



1.2kW/3.6kW/6.5kW/12kW

Pure Sine Wave Off Grid Inverter User Manual

SUN UP & GLOW



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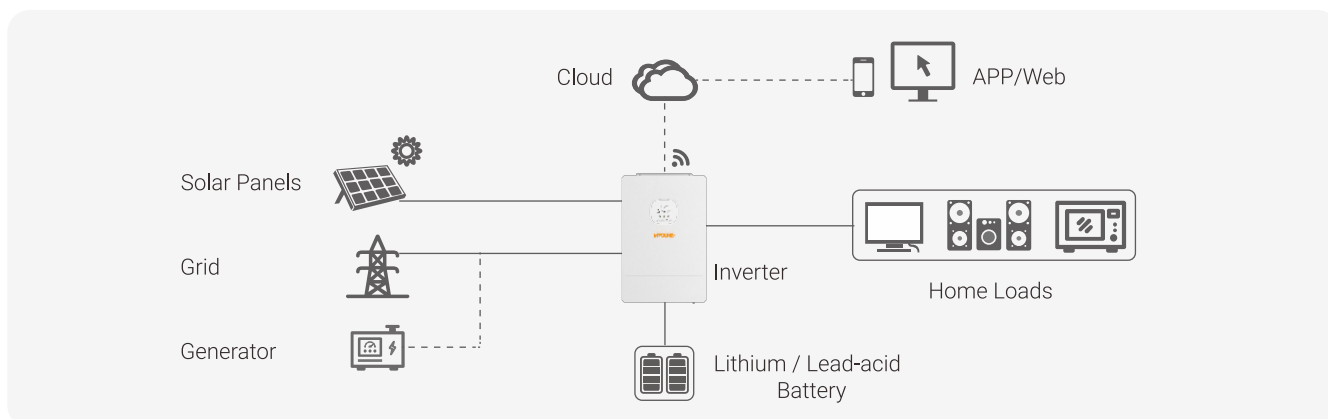
1.2kW Single Phase Off-grid Inverter

Product Features

-  Built-in 50A Solar Charger
-  PV Input Voltage Range 17-115V
-  LCD Display
-  Support Lithium/Lead-acid Battery
-  Lithium Battery Activation
-  WiFi Monitoring(built-in)
-  Detachable Dust Cover
-  Pure Sine Wave



Product Connection Diagram



Specifications

Model		SDPO-1.2KW
AC Input		
Rated Input Voltage (VAC)	208/220/230/240;L+N+PE	
Voltage Range (VAC)	90~280±3 (normal mode);170~280±3 (UPS mode)	
Frequency (Hz)	50 / 60 (Auto Adaptive)	
AC Output		
Rated Capacity (kW)	1.2	
Surge Power (kVA)	2.4	
Voltage (VAC)	208/220/230/240	
Power Factor (PF)	1	
Frequency	50/60Hz±0.1%	
Switch Time (ms)	10 (APP/UPS/GEN mode)	
Wave Form	Pure Sine Wave	
Overload Capacity (Battery Mode)	60s@102%-120% load; 10s@120%-200% load;	
Max. Efficiency (Battery Mode)	90%@12VDC	
Parallel Quantity	NA	
Charger (PV / AC)		
Solar Charger Type	MPPT	
Max PV Input Current / Power	18A/800W	
MPPT Range@Operating Voltage (VDC)	17-115	
Max PV Open Circuit Voltage (VDC)	115	
Max PV Charge Current (A)	50	
Max AC Charge Current (A)	50	
Max. Charge Current (PV+ AC) (A)	100	
Battery		
Normal Voltage (VDC)	12	
Floating Charge Voltage (VDC)	13.8	
Overcharge Protection (VDC)	15	
Battery Type	Lead-acid / Lithium	
Interface		
HMI	LCD	
Interface	RS232 / RS485(optional) / CAN (optional)	
Monitoring	WiFi (optional/built-in/external)	
General Data		
Ingress Protection	IP21	
Operating Temperature	-10°C-60°C	
Relative Humidity	5%- 95%(Non-condensing)	
Storage Temperature	-15°C-60°C	
Net Weight (kg)	3.5	
Dimensions (H*W*D)	301*217*97mm	
Max. Operating Altitude	4000m (Derating above 1000m)	
Activation		
AC Activation	YES	
PV Activation	YES	

