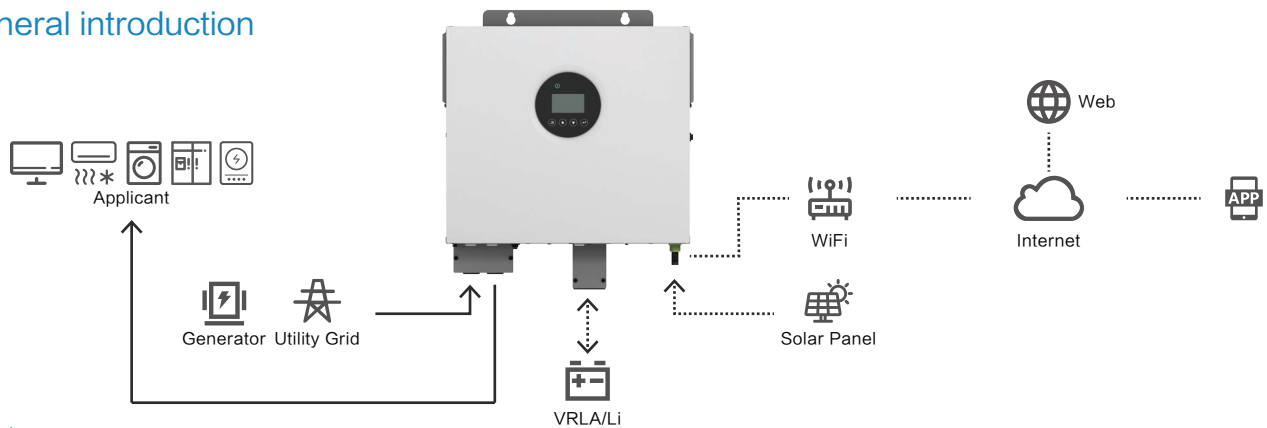




### General introduction



### 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	
<b>Input(AC)</b>						
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					
<b>PV String Input(DC)</b>						
Max PV Array Open Circuit Voltage Range	500Vdc					
Start-up Voltage	120Vdc					
Initial Feeding Voltage	150Vdc					
MPPT Voltage Range	120Vdc ~ 450Vdc					
Number of MPPT Trackers	1					
Maximum PV input Power	4000W		4000W		6700W	
DC Switch	Optional					
<b>AC Output</b>						
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%					
<b>Battery &amp; Charge</b>						
Nominal Voltage (LiFePO <sub>4</sub> )	25.6Vdc		51.2Vdc		51.2Vdc	
Nominal Voltage (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)	
<b>Interface &amp; Mechanical</b>						
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	
<b>Protection</b>						
Output Over-current Protection	Yes					
Function Protection	Short Circuit; Over voltage; Under voltage;					
Insulation Detection	Yes					
AC/DC Surge Protection	Yes					
<b>General Specifications</b>						
Operating Temperature	-10°C~50°C					
Storage Temperature	-15°C~60°C					
Relative Humidity	5%~95%, non-condensing					
Altitude	<3000m					
Protection Class	IP21					
<b>Standards</b>						
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