

Hybrid Energy 3.0

Single-phase on-grid hybrid inverter with Energy Storage



Efficiency

This high performance hybrid inverter has an efficiency of more than 96 % to deliver the maximum power.

Programmable

You can choose how the hybrid inverter is going to priority the produced energy. You can choose between the PV, Battery or Grid

Battery charger

This hybrid inverter has an user adjustable charging current, that suits different types of batteries

Monitoring

Monitoring software for real time status display and control

Self-consumption

The hybrid inverter can be used as either a normal inverter or store the energy to the battery bank

Communication

The Hybrid Energy 3.0 has multiple communication for USB, RS-232, Modbus and SNMP

Multiple working modes

Programmable multiple operations modes: On Grid, Off grid, and On grid with backup

Build-in timer

Built-in Timer for various mode of on/off operation

Technical specifications of the Hybrid Energy 3.0

More information's on our website www.sunto.dk

PARAMETER	HYBRID ENERGY 3.0
PHASE	1-phase in / 1-phase out
RATED OUTPUT POWER	3000 W
ON GRID	
DC INPUT	
Max DC input power	4500 Watt
Nominal DC voltage / Max DC voltage	360 V / 500 V
Turn-on voltage / initial feeding voltage	116 V / 150 V
MPP voltage range	250 V ~ 450 V
MPP trackers / Max input current	1 / 1 x 18 A
AC OUTPUT	
Nominal output voltage	208 / 220 / 230 / 240 V
Output voltage range	184 – 264,5 V
Maximum output current	13 A per phase
Power Factor	> 0,99
EFFICIENCY	
Max. efficiency	> 96%
Euro efficiency	> 95%
HYBRID	
DC INPUT	
Nominal DC voltage / Max DC voltage	360 V / 500 V
Turn on voltage / initial feeding voltage	116 V / 150 V
MPP voltage range	250 V ~ 450 V
MPP trackers / Max input current	1 / 1 x 18 A
AC INPUT	
Turn on voltage / Auto restart voltage	120 -140 V / 180 V
Input Voltage Range	170 - 280 V
Max AC input current	30 A
AC OUTPUT	
Nominal output voltage	208 / 220 / 230 / 240 V
Output voltage range	184 – 264,5 V*
Maximum output current	13 A per phase
BATTERY AC MODE	
Nominal output voltage	208 / 220 / 230 / 240 V
Efficiency	93%
Nominal DC voltage	48 V
Max charging current (Adjustable)	25 A



Additional technical specifications of the Hybrid Energy 3.0

More information's on our website www.sunto.dk

OFF GRID	HYBRID ENERGY 3.0
DC INPUT	
Max DC voltage	500 V
MPP voltage range	250 V ~ 450 V
MPP tackers / Max input current	1 / 1 x 18 A
AC INPUT	
Turn on voltage / Auto restart voltage	120 -140 V / 180 V
Input Voltage Range	170 - 280 V
Max AC input current	30 A
BATTERY AC MODE	
Nominal output voltage	208 / 220 / 230 / 240 V
Output waveform	Pure Sine wave
Efficiency	93%
GENERAL INFORMATIONS	
ENVIROMENT	
Humidity (RH)	0 ~ 90% (No condensing)
Operating Temperature -10 to 55°C	0 to 40°C
Altitude	0 ~ 1000 m**
PHYSICAL INFORMATION	
Communication port	RS-232 / USB
Intelligent Slot	Optional SNMP, Modbus, and AS-400 cards available
Net weight (kg)	15,5
Dimension, D X W X H (cm)	10,7 x 43,8 x 48,0
Warranty	5 years
APPROVAL	
APPROVED BY ENERGINET (DENMARK)	Februar 2015
APPROVED BY EUROFINS	VDE-AR-N 4105
APPROVED BY EUROFINS	CE

* The output voltage range may vary, depending on the country requirements.

** Every 100 m when altitude is over 1000m, the power is derating 1%