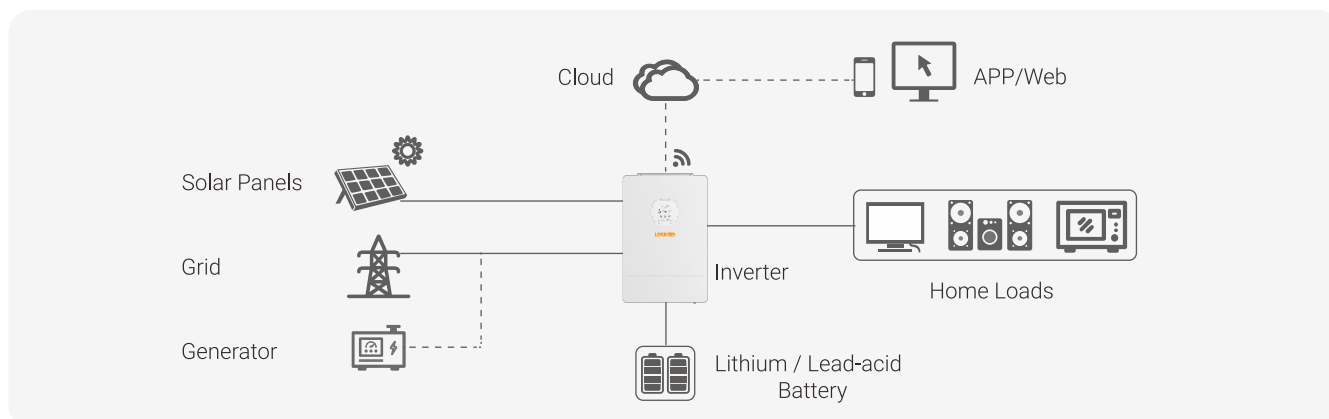
3.6kW Single Phase Off-grid Inverter

Product Features

-  Built-in 100A Solar Charger
-  PV Input Voltage Range 40-500V
-  LCD Display
-  Support Lithium/Lead-acid Battery
-  Lithium Battery Activation
-  WiFi Monitoring(built-in)
-  Detachable Dust Cover
-  Pure Sine Wave



Product Connection Diagram



Specifications

Model	SDPO-5KW
AC Input	
Rated Input Voltage (VAC)	208/220/230/240;L+N+ PE
Voltage Range (VAC)	90~280±3 (normal mode); 170~280±3 (UPS mode)
Frequency (Hz)	50 / 60 (Auto Adaptive)
Ac Output	
Rated Capacity (kW)	5
Surge Power (kVA)	10
Voltage (VAC)	208/220/230/240
Power Factor (PF)	1
Frequency	50/60Hz±0.1%
Switch Time (ms)	10 (normal mode) / 10 (UPS mode)
Wave Form	Pure Sine Wave
Overload Capacity (Battery Mode)	60s@102%-110% load; 10s@110%-130% load; 3s@130%-150% load;0.2s@>150% load
Max. Efficiency (Battery Mode)	93%@48VDC
Parallel Quantity	9
Charger (PV/AC)	
Solar Charger Type	MPPT
Max PV Input Current / Input Power	18A/6000W
MPPT Range@Operating Voltage (VDC)	120-450
Max PV Open Circuit Voltage (VDC)	500
Max PV Charge Current (A)	80
Max AC Charge Current (A)	80
Max. Charge Current (PV + AC) (A)	80
Battery	
Rated Voltage (VDC)	48
Floating Charge Voltage (VDC)	54
Overcharge Protection (VDC)	61
Battery Type	Lithium and Lead-acid
Interface	
HMI	LCD
Interface	RS485 / CAN / RS232/ Dry Contact
Monitoring	WiFi (optional/external)
General Data	
Ingress Protection	IP20
Operating Temperature	-10 °C-50 °C
Relative Humidity	5% ~ 95% (Non-condensing)
Storage Temperature	-15°C-60 °C
Net Weight (kg)	9.5
Dimensions (H*W*D)	510*306*115mm (without bracket)
Max. Operating Altitude	4000m (Derating above 1000m)

