



Edge 2.4KW-US

Single Phase Hybrid Inverter Board

Input PV(DC)

Max. PV array power	1600W
Max. PV input current	0-30A
Rated MPP voltage range	25Vdc~145Vdc
Max. DC voltage	150Vdc
MPPT efficiency	99.9%
MPP Trackers	1
PV invert efficiency	96%



Grid Output

Grid Type	single phase (L,N)+Neutral
Output voltage	100/110/120VAC
Voltage accuracy	±1%
Rated Frequency	50Hz/60Hz(Auto track)
Overload (Rated load)	5min@102%~125% 10s@125%~150% 2S@>150%

General Data

Dimensions (W×H×D)	290×200×65mm
Weight	2.7kg
Insulation voltage	42VDC(battery and AC)
Noise emissions	<60dB
Communication	CAN/RS485/WIFI/BLE/Dry connect point
Ingress protection	IP65
LCD Screen	Optional
Compatibility (not certified)	UL 1741 / FCC 15 class B

AC Grid Mode

AC voltage range	90Vac~140Vac
AC grid frequency	46Hz-64Hz
Rated power	0-2400W(default 800W)
Max. AC invert efficiency	≥92%
Max. battery invert efficiency	≥91%

Input Battery (DC)

Battery type	Lead acid or LFP
Battery rated voltage	48V
Voltage range	40V~60V
Max. charge current	50A(Default 20A)

Backup

Nominal AC voltage	120V single phase
AC grid frequency	50 Hz or 60 Hz
Rated power	2400W
Switching time	10ms (Typical)
Output wave form	Pure sine wave

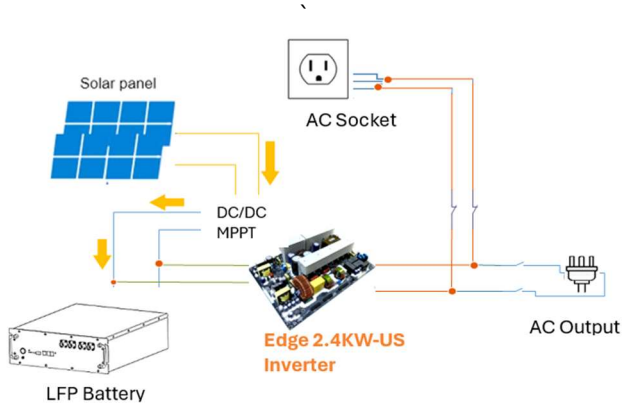
Equipment

Temperature	-15°C~55°C
Relative Humidity	0%~98%
Cooling method	Transformerless / Fan
Fan reference	80*25mm 12V*0.25A 3500RPM
Parallel	Up to 6 units
No-load power	<30W
Humidity	0%~95%
Altitude	≤2000m

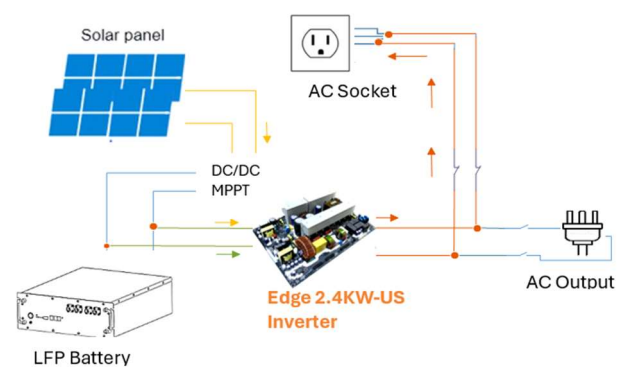
On-Grid and off-Grid Hybrid Inverter, the universal board unit is available for directly integrating in balcony and yard solar+storage system. Mature systematic debugging process ensures the ESS system is compatible with regulation on UL1741 and EMC ClassB.

- Intelligent control MPPT systems offer lower costs and higher conversion efficiency.
- Cloud data server based in Europe, the Americas, Singapore and India.
- Supports DC arcing protection at standard level 2 surge protection, continuously provide safer power
- The board is compatible with BMS of 3rd party batteries (SLA and Li-ion).
- ODM development and structural modification on inverter board unit to fit in the AIO ESS
- APP working mode switching

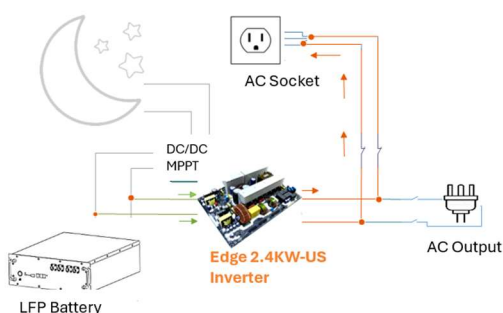
On-Grid and off-Grid Working Mode



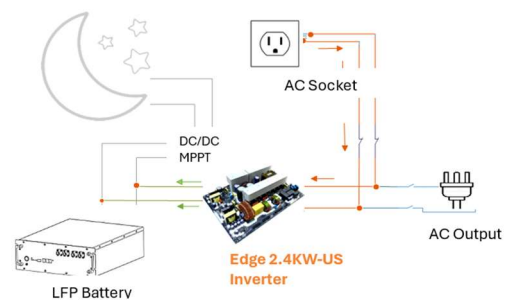
Input PV Mode



Grid Output Mode



Input Battery Mode



Input AC Mode