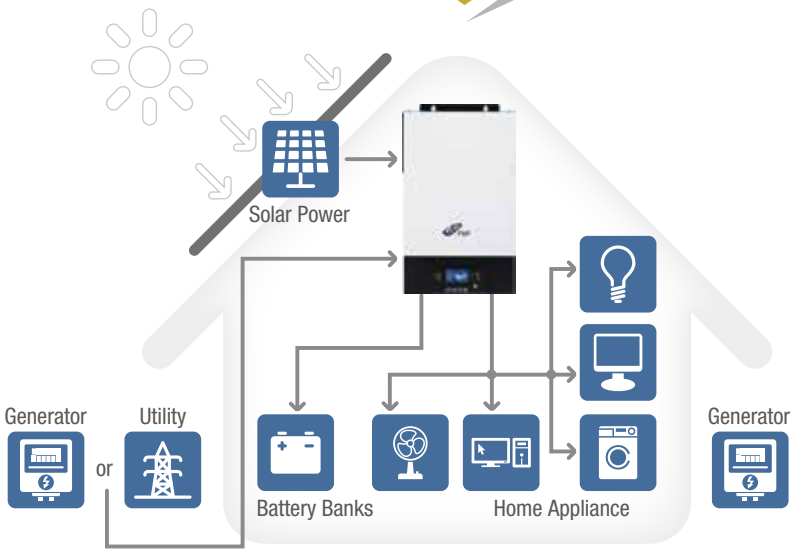
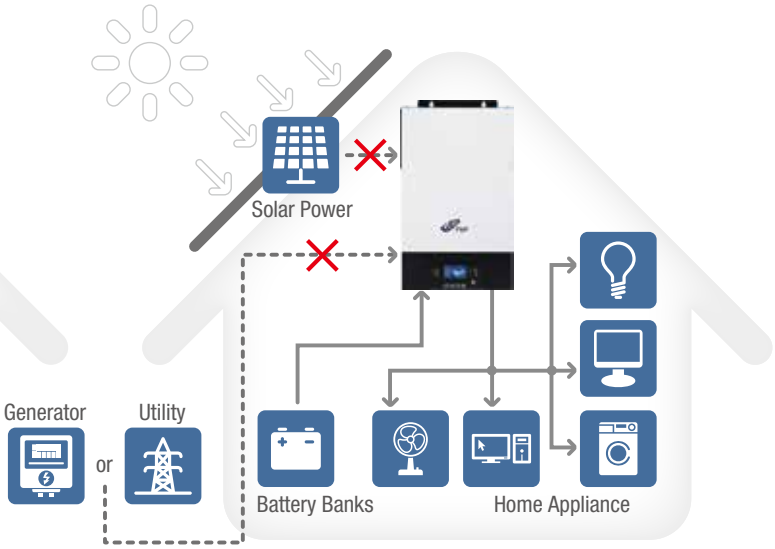
Ideal Off-Grid Inverter OffGrid Zero Series

Programmable Power Source Priority function.
More Flexible, More Independent for energy usage and storage.

The Principle of FSP Off-Grid Inverters



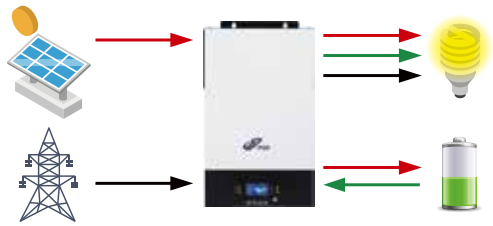
As Hybrid Power System



As Power Backup System

FSP Off-Grid Inverters/ Smart Power Priority

FSP Off-Grid inverters designed for power and charging source priority, can be set up by LCD panel according to the power consumption demand, storing and/or consuming energy are also user-defined.