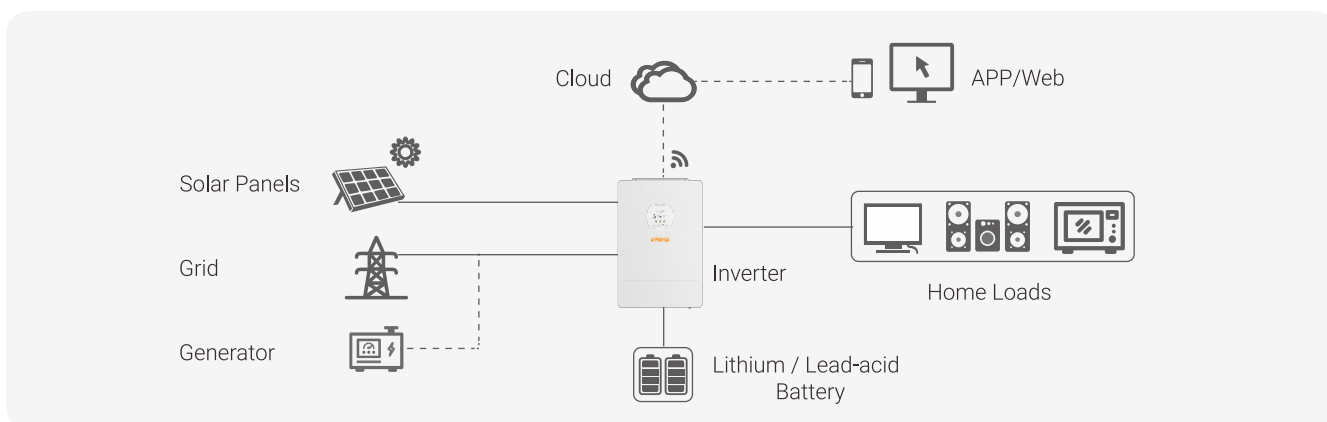
6.5kW Single Phase Off-grid Inverter

Product Features

-  Built-in 120A Solar Charger
-  Wide PV Input Voltage Range 60-500V
-  9 Inverters in Parallel*
-  27A MAX PV Input
-  Support Lithium/Lead-acid Battery
-  Lithium Battery Activation
-  WiFi Monitoring(built-in)
-  Feed-in to Grid
-  LCD(5 Inch optional)
-  Dual AC Output



Product Connection Diagram



Specifications

Model	SDPO-S6.5KW		SDPO-P6.5KW
AC Input			
Rated Input Voltage (VAC)	208/220/230/240;L+N+ PE		
Voltage Range (VAC)	90~280±3 (normal mode); 170~280±3 (UPS mode)		
Frequency (Hz)	50 / 60 (Auto Adaptive)		
Ac Output			
Rated Capacity (kW)	6.5		
Surge Power (kVA)	12		
Voltage (VAC)	208/220/230/240		
Power Factor (PF)	1		
Frequency	50/60Hz±0.1%		
Switch Time (ms)	10 (normal mode) / 10 (UPS mode)		
Wave Form	Pure Sine Wave		
Overload Capacity (Battery Mode)	1min@102%~110% load; 10s@> 110% load		
Max. Efficiency (Battery Mode)	94%@48VDC		
Parallel Quantity	NA	9	
Charger (PV/AC)			
Solar Charger Type	MPPT		
Max PV Input Current / Input Power	27A/9000W		
MPPT Range@Operating Voltage (VDC)	60-450		
Max PV Open Circuit Voltage (VDC)	500		
Max PV Charge Current (A)	120		
Max AC Charge Current (A)	120		
Max. Charge Current (PV + AC) (A)	120		
Battery			
Rated Voltage (VDC)	48		
Floating Charge Voltage (VDC)	54		
Overcharge Protection (VDC)	61		
Battery Type	Lithium and Lead-acid		
Interface			
HMI	5 inch LCD		
Interface	RS232/RS485/CAN	RS232/RS485/CAN/Parallel Interface	
Monitoring	WiFi (optional/built-in/external)		
General Data			
Ingress Protection	IP21		
Operating Temperature	-10 °C-60 °C		
Relative Humidity	5% ~ 95% (Non-condensing)		
Storage Temperature	-15°C-60 °C		
Net Weight (kg)	8.4		
Dimensions (H*W*D)	410*336*110mm		
Max. Operating Altitude	4000m (Derating above 1000m)		

