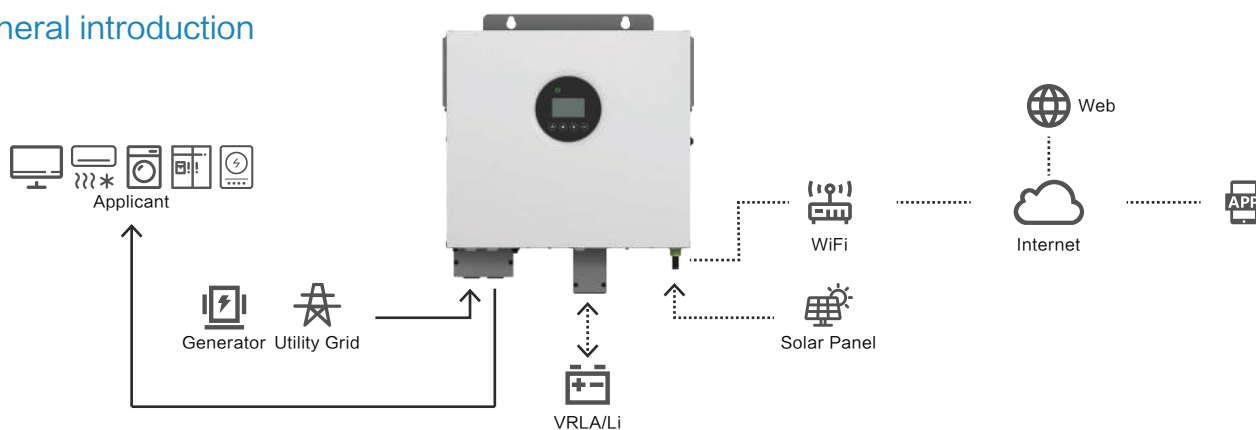




General introduction



Features

✓ Safety

- 6kV lightning protection
- DC – DC high frequency isolating converter (Battery)
- Waterproof PV terminal

🌿 Green

- Up to 93.5% efficiency
- Output power factor is 1.0
- Intelligent cooling fan control
- Low THDv

🔗 Reliable

- Widely input voltage of AC and PV
- Pure sine wave output
- Compatible with generator
- Built-in Intelligent temperature sensors
- Dust cleaning alarms and dust-proof components

⚡ Fast charging

- PV and AC charging current is up to 120A
- Intelligent charging (Multiple charging modes)

👤 User-friendly

- Dot-matrix screen and physical button
- Built-in WiFi module (Optional)
- APP support (Optional)
- Built-in PV terminal for easy installation

🏠 Applications

- Support home appliances/office equipment/lighting equipment etc.
- Support lead-acid and lithium-ion battery
- Max. 6 units in parallel
- RS232/USB/Dry Contact

Technical Specifications

Model	Knight 3600–24		Knight 3600–48	Knight 6000–48
Input(AC)				
Nominal Voltage	220/230/240Vac			
Selectable Voltage Range	170~280Vac (For Personal Computers) 90~280Vac (For Home Appliances)			
Frequency	50/60Hz (Auto Detection)			
Power Factor	0.98			
AC Switch	Optional			
Generator input	Support			
PV String Input(DC)				
Max PV Array Open Circuit Voltage	500Vdc			
Range Start-up Voltage	120Vdc			
Initial Feeding Voltage	150Vdc			
MPPT Voltage Range	120Vdc ~ 450Vdc			
Number of MPPT Trackers	1			
Maximum PV input Power / Current	4000W/30A	4000W/30A	6700W/40A	
MPPT Efficiency	99,3 %			
AC Output				
Nominal output Power	3600W/3600VA	3600W/3600VA	6000W/6000VA	
Nominal Voltage (Batt. Mode)	220/230 (Default)/240Vac ± 5%, User Settable			
Surge Power	7200VA	7200VA	12000VA	
Transfer Time	15ms (For Personal Computers); 20ms (For Home Appliances)			
Waveform	Pure sine wave			
Output THDv (@Linear Load)	<3%			
Battery Mode Efficiency (Peak)	93.5%			
Battery & Charge				
Nominal Votage (LiFePO ₄)	25.6Vdc	51.2Vdc	51.2Vdc	
Nominal Votage (Lead Acid)	24V	48V	48V	
Max. AC charge Current	120A	60A	120A	
Max. Solar Charge Current	120A	60A	120A	
Max. Charge Current (Solar + AC charge current)	120A (User Selectable)	60A (User Selectable)	120A (User Selectable)	
Interface & Mechanical				
Display	LCD & LED			
Parallel Function	Optional, max 6 units			
Communication Interface	RS232/USB/Dry Contact; Optional: RS485/CAN/WIFI			
Dimension (D*W*H/mm)	134.0*427.5*460.8			
Net Weight (kg)	11.5	11.6	13.2	
Protection				
Output Over-current Protection	Yes			
Function Protection	Short Circuit; Over voltage; Under voltage; Reverse polarity			
Insulation Detection	Yes			
AC/DC Surge Protection	Yes			
General Specifications				
Operating Temperature	-25℃~60℃			
Storage Temperature	-30℃~60℃			
Relative Humidity	5%~95%, non-condensing			
Altitude	<3000m			
Protection Class	IP21			
Standards				
Safety	IEC/EN62109-1&2			
EMC	EN61000-6-1&2&3&4			

- Specifications are subject to change without prior notice
- Data above are typical values for reference only, not as a basis for engineering design
- Output load will not be derated if the working altitude is under 2000m