ 10ms	
Solar Controller		
Maximum Open-circuit Voltage	95V	145V
MPPT Maximum Efficiency	⩾ 99.5%	
MPPT Voltage Range	Battery voltage+2V~0.8*open-circuit voltage	Battery voltage+2V~0.8*open-circuit voltage
Number of MPPT	1	
Maximum Charging Current	60A	40A
Others		
Working Temperature Range	-20°C to +50°C (> 40°C derating)	-20°C to +50°C
Enclosure	IP20	
Altitude	< 4,000m (> 2,000m derating)	
Certification	EN IEC 61000-6-2; EN IEC 61000-6-4; EN IEC 61000-3-2; EN 61000-3-3; IEC 62109-1; IEC 62109-2	
Relative Humidity	< 95% (N.C.)	
Storage Temperature	-25°C to +60°C	
LCD	Color LCD, English interface	
Dimension (L × W × H)	265mm × 380mm × 110mm	
Net Weight	8kg	