

volta

ELECTRIC

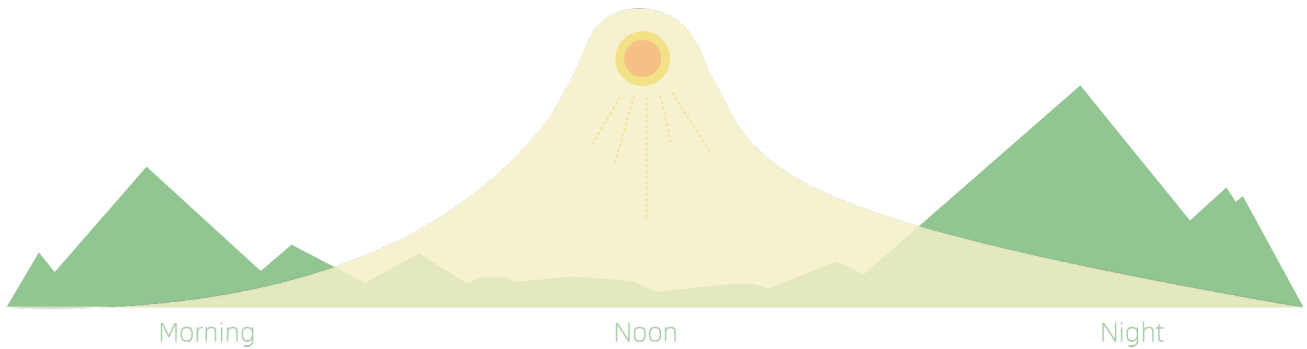
Unlimited Power

Solar inverters and batteries



Designed in AZ, USA
Manufactured in Qatar

Solar Energy Flow



Morning:

Minimal energy production, high energy demand.

At sunrise the solar panels start

to power generation, though not enough to cover the energy needs.

The battery will fill the gap with the stored energy.

Midday:

Highest energy production, low energy demand.

In the day time, the energy generated from the solar panels is at its peak.

But energy consumption is low so that most of the generated energy is stored in the Battery

Evening:

Low energy production, high energy demand.

The highest daily energy consumption & solar panels produce little or no energy.

The battery will cover the energy needs with the energy storage.

5.12kwh wall mounted lithium battery



PARAMETER	VALUE
Rated energy (kWh)	5.12
Nominal Voltage (V)	51.2
Working voltage (V)	42 - 58.4
Normal Capacity (Ah)	100 Ah
Rated charge / discharge current (A)	50 / 100 @ 25 ± 2 °C
Maximum charging current	100 A @ 25 ± 2 °C
Maximum discharging current	100 A @ 25 ± 2 °C
Working Temperature	0 ~ 40 °C (Charge) -20 ~ 40°C (Discharge)
Humidity %	5 ~ 95 %
Altitude Limited (m)	0 - 3000
Weight (kg)	48 ± 3
Dimension (mm)	580x460x172
Storage temperature and humidity	-10°C~35°C (Within one month of storage) 25±2°C (Within three months) 65%RH
Cycle life	6000 Cycles @ 25°C 80%DOD
IP Grade	IP20
Comunication mode	CAN&RS485
Warranty	5 years

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10.24 kwh wall mounted lithium battery



PARAMETER	VALUE
Battery Configuration	2P16S
Rated Voltage (V)	51.2
Working voltage (V)	43.2 - 58.4
Rated Capacity (Ah)	200 Ah
Rated charge / discharge current (A)	50 @ 25 ± 2 °C
Maximum charging current	100 A @ 25 ± 2 °C
Maximum discharging current	100 A @ 25 ± 2 °C
Working Temperature	0 ~ 40 °C (Charge) -20 ~ 40°C (Discharge)
Humidity %	5 ~ 80 %
Altitude Limited (m)	0 - 3000
Weight (kg)	98 ± 3
Dimension (mm)	830x520x159
Storage temperature and humidity	-10°C~35°C (Within one month of storage) 25±2°C (Within three months) 65%RH
Cycle life	6000 Cycles @ 25°C 80%DOD
IP Grade	IP20
Communication mode	CAN&RS485
Warranty	5 years

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Hybrid Solar Inverter



PV ARRAY

Max. PV Array Power	6600W
Max. PV Array Power Open-Circuit	500 VDC
Start-up Voltage	100 VDC
MPPT Operating Voltage Range	120 - 450 VDC
Nomina Input Voltage	360VDC
Max. Input Current MPPT	20 A
MPPT max Efficiency	99%

BATTERY

Battery Type	Li - ion / Lead-acid
Nominal Battery Voltage	48 V
Battery Voltage Range	41 - 58V
Max. AC Charging Current	40 A
Max. PV Charging Current	100 A
Max. Continuous Discharging Current	120 A

