

# Energy Storage Hybrid Bi-Directional Solar Inverter



## Performance

- Wide input voltage range.
- Compatible with lead-acid or lithium-ion batteries or other battery.

## Design

- User-friendly, light weight, intelligent operation.
- Natural cooling, low noise.
- IP65 , wall mounted design, saving space.
- Touch screen LCD.

## Reliable

- Compatible with lead-acid or lithium-ion.
- Batteries or other energy storage system.

## Advanced

- Smart energy management system for home or office use.
- Independent power supply and critical demand response management.
- Remote virtual monitoring power management.

## Application



Office



Communication  
Base Station



Temporary Shelter



Power Plant

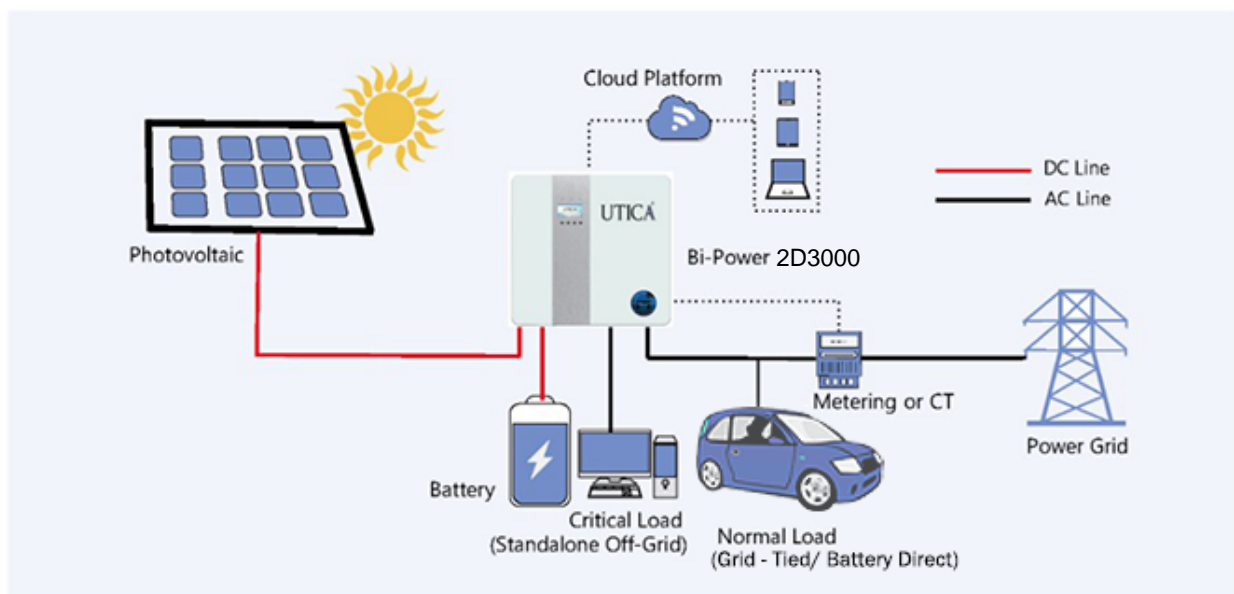


Household



Emergency  
Power Supply

## Product Topology



Model	Bi-Power 2D3000
<b>DC input</b>	
Max. Input Power	4600W
Start-up voltage	125V
Max. PV voltage	550V
MPPT range/nominal	125V-550V /360V
Max. input current	14A/14A
MPPT tracker/strings	2/1
<b>AC output</b>	
Rated power w/va	3000VA/3000W
Max. output current	13A
Nominal voltage/range	230V /180Vac~280Vac
Frequency	50 /60Hz
PF	1(0.8lagging-0.8leading)
THDI	<3%
AC output topology	L+N+PE
<b>Battery</b>	
Battery voltage range	42~59V
Max. charging voltage	58V
Charge/discharge current	95A/62.5A
Battery type	lithium /Lead-acid (2.4kWh storage included)
Communication interface	CAN/RS485
<b>EPS output</b>	
Rated power w/va	3000VA/3000W
Rated voltage	230Vac
Rated current	13A
Rated frequency	50 /60Hz
Automatic switchover time	<20ms
THDU	<2%
<b>General data</b>	
Battery chage/discharge	95.5%/95%
DC max. efficiency	97.6%
Euro efficiency	97%
MPPT efficiency	99.9%
Protection class	IP65
Noise emission (typical)	<35dB
Operation temperature	-25°C~+60°C
Cooling	Natural
Relative humidity	0~95% (non-condensing)
Altitude	2000m
Dimensions (WDXH)	550X200X515mm
Weight	25kg
Inverter topology	Without transformer
Self-consumption	<3W
<b>Features</b>	
Display	LCD
Interface:rs485/wifi/lan /can/drm	yes /opt/opt/yes/yes
Certificates	CE, TUV

