

On-Grid Inverter with Energy Storage

Krypton 12002 | 13002 | 15002



Models:

8.5kW-48-pV12kW-TWIN

10kW-48-pV13kW-TWIN

11.5kW-48-pV15kW-TWIN

7" HMI Touchable Screen

Dual MPPT

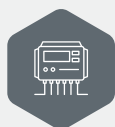
RGB Shifting



In Built Wifi



7" HMI
Touchable
Screen



Dual MPPT



Intelligent Load
Management



Dual Output



Grid Feeding



Batteryless
Operation



Battery
Management
System



Parallel
upto 6 Units



Easy-to-install

- Large HMI touchable screen
- Dual outputs, for smart load management
- Maximum PV input current increases to 30Ax2
- Wide PV input voltage range 90VDC ~ 450VDC
- Status indication with RGB lights
- Built-in Wi-Fi for mobile monitoring (Android/iOS App is available)



Reliable

- Supports USB On-the-Go function
- Reserved communication port for BMS (RS485, CAN-BUS or RS232)
- Replaceable fan design for ease of maintenance
- Battery independent design
- Configurable AC/PV output usage timer and prioritization
- USB-A OTG firmware upgrades



User-Friendly

- Compatible to Utility Mains or generator input
- Built-in anti-dust kit
- Built-in DC output for DC fan, LED bulb, router and so on.
- Parallel operation with 6 units

Technical Datasheet

KNOX SERIES	Krypton 12002		Krypton 13002	Krypton 15002
MODEL	8.5kW-48-pV12kW-TWIN	10kW-48-pV13kW-TWIN	11.5kW-48-pV15kW-TWIN	
Phase	Single Phase			
Maximum PV Input Power	12000 W	13000 W	15000 W	
Rated Output Power	8500 W	10000 W	11500 W	
Battery + PV Output Power	8500 W	10000 W	11500 W	
GRID-TIE OPERATION				
PV INPUT (DC)				
Nominal DC Voltage / Maximum DC Voltage	500 VDC			
Start-up Voltage / Initial Feeding Voltage	120VDC / 150 VDC			
MPPT Voltage Range	90 - 450 VDC			
Number of MPP T rackers / Maximum Input Current	30A x 2 (MAX 45A)			
GRID OUTPUT (AC)				
Nominal Output Voltage	220/230/240 VAC			
Output Voltage Range	170-280 VAC (For Personal Computers) 90- 280 VAC (For Home Appliances)			
Nominal Output Current	39 A	45 A	52 A	
Power Factor	> 0.99			
EFFICIENCY				
Maximum Conversion Effi ciency (DC/AC)	95%			
OFF-GRID OPERATION				
AC INPUT				
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC / 180 VAC			
Acceptable Input Voltage Range	90 - 280 VAC or 170 - 280 VAC			
Frequency Range	50 Hz/60 Hz (Auto sensing)			
BATTERY MODE OