



Qoltec Modular Hybrid Solar Inverter Off-Grid 5kW | 80A | 48V | MPPT | Sinus

Product code: 53888

The off-grid hybrid inverter converts the energy created by PV modules into energy needed to power electrical appliances. It works as a solar charger and battery charger. Equipped with a multifunctional LCD display that records operating data allowing continuous monitoring and management of the entire system. The inverter operates in off-grid mode.

It has a built-in 80A MPPT charge controller. Possible increase in system capacity to 45kW by connecting 9 units in parallel.

HOW DOES THE OFF-GRID HYBRID INVERTER WORK?

The efficiency of a solar PV system depends on the selection of the right inverter, or solar inverter. The inverter performs a key function in this system, changing the DC current generated by the solar PV panels into AC current used by household appliances.

The off-grid hybrid inverter combines the solar PV system, energy storage and the power grid. During the day, it charges the energy storage from the photovoltaic panels. The energy storage unit powers household appliances from the stored energy during the day, and when the batteries are discharged, it draws energy from the grid.

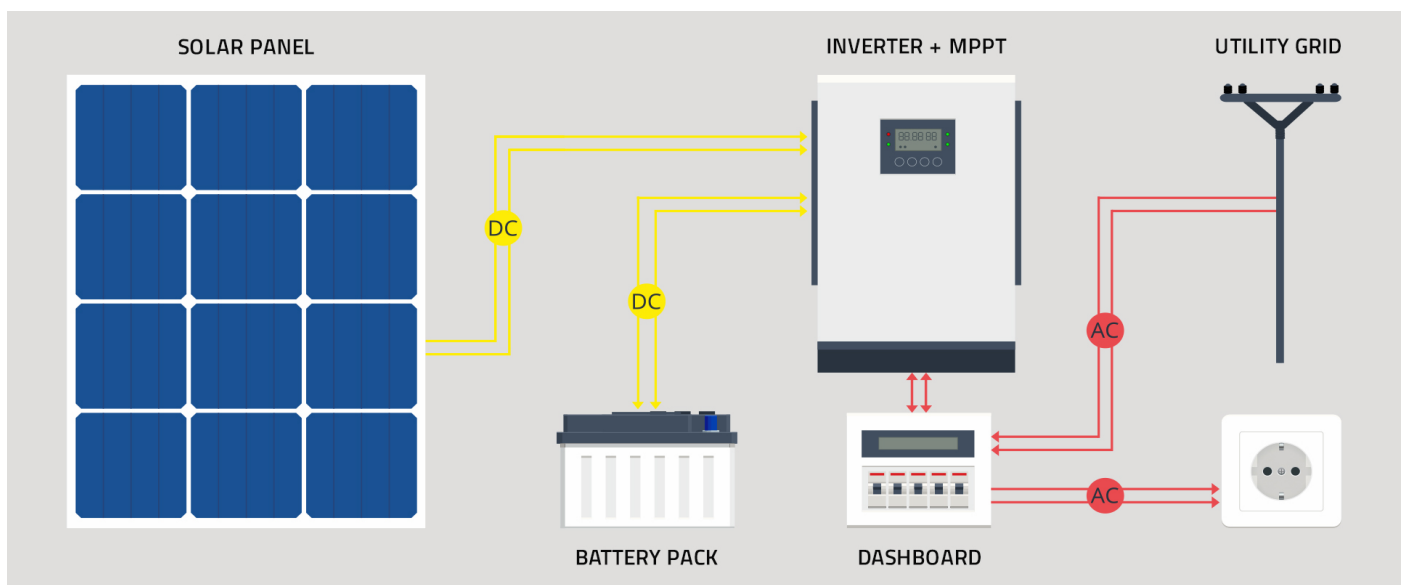
The inverter works in off-grid mode, using excess solar energy to power consumers and charge the battery. In the event of an emergency, current is drawn from the solar PV system to the energy storage and can safely and uninterruptedly ensure the continuous operation of our appliances.

WHY SHOULD YOU CHOOSE A HYBRID INVERTER ?



- Pure sine wave,
- Capable of being powered from the mains or, if not possible, from energy storage,
- Automatic restart when AC power is restored,
- Short circuit, overheat and overload protection,
- Configurable input voltage range for home appliances and personal computers via LCD settings,
- configurable battery charging current settings,
- single-phase,
- intelligent charger design for optimal battery performance,
- Customizable AC/Solar charger priority settings via LCD display,
- Cold start function,
- Built-in MPPT 80A charge controller,
- Built-in dust kit for harsh environments,
- Wall mountable,
- Possibility to connect 9 batteries under 1 inverter.

