

ATLAS

Your Renewable Energy Solutions Partner

How Hybrid inverters work for you

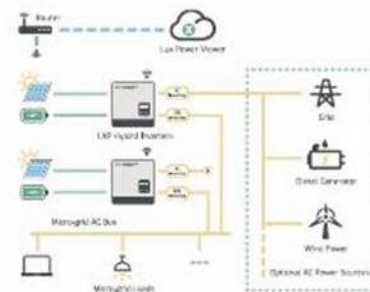


**Hybrid Series Inverter
ATL12KW2897-22**

System Connection

A newly designed solar and energy storage hybrid inverter, installed in on-grid solar, off-grid solar and back-up systems.

LXP Hybrid enables a programmable and schedulable smart solar energy storage system to help increase your solar energy self-consumption rate, protect your home appliances from grid outage, and balance your energy usage strategy to save energy bill.

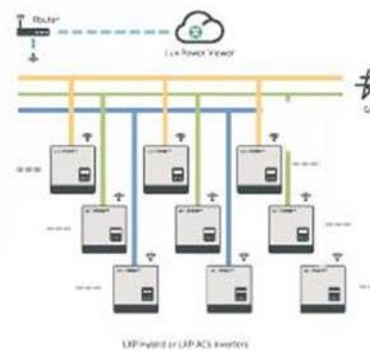


Parallel Connection

Paralleling LXP inverters in one phase to extend the single phase system capacity for either hybrid or AC coupled energy storage applications.

Paralleling LXP inverters (single phase inverters) to build a three phase system for either hybrid or AC coupled energy storage applications.

Smart paralleling algorithm enable multiple configurable working modes under on-grid, off-grid or micro-grid applications.



ATL12KW2897-22 Hybrid Inverter

12kW EPS output

10 Units Paralleling

AC Coupling Function

3 MPPT input for max input of 18kW

Separated Generator input

200A AC Pass through Current

PV Module Monitoring

Peak Shaving Function

Color LCD Touch screen

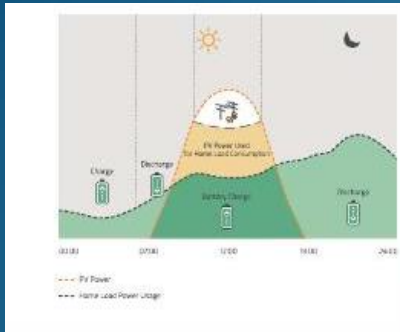


Specifications

Battery Parameters	ATL12KW2897-22
Compatible Battery Type	SLA/Lithium LiFePO4
Nominal battery Voltage	48V
Battery Voltage Range	40-60V
Maximum Charging/Discharge Current	250A/250A
Maximum Charging /Discharging power	12000W
Input DC PV Side	
Max DC Input POWER FOR Single MPPT	12000 W/7000W/7000W
Max PV Input Voltage	18000W
DC Input Voltage range	100V-600V
Nominal DC Input Voltage	360V
Full Power MPPT Voltage Range	230-500V
Max DC Input current	25A/15A/15A
MPPT Number / Strings per MPPT	3 (2/1/1)
Output/Input AC Grid	
Nominal Power	12000W
Nominal AC Voltage	240V 208V
Operating Voltage Range	180V-270V
Max. Continuous AC Current	50A@240V 50A@208V
Nominal AC Frequency	50Hz-60Hz
UPS Output-with Battery	
UPS Max. Output Power	12000W
UPS Nominal Output Voltage	240V 208V 120V-240V
UPS Nominal Output Frequency	50Hz-60Hz
UPS Nominal Output Current	50A @240V
Peak Power	14kw 10mins / 16kw 5mins 20km 500ms
Switching Time	20ms
Efficiency	
MPPT Efficiency	99.9%
Max. Efficiency	97.5%
EU Efficiency	96.5%
Battery Charging Efficiency	95%
Battery Discharge Efficiency	94.5%
Protection	
Anti-Islanding Protection	Yes
DC Switch	Yes
Ingress Protect Degree	IP65
SPD Protection	Yes
AFCI	OPT
RSD	OPT
General Data	
Dimensions (mm)	640x490x265
Weight (Kg)	42Kg
Display	Color LCD
Topology	Transformer less
Ambient Temp Range	-25 to +60 C
Cooling	Fan
Communication	RS485/WiFi/CAN
Standards and Certifications	
EMC	IEE1547 FCC S00C
Safety Standard	UL1741
Grid Standards	IEE1547

Hybrid Series

Hybrid Series How they Work



Force Time

Force time use mode, where there is a big difference tariff times.

This mode suits for situation where the price difference of energy is big. User can set the charging and discharging time and priority of energy use under Force Time Use mode. The user can also choose whether to charge the battery using grid power if the regulations permitted.



Self Consumption

Under self consumption mode the energy generated by PV will be mainly used by local loads, and rest will be stored in the battery, excessive power will be fed back into the grid.

This is the default mode which will increase the self consumption rate and reduce the energy bill significantly.

Hybrid Series Inverter

Intelligent working Modes

- Self consumption mode for high tariff areas
- Charge priority mode for areas where grid power is unstable
- Force charge & discharge mode for areas where tariff varies by time

Smart EPS

- Plug & Play, seamless switching under 10ms
- Sufficient backup power for emergency use

Easy to use with ATLAS Batteries

- Remote upgrade BMS firmware
- Wide range of compatible battery brands
- Wake up lithium battery from sleep mode
- Essential info uploaded to Lux server for quick ESS diagnosis
- Battery sharing with multi-Inverters in single phase or three phase

Advanced Parallel

- Up to 10 units parallel, expandable to 120kW
- Single phase and unbalanced three phase paralleling

Key Features

- Light, fast & easy installation
- Free & handy monitoring on mobile / PC
- Multi phases output on different hybrid models
- Generator interface available