

Knight Series **NEW**

Off-grid / 3.6 kW / 6 kW



Safety

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

Fast charging

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

Green

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

User-friendly

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

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 kit

Applications

- ▶ Support home appliances / office equipment / lighting equipment etc.
- ▶ Support lead-acid and lithium-ion battery
- ▶ Max. 6 units in parallel
- ▶ RS-232 / USB / Dry contact

Model	Knight 3600-24	Knight 3600-48	Knight 6000-48
Input (AC)			
Nominal Voltage	230 V		
Selectable Voltage Range	170 ~ 280 Vac (For personal computer) 90 ~ 280 Vac (For home appliances)		
Frequency	50 / 60 Hz (Auto detection)		
Power Factor	0.98		
Generator Input	Support		
PV String Input (DC)			
Max PV Array Open Circuit Voltage Range	500 Vdc		
Start-up Voltage	120 Vdc		
Initial Feeding Voltage	150 Vdc		
MPPT Voltage Range	120 ~ 450 Vdc		
Number of MPPT Trackers	1		
Nominal PV Input Power	4000 W	4000 W	6700 W
AC Output			
Nominal Output Power	3600 W / 3600 VA	3600 W / 3600 VA	6000 W / 6000 VA
Nominal Voltage (Batt. Mode)	220 / 230 (Default) / 240 Vac ± 5%, User settable		
Surge Power	7200 VA	7200 VA	12000 VA
Transfer Time	15 ms (For personal computer); 20 ms (For home appliances)		
Waveform	Pure sine wave		
Output THDv (@Linear Load)	< 3%		
Battery & Charge			
Nominal Voltage (LiFePO4)	25.6 Vdc	51.2 Vdc	51.2 Vdc
Nominal Voltage (Lead Acid)	24 Vdc	48 Vdc	48 Vdc
Max. AC Charge Current	120 A	60 A	120 A
Max. Solar Charge Current	120 A	60 A	120 A
Max. Charge Current (Solar + AC Charge Current)	120 A (User selectable)	60 A (User selectable)	120 A (User selectable)
Interface & Mechanical			
Display	LCD & LED		
Parallel Function	Optional, max. 6 units		
Communication Interface	RS-232 / USB / Dry contact; Optional: RS-485 / CAN / WiFi		
Dimensions (W x H x D)	134.0 x 427.5 x 460.8 mm		
Net Weight	11.5 kg	11.6 kg	13.2 kg
Protection			
Output Over-current Protection	Yes		
Function Protection	Short circuit; Over voltage; Under voltage;		
Insulation Detection	Yes		
DC / AC Surge Protection	Yes		
General Specifications			
Operating Temperature	-10°C ~ 50°C		
Storage Temperature	-15°C ~ 60°C		
Relative Humidity	5% ~ 95%, non-condensing		
Max. Operating Altitude	3000 m (> 2000 m Derating)		
Protection Class	IP21		
Standards			
Certificate & Standard	IEC62109-1&2; EN/IEC62920:2017+A1:2021; EN55011:2016+A2:2021; STA-2A; IEC61683; IEC60068		

1) Specifications are subject to change without prior notice