



Energizr-100

- Off-grid or Grid-tied Renewable Energy Source
- Complete System, Integrated for Residential and Small Commercial Installations
- Various Ways to Power AC Loads
 - 48V Battery
 - o 120V/240V Renewable Energy
 - o 120V/240V Grid
 - o 120V/240V Generator
 - Output Power of 4.4kW
- Cloud-based Interface with Measurz
- Battery options
 - Chemistry: AGM; Nominal Capacity: 4.3 kWh
 - Chemistry: LiFePO4; Nominal Capacity: 8.8 kWh

Energizr 100 seamlessly brings together different sources of energy to power loads and manage a battery system. Energizr 100 creates a local microgrid so that grid-tied renewable energy inverters continue to generate electricity even during a black-out. In situations where the grid is available, the renewable resources are used to charge the system batteries, and then the excess renewable energy is used for net metering. When the grid is unavailable or if the loads' demand surpasses a pre-specified level, Energizr 100 uses the energy stored in the batteries to power local electrical loads and, at the same time, ensure that the PV or wind power generated is used to recharge the batteries. If the grid is unavailable and the batteries are fully charged, the renewables are controlled to prevent the batteries from overcharging.



All main sources power loads and charge batteries.



No AC grid. Renewables charge batteries and power loads (Optional generator)



No AC grid. Renewables and batteries power loads.



Battery system is powering loads. (optional generator)

Energizr-100 Smart Inverter

Data Sheet

GRID INPUT AND GENERATOR INPUT (AC)

Continuous AC Output Power (25° C)	5760 VA
Peak AC Output Power (25° C)	7200 VA
Input Voltage Range	120/240V Split-Phase (60V – 140V per leg)
Input Frequency Range	50 – 70 Hz
Surge Amps (overcurrent / fault limit)	L - L: 70 AAC (1 mSec), 40 AAC (100 mSec)
Maximum Continuous Current	24 AAC
Maximum Overcurrent Protection	30 AAC

LOADS OUTPUT (ON-GRID) (AC)

Continuous AC Output Power (25° C)	5760 VA
Peak AC Output Power (25° C)	7200 VA
Input Voltage Range	120/240V Split-Phase (60V – 140V per leg)
Input Frequency Range	50 – 70 Hz
Surge Amps (overcurrent / fault limit)	L - L: 70 AAC (1 mSec), 40 AAC (100 mSec)
Maximum Continuous Current	24 AAC
Maximum Overcurrent Protection	30 AAC

LOADS OUTPUT (OFF-GRID) (AC)

Continuous AC Output Power (25° C)	4400 VA
Peak AC Output Power (25° C)	4400 VA
Voltage Range	120/240V (+/- 5%) Split Phase
Frequency Range	60 Hz (+/- 0.1 Hz)
Maximum Continuous Current	18.3 AAC
Surge Amps (overcurrent / fault limit)	L – L: 70 AAC (1 mSec), 40 AAC (100 mSec)
Surge Power	8500 Real Watts (5 seconds)

RENEWABLES INPUT (ON-GRID AND OFF-GRID) (AC)

Continuous AC Output Power (25° C)	5760 VA
Peak AC Output Power (25° C)	7200 VA
Input Voltage Range	120/240V Split-Phase (60V – 140V per leg)
Input Frequency Range	50 – 70 Hz
Surge Amps (overcurrent / fault limit)	L - L: 70 AAC (1 mSec), 40 AAC (100 mSec)
Maximum Continuous Current	24 AAC
Maximum Overcurrent Protection	30 AAC

BATTERY PORT (DC)

L W b D	2/01//7/1///00///
Input Voltage Range	36.0V – 67.6V (48.0V Nominal)
Maximum Continuous Current	100 ADC
Surge Amps (overcurrent / fault limit)	140 ADC (1 mSec)
Maximum Torque for Battery Terminal	30 ftlbs. (40.6 Nm)
Temperature Compensation (External)	0° C – 50° C
Battery Chemistry Compatibility	LiFePO4, AGM, FLA, and Gel
Battery Chemistry Factory Options	LiFePO4 and AGM

Energizr-100 Smart Inverter

Data Sheet

MECHANICAL DATA AND CERTIFICATION

Dimensions of Energizr System (L x W x H)	93.75" (238.125 cm) x 16" (40.64 cm) x 9" (22.86 cm)
Inverter Weight	96 lbs. (43.5 kg)
Junction Box Weight	11 lbs. (5 kg)
Battery Rack Weight	312 lbs. (141.5 kg)
Total Weight	419 lbs. (190 kg)
Certifications (UL)	Certified to UL 1741, 2nd Edition
Certifications (CSA)	Certified to CSA STD c22.2 No. 107.1-01

Specifications subject to change without notice – please ensure this is the most recent update found at www.ilmei.com