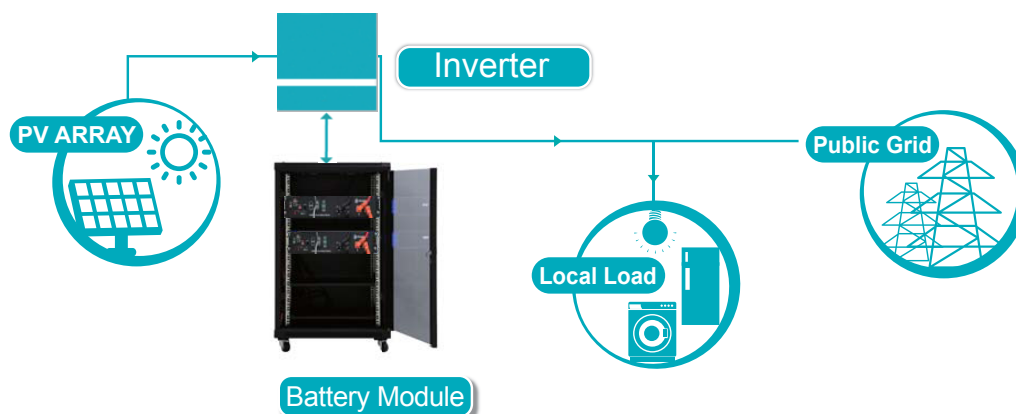


# LOW VOLTAGE ENERGY STORAGE SYSTEM —FOR RESIDENTIAL AND SME



## Advantages

- ◆ Vertical industry integration ensures more than 6000 cycles with 80% DoD
- ◆ Compact and fashionable design fits in your sweet home environment
- ◆ Deliver up to 5KW with single module (2.4KWh)
- ◆ Modular design gives the end customers the power of choice of capacity
- ◆ Compatible with most of the available Hybrid inverters
- ◆ Simple buckle fixing minimize the installation time and cost
- ◆ Safety Cert.TÜV CE UN38.3 TLC



## Features

Developed with our own LFP (lithium iron phosphate) cell to ensure the highest safety and most promising cycle life.

Self-designed BMS protects the cell in all angels such as abnormal temperature, current, voltage, SoC, SoH

No maintenance and easy installation saves the valuable main power.

## Specifications

Basic Parameters	U48 - 50C
Nominal Voltage (V)	48
Nominal Capacity (Wh)	2400
Usable Capacity (Wh)	2280
Dimension (mm)	440*410*89
Weight (Kg)	22.5
Discharge Voltage (V)	44.5 ~ 53.5
Charge Voltage (V)	52.5 ~ 53.5
Recommend Charge/Discharge Current (A)	25
Max. Charge/Discharge Current (A)	50-89@60sec
Peak Charge/Discharge Current (A)	90~200@15sec
Communication	RS485, CAN
Depth of discharge (%)	95
Configuration (max. in 1 battery group)	16pcs
Working Temperature	0℃~50℃ Charge
	-10℃~50℃ Discharge
Shelf Temperature	-20℃~60℃
Short current/duration time	<4000A/2ms
Protective class	I
IP rating of enclosure	IP20
Humidity	5 ~ 95%(RH) No Condensation
Altitude(m)	<4000
Certification	TÜV / CE / UN38.3
Design life	15+ Years (25℃/77°F)
Cycle Life	>6,000 25℃
Reference to standards	IEC62619, IEC63056 UL1642, IEC61000-6-2, IEC61000-6-3, UN38.3