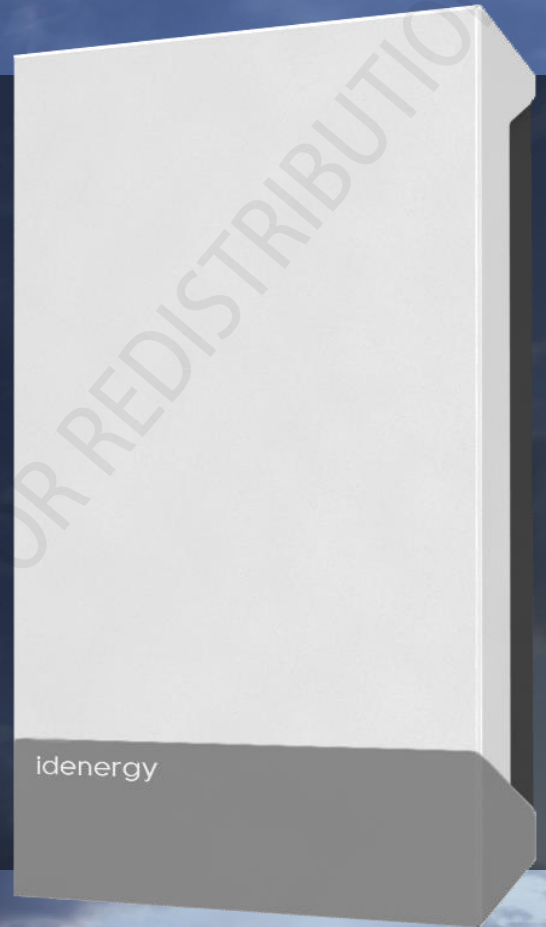
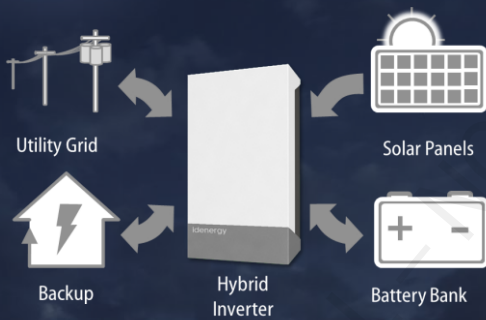


The smartest residential hybrid inverter, battery charger and solar inverter out there, all united in a single platform!

8 kVA hybrid inverter for complete home energy autonomy

- Single module to install, lightweight
- Silent – No fans – 0 dB
- Indoor/Outdoor installation
- Advanced communication system and signal control technology exceeding the latest standards
- Solar power production • Home battery charging
- Backup loads support • Grid-tied/Off Grid



Powered by

idenergy™

Outdoor, fanless, silent

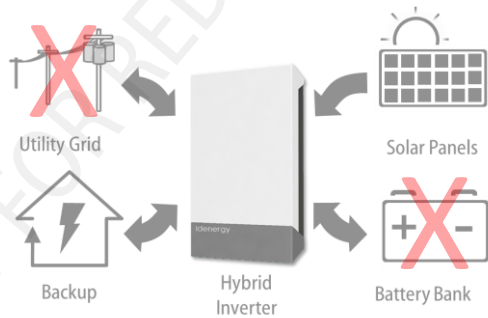
Thanks to their highly efficient power electronics design, our inverters are cooled through natural convection and are completely NEMA 3R compliant.

- Natural Convection → **No Fan, Silent, Reliable**
- High Power Density → **Lightweight, Compact**
- Improved Efficiency → **Increased Lifetime**



Expandable system for net metering

Our hybrid inverter does not require batteries to operate. The user can choose to use our system as a net metering unit, harvesting energy from the sun. During outages, the sun can provide energy for backup loads. Batteries, which will guarantee power when sunlight is absent, can be added later.

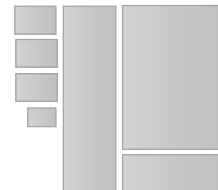


Small footprint, lightweight

When it comes to installation, especially where batteries are involved, inverters are large and heavy, require a lot of hardware and occupy a lot of wall space. We designed our technology with the latest high-frequency switching devices and using the lightest passive components to make your life easier.



idenergy



Others

Introducing Idenergy's Power Converters

Configuration assistant

Our interface simplifies installation by providing professional installers with a step-by-step interactive assistant. For example, battery configuration is done by answering simple questions, from dimensioning and charging parameters to smart scheduling. The user is asked to review the result in the form of a checklist. For advanced electrical problems, the system also provide an embedded oscilloscope feature to visualize the signals.



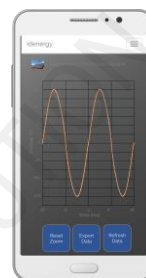
Friendly user interface for remote access.



Programmable battery schedules in a click.