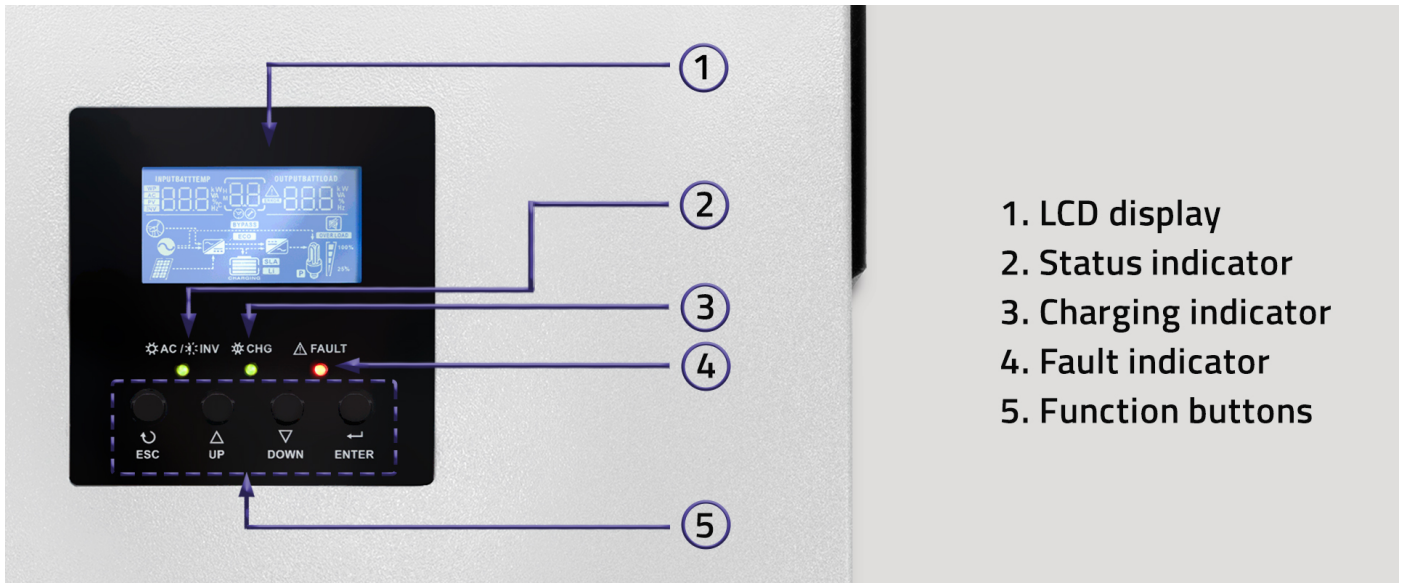
MAXIMIZE THE POSSIBILITIES WITH MPPT TECHNOLOGY



The battery charging inverter uses a state-of-the-art 80A MPPT charge controller to maximize the power drawn from the photovoltaic panels, using advanced maximum power point tracking technology.

Having this feature significantly affects the efficiency of the photovoltaic installation—they can maintain high power even in low sunlight conditions. In addition, the controller controls the battery operation and charging process and protects the battery from damage.

MULTIFUNCTION LCD DISPLAY



The product is equipped with a multifunctional, easy-to-use LCD display with control panel. Facilitates monitoring of the entire photovoltaic installation. Allows you to configure the input voltage range for home appliances and personal computers or change the priority settings of the AC/Solar charger. In addition, the display records data and informs about failures, reacting accordingly if any of the parameters exceed the norm. If a fault occurs, the inverter shuts down.

INCREASE INSTALLATION EFFICIENCY



Possible increase in system capacity to 45kW by connecting 9 units in parallel.

CONFIDENCE CONFIRMED BY A WARRANTY

The product comes with a 24-month warranty from the date of purchase.

TECHNICAL DATA

Producer	Qoltec
Type	Off-Grid
Phase	1
Parallel capability	9
Rated Power	5000VA/5000W
Input parameters	
Nominal Input voltage	230 VAC
Input Voltage Range	90 ~ 280 VAC
Working frequency	60/50 HZ
Output parameters	
Maximum power	10000 VA
Efficiency	90 %
Transfer time	10 ms (PC) 20 ms (home appliances)
Waveform	Pure sine wave
BATTERY PARAMETERS	
Type of charging	MPPT
Battery voltage	48 VDC
Battery charging voltage	54 VDC
Maximum charging current	80 A
Battery overcharge protection	66 VDC
Maximum battery charging current from PV	80 A
Built-in battery	No
PV PARAMETERS	
Maximum PV array open circuit power	4500 W
Maximum solar charge current	80 A
MPPT operating voltage range	120 ~ 430VDC
Maximum PV array open circuit voltage	450 VDC
OTHER PARAMETERS	
Screen	LCD
Interface	USB/RS232
Connector diameter	M6 ~ 6 mm
Cooling system	2x fans
Noise level	45 dB
Protection	Anti-short-circuit Surge protection Thermal Overload
Colour	Silver, Black
Working temperature	0°C ~ +55°C
Storage temperature	-15°C do +60°C
Package depth / length [mm]	590
Package height [mm]	250
Package width [mm]	390
Net weight [kg]	11.090

Gross weight [kg]	12.500
Certificate	CE
Warranty	24 month
EAN code	5901878538884