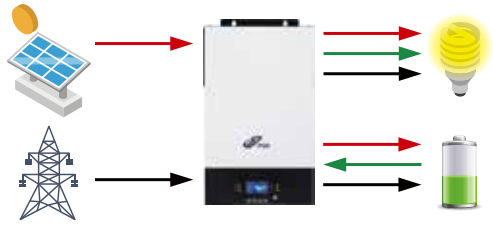
O/P Source Priority 1 → 2 → 3 →

Output source Priority is Solar-> Bat-> Utility
Charging source priority is Solar Power Only

Solar energy is sufficient to charge the battery and carry the loads. Once solar power is low, system will switch to battery mode automatically until battery reaches low warning then system transfers to utility.

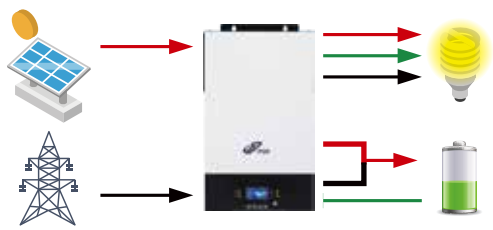
Output source is Utility first
Charging source priority is solar first

Utility will feed output loads, Solar power will charge the battery until solar power ceases. Solar and battery energy will be used when utility fails.
Power source priority is Utility -> Solar & Battery
Charging source priority is Solar -> Utility



Output source & Charger source priority is solar first

When Solar energy is sufficient to charge the battery and feed the loads, utility will stand by until Solar power ceases or battery voltage drops to user's setting.
Power source priority is Solar -> Battery or Utility
Charging source priority is Solar -> Utility



Output source is Solar-Bat-Utility
Charging source priority is Solar & Utility

System will adapt Solar and utility both source to charge battery at the same time. Once solar power is low, system will switch to battery mode automatically until reach low bat warning then transfer to utility.
Power source priority is Solar -> Battery -> Utility
Charge source priority is Solar & Utility

OffGrid Zero Inverter

- Zero (0ms) transfer time to protect mission-critical loads such as servers and ATMs
- Removable LCD control module with multiple communications
- iOS & Android Mobile monitoring APP with optional WiFi module
- Supports USB On-the-Go function
- Configurable AC/PV output usage timer and prioritization
- Pure sine wave solar inverter
- Selectable high power charging current
- Wide DC input range
- Compatible to mains voltage or generator power
- Auto restart while AC is recovering
- Overload and short circuit protection
- Smart battery charger design for optimized battery performance
- Cold start function
- Optional parallel operation up to 9 units
- Pylontech Lithium battery compatible for 5K model

PYLONTECH

MODEL NUMBER	OffGrid Zero 3K	OffGrid Zero 5K
Rated power	3000VA/3000W	5000VA/5000W
Parallel Capability	Up to 9 units	
INPUT		
Voltage	230 VAC	
Voltage Range	110-280 VAC	
Frequency Range	50 Hz/60 Hz (Auto sensing)	
OUTPUT		
AC Voltage Regulation	230 VAC ± 5%	
Output THDv	≦3% for Linear load, ≦ 8 % for non-linear load	
Surger Power	6000VA for 5 sec	10000VA for 5 sec
Efficiency (Peak)	93 % at Line Mode, 90% at Battery Mode	
Transfer Time	0 ms	
Waveform	Pure sine wave	
BATTERY		
Battery Voltage	24 VDC	48 VDC
Floating Charge Voltage	27 VDC	54 VDC
Overcharge Protection	34 VDC	66 VDC
SOLAR CHARGER & AC CHARGER		
Solar Charger type	MPPT	
Maximum PV Array Open Circuit Voltage	145 VDC	
Maximum PV Array Power	1500 W	4000 W
MPPT Range @ Operating Voltage	30 ~ 115 VDC	60 ~ 115 VDC
Maxmum Solar Charge Current	60A	80A
Maximum AC Charge Current	60A	
Maximum Charge Current	120A	140A
PHYSICAL		
Dimension, D X W X H (mm)	140 x 303 x 525	
Net Weight (kgs) 13.0 13.5	13.0	13.5
Communication Interface	USB/RS232/RS485/Bluetooth/Dry-contact	
OPERATING ENVIRONMENT		
Humidity	5% to 95% Relative Humidity(Non-condensing)	
Operating Temperature	0°C to 55°C	
Storage Temperature	-15°C to 60°C	

* Product specifications are subject to change without further notice.