AC INPUT

Nominal Voltage AC	120 (single) / 240 (split)
Voltage Range	90-140 / 180-280
Frequency	50/60 Hz (Auto sensing)
Max. Input Current	40 A

AC OUTPUT

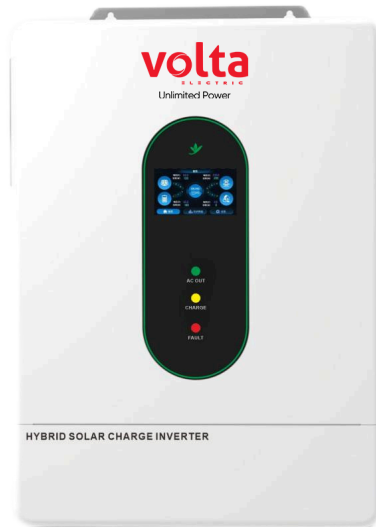
Nominal Voltage (V AC)	120 ± 5% / 240 ± 5%
Output Voltage Waveform	Pure Sine Wave
Rated Output Power	5500 VA / 5500 W
Peak Output Power	8000 VA
Nomina Output Frequency	50/60 Hz
Transfer Time	10 ms
Efficiency (peak) PV to INV	96.5%
Efficiency (peak) BAT to INV	93.0%

GENERAL DATA

Operating Temperature Range	-10 -- +50°C
Relative Humidity	0 ~ 95%
Max. Operanting Altitude	<4000 m
Cooling Method	Intelligent Fan cooling
Display	LED + LCD
Communication with BMS	RS485
Communication with Cloud	WiFi/4G
IP protection	IP21
Weight(kg)	9
Dimension (W*H*D mm)	373*105*300

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Hybrid Solar Inverter



48-500P

Battery Voltage	48V
Battery Type	Lead acid or Lithium

INVERTER OUTPUT

Rated Power (Split / Single) [W]	10000 / 7200
Paralell Capability	Yes, max. 6 units
Nominal Voltage (VAC)	120 (L1/N , L2/N) / 240 (L1/L2)
Surge Power (W)	15000 (Split)
Battery Type	Lead acid or Lithium
Efficiency (Preak)	95%
Output Voltage Waveform	Pure Sine Wave
Transfer Time	10 ms
Nominal Output Frequency	50/60 Hz

AC CHARGER

AC Input Voltage	120 (L1/N , L2/N) / 240 (L1/L2)
Input phase Voltage Range	(85 - 140) ± 2%
Frequency	50/60 Hz (Auto sensing)

PHYSICAL

Dimension (L*W*D mm)	620X450X132
Weight(kg)	23.8
Cooling Method	Intelligent Fan cooling
Communication	0USB/RS485(WiFi/GPRS)

OPERATING ENVIRONMENT

Operating Temperature Range	-10°C -- +50°C
Relative Humidity	5% ~ 95%
Storage Temperature	-25°C -- +60°C
Safety Certification	UL STD.1741
EMC certification level	FCC part15, CLASS B
Noise	<61dB
Overload Protection	(102% < Load < 110%) ± 5%

All-in-one Machine



PARAMETER	VALUE
Rated output power	5000 W
Battery capacity	4800 Wh
Rated Output Frequency	50/60 Hz
Maximum photovoltaic charging current	30 A
MPPT voltage range	120 - 450 V DC
Operating temperature range	Discharge: -15°C ~ 55°C / Charge: 0°C ~ 45°C
Peak power	10.000 VA
Battery type	LiFePO4
Maximum photovoltaic input power	6000 W
Input Voltage Range	90 ~ 140 VAC
Class of protection	IP55
Heat dissipation mode	Intelligent Fan cooling
Display screen	Support
Operating key	Support
Weight(kg)	70
Dimension (L*W*H mm)	640x340x510

All in one floor stand BESS

PARAMETER	VALUE
Rated output power	5000 W
Battery capacity	4800 Wh
Rated Output Frequency	50/60 Hz
Maximum photovoltaic charging current	30 A
MPPT voltage range	120 - 450 V DC
Operating temperature range	Discharge: -15°C ~ 55°C / Charge: 0°C ~ 45°C
Peak power	10.000 VA
Battery type	LiFePO4
Maximum photovoltaic input power	6000 W
Input Voltage Range	90 ~ 140 VAC
Class of protection	IP55
Heat dissipation mode	Intelligent Fan cooling
Display screen	Support
Operating key	Support
Weight(kg)	70
Dimension (L*W*H mm)	640x340x510

