

ELIOS | INVERSA 1812



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all in
one

18|12K
Hybrid
Solar
Inverter
Charger

power
your place

enjoy
green life

ELIOS | INVERSA 1812



hybrid series High Performance Inverter

The New Hybrid Series High Performance Inverter delivers exceptional performance and unsurpassed quality in an All-In-One Solution for all your Energy needs.

Volts Energies has gone ABOVE and BEYOND to bring you the best technologies available meeting the ever changing demands of the renewable energy market.



Applications

Solar Energy | Back-Up Energy Systems | Home, Office and Trailer

Multiple Protection Management System | Electric applications with high energy requirements

Smart LCD
Touchscreen
Display

Multiple
Operation
Modes

Parallel
Integration
Capability

AC
Coupling
Capabilities

Fully
Programmable
Settings

Model

18/12K-200-120/240-UL

Key Features

- 120V/240V Split phase Pure Sine Wave
- Self-consumption and feed-in to the grid.
- Auto restart while AC is recovering.
- Multiple Programming Possibilities
- Operation modes: On grid, off grid and UPS. Configurable battery
- Generator Charger Settings
- WIFI Cloud Monitoring
- Multiple Stages Protection
- Smart Battery Charging
- Smart MPPT Charging System
- Time of use function.
- Smart Load Function.
- 12kW EPS Output
- 10 Units Paralleling
- AC Coupling Function
- 4 MPPT Input for max Input 18kW
- Separated Generator Input
- 200A AC Passthrough Current
- Peak Shaving Function
- 5in Color LCD, Touch Screen
- 10 Years limited Warranty



UNPARALLEL SAFETY

ELIOS INVERSA Hybrid Series Inverter includes a complete Intelligent Energy Management System. In addition to be Multiconnection ready, this system also comes with safety features such as PV Arc Fault Detection, PV Input Lightning Protection, Output Over Current Protection and many other protection protocols.



UNSURPASSED PERFORMANCE

Our ELIOS INVERSA Inverter is designed to excel in every application. With up to 250A continuous discharge current, rest assured the Volts Energies Hybrid Inverter will deliver the energy you need when you need every time.



EASY INSTALLATION

The ELIOS INVERSA Hybrid Series Inverter can work as a stand-alone unit or can be mounted as a wall accessory. That sleek compact design not only saves you space, but will definitely improve the look of your renewable energy system.



LONG LIFE DESIGN

With an IP65 protection rating, ELIOS INVERSA Series has been developed to withstand harsh weather and temperatures, making it the best of its kind.

All our products are born from meticulous research and development and from rigorous testing. The Hybrid 18/12K-200-120/240-UL Series is no exception, offering you total versatility without sacrificing performance and reliability.

Our quality assurance is backed up by a 10 year limited warranty.

ELIOS

INVERSA 1812

SPECIFICATIONS



all in one

18|12K Hybrid Solar Inverter Charger

POWER Inverters
18/12K-200-120/240-UL

Battery Parameters

Compatible Battery Type	Lead-acid / Lithium
Nominal Battery Voltage	48V
Battery Voltage Range	40V~60V
Maximun Charging/Discharging Current	250A / 250A
Maximun Charging/Discharging Power	12000W

Input DC (PV Side)

Max. DC Input Power for Single MPPT	12000W / 7000W / 7000W
Max. PV Input Power	18000W
DC Input Voltage Range	100V~600V
Nominal DC Input Voltage	360V
Full Power MPPT Voltage Range	230~500V
Max. DC Input Current	25A / 15A / 15A
MPPT Number/(Strings per MPPT)	3(2/1/1)

Output/Input AC (Grid)

Nominal Power	12000W
Nominal AC Voltage	120 / 240V Split Phase
Operating Voltage Range	180V~270V
Max. Continuous AC Current	50A @ 240V
Nominal AC Frequency	50Hz / 60Hz
Pass Through Relay	200A

UPS Output-with Battery

UPS Max. Output Power	12000W
UPS Nominal Output Voltage	120 / 240V Split Phase
UPS Nominal Output Frequency	50Hz / 60Hz
UPS Nominal Output Current	50A @ 240V
Peak Power	14kW 10minutes / 16kW 5minutes / 20kW 500ms
Switching Time	<20ms

Efficiency

MPPT Efficiency	99.9%
Max. Efficiency	97.5%
EU Efficiency	96.5%
Battery Charging Efficiency	95.0%
Battery Discharging Efficiency	94.5%

Protection

Anti-islanding Protection	YES
DC Switch	YES
Ingress Protect Degree	IP65
SPD Protection	YES
AFCI	YES
RSD	YES

General Data

Dimension	31.1 in x 20.5 in x 11.2 in
Weight	42kg
Display	Color LCD
Topology	Transformer-less
Ambient Temperature Range	-25°C~60°C
Cooling	FAN
Communication	RS485 / Wi-Fi / CAN

Standard & Certification

EMC	IEEE1547, FCC, SDOC
Safety Standard	UL 1741
Grid Standards	IEEE1547
Warranty	10 years limited