

## HYBRID INVERTER

### ULTRA HYBRID PRO 12K 3F



#### Features

- Combines the function of an on-grid and off-grid
- Easy parameters configuration via LCD touchscreen
- Built-in Smart Meter and current transformers included with the inverter
- Cooperation with the Ultra 5 energy storage
- Short-circuit, overload and temperature protection
- Computer software via USB or external WIFI remote control module included (view and control of parameters)
- Compatible with the system BMS
- 3-phase power supply with continuous power up to 12kW without mains power
- Possibility to connect a 3-phase generator with autostart option (built-in relay)
- 5 operating modes: Store Mode, Load First Mode, Battery First Mode, Grid First Mode and Advanced Mode (manual setting of the operating mode for different hours of the day)
- Possibility of parallel operation of up to three inverters
- Possibility of cooperation with other inverters connected to the building's electrical installation (charging the battery with surplus energy from another inverter)

#### How does hybrid inverter combines the function of on-grid/off-grid?

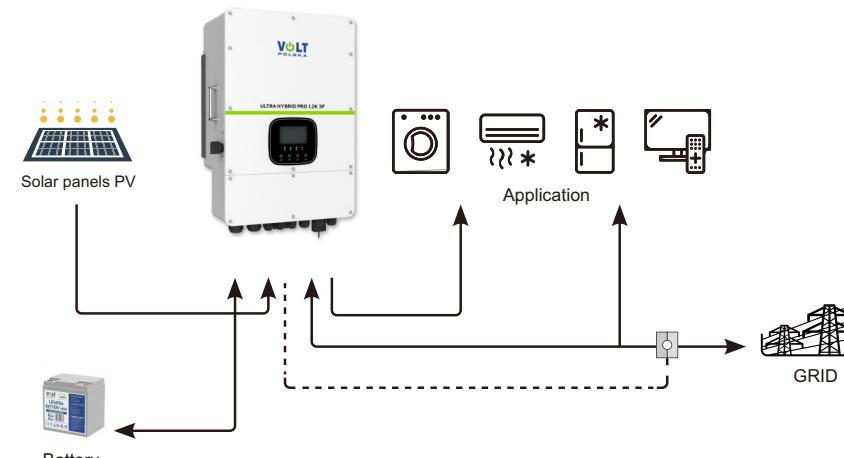
##### On-grid:

In on-grid when the photovoltaic installation is connected to the user's electrical installation the hybrid inverter works like a typical on-grid inverter. It converts direct current (DC) generated by solar panels into alternating current (AC). Thanks to that we can power electrical devices in the house. Surplus energy is sent via the inverter to the power grid.

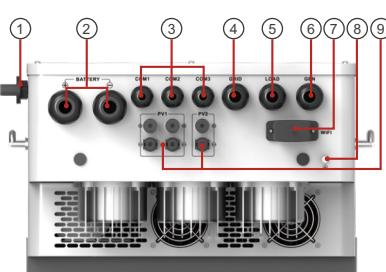
##### Off-grid:

In off-grid the hybrid inverter operates independently of the user's electrical installation. The energy obtained from solar panels is stored in batteries and then transferred to the connected devices we want to power.

#### Solar system connection



#### Back panel description



- DC switch
- Battery input connectors
- BTS terminals, BMS terminals, load monitor terminals, dry contact terminals, CAN communication terminals, USB terminal and cover
- Circuit breaker of Grid
- Load
- Generator input
- WiFi Interface
- Ground
- PV input with two MPPT

INDEKS: 3SSHZ9123F  
EAN: 5904100452279

## Specification

Model		ULTRA HYBRID 12000
Current power		12000W
PV Input (DC)	Max DC Input Power	15600W
	Nominal DC operating voltage	550V
	Maximum DC voltage	800V
	MPPT voltage range	200-650V
	Maximum input current	13A/26A
	Number of MPPT tracker	2
Inverter Output (AC)	Strings per MPPT tracker	3
	Output voltage range	220/230/240V; 180-280V
	Maximum output current	20/19,1A
	Frequency (Hz)	50/60Hz; 45-55/55-65Hz
Battery	Grid type	3 phase
	Battery voltage	48V
	Battery voltage range	40-60V
	Maximum charging current	240A
	Output waveform	Pure sine wave
	Protections: short circuit, overload, temperature	Yes
	Maximum efficiency	97,10%
	Operating Temperature	(-25~60°C >45°C)
	Interfejs	RS485/CAN
	Cooling	Fans
	Dimensions	446x692x260mm
	Weight	38kg
	Gross dimensions	816x567x404mm
	Gross Weight	46kg