Battery bank configuration assistant

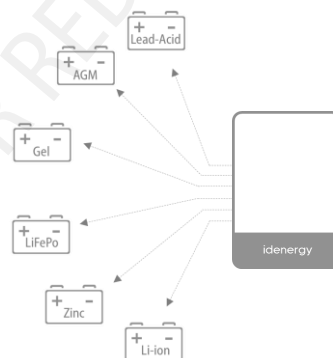


Remote oscilloscope sampling

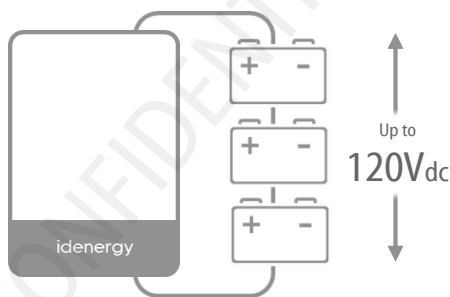
Flexible battery system

Our charger has been designed to adapt to all types of batteries, whatever the voltage or chemistry:

- Charges up to 120 V DC and maximize charge / discharge power
- Charges from 0 V – allows batteries to travel discharged to installation site, or to be recovered after a complete accidental discharge
- Accepts any type of chemistry (LiFePO₄, Lead-Acid, AGM, Gel, Zinc and Li-ion)
- Can adapt with BMSs (battery management systems) through protocols such as MODBUS.



High-voltage battery banks for higher charging capacity



Our charger has been designed to adapt to various levels of battery string voltages, up to 120 V, granting extra charging power capacity as the voltage rises:

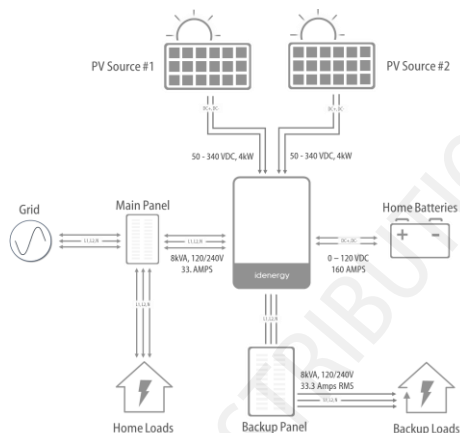
Battery String Voltage	Max Charging Capacity
24V	4 kW
48V	8 kW
96V	16 kW

Specifications (preliminary)

System connections

Our hybrid inverter contains all the means of connections in one central box

- Output for backup panel for critical emergency loads
- 2 solar PV string inputs with independent MPPTs
- Grid-tied connection, not requiring batteries
- Accepts battery strings from 0 V up to 120 V.
- Backup generator input up to 8 kW



General specifications

Product name	Hybrid Inverter
Product number	HINV06
Idle consumption (invert mode, no load)	5 W
Max efficiency at full load (Solar → Load)	95,4 %
Max efficiency at full load (Solar → Battery)	91 %
Total harmonic distortion	< 3%

Inverter channel-specific

Topology	Single-phase inverter
Continuous (grid-tied) input / output power at 25°C	8 kVA (240 V split phase)
Continuous (backup load) input / output power at 25°C	8 kVA (240 V split phase)
Continuous (generator) input power at 25°C	8 kVA (240 V split phase)
AC input / output frequency range	50 Hz-60 Hz
Power factor	0,025 to 1 lagging or leading

Battery charger-specific

Voltage range	0-120 VDC
Nominal current	150 Amps
Maximum charging capacity at 24V, 48V and 96V respectively	4 kW, 8 kW, 16 kW
Charge control	Bulk, Absorb, Float, Equalize, Custom
Compatible battery types	Flooded, Gel, AGM, Lead, LiFePO ₄ , Li-ion*

MPPT specific

Number of channels	2
Maximum usable power / channel	4 kW
Operating MPPT voltage range	50 Vdc - 340 Vdc
Maximum voltage input	400V

Physical specifications

Temperature range (operating)	-13 °F to 122 °F / -25 °C to 50 °C
Weight (unit)	66 lbs (30 kg)
Dimensions (W x H x D)	20" x 32" x 5.33" (355 mm x 812 mm x 13.7 mm)
Mounting	Wall-mounted
Degree of protection	NEMA 3R (outdoor)
Chassis type / cooling	Natural convection
Max operating altitude	6560 ft (2000 m)

Communications and smart features

Smart features	California Rule 21 requirements phases I & II
System monitoring and communications	High-speed fiber optics (4.6 Mbps), Ethernet (RJ45), embedded Wi-Fi server
Supported communication protocols	Sunspec (MODBUS)
Remote upgradable firmware	Yes

Certifications (2020)

Compliance	UL 1741, IEEE1547, CSA-C22.2N. 107.1-01, UL1998 UL1699B, FCC Part 15
Built-in Protections	GFDI, (rapid shutdown), anti-islanding protection, arc fault detection
Rohs compliant	Yes
Warranty	5 years