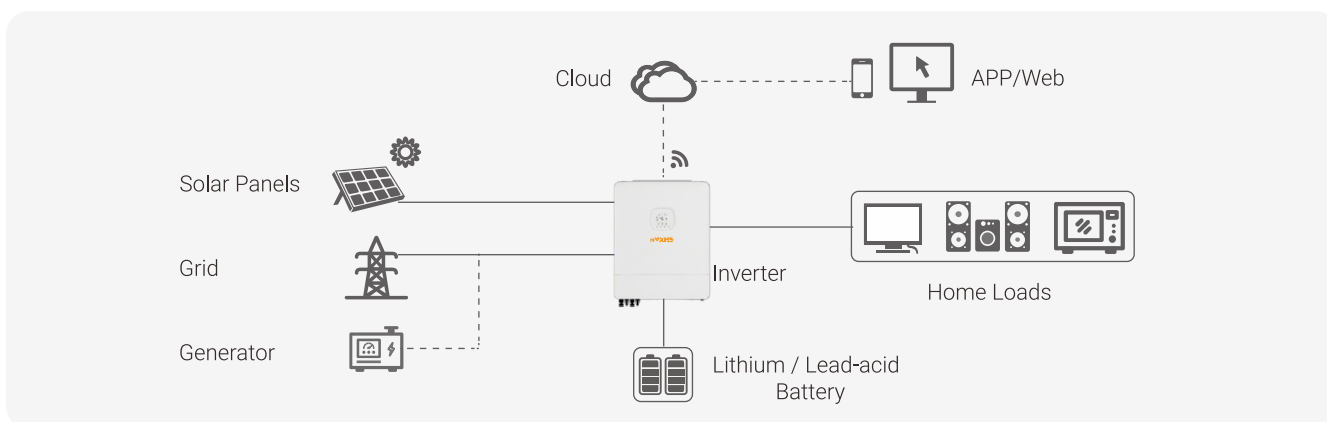
12kW Single Phase Off-grid Inverter

Product Features

-  Built-in 160A Solar Charger
-  Wide PV Input Voltage Range 60-500V
-  Dual MPPTs Input
-  45A MAX PV Input
-  Support Lithium/Lead-acid Battery
-  Lithium Battery Activation
-  WiFi Monitoring(built-in)
-  Feed-in to Grid
-  LCD(5 Inch optional)
-  Dual AC Output



Product Connection Diagram



Specifications

Model	SDPO-12KW
AC Input	
Rated Input Voltage (VAC)	208/220/230/240;L+N+ PE
Voltage Range (VAC)	90~280±3 (normal mode); 170~280±3 (UPS mode)
Frequency (Hz)	50 / 60 (Auto Adaptive)
AC Output	
Rated Capacity (kW)	12
Surge Power (kVA)	24
Voltage (VAC)	220/230/240
Power Factor (PF)	1
Frequency	50/60Hz±0.1%
Switch Time (ms)	10(APP/UPS mode), 20(GEN mode)
Wave Form	Pure Sine Wave
Overload Capacity (Battery Mode)	1min@102%~125%Load 10s@>125%Load
Max. Efficiency (Battery Mode)	94%@48VDC
Parallel Quantity	NA
Charger (PV/AC)	
Solar Charger Type	Dual MPPTs
Max PV Input Current / Input Power	Using One MPPT: 27A/9KW; Using Two MPPTs: 22.5A/Per MPPT, 15kW/Total
MPPT Range@Operating Voltage (VDC)	60-450
Max PV Open Circuit Voltage (VDC)	500
Max PV Charge Current (A)	160
Max AC Charge Current (A)	160
Max. Charge Current (PV + AC) (A)	160
Battery	
Rated Voltage (VDC)	48
Floating Charge Voltage (VDC)	54
Overcharge Protection (VDC)	61
Battery	Lithium and Lead-acid
Interface	
HMI	LCD
Interface	RS232/ RS485 /CAN
Monitoring	WiFi (optional/built-in/external)
General Data	
Ingress Protection	IP21
Operating Temperature	-10 °C-60 °C
Relative Humidity	5% ~ 95% (Non-condensing)
Storage Temperature	-15°C-60 °C
Net Weight (kg)	15
Dimensions (H*W*D)	495*425*120
Max. Operating Altitude	4000m (Derating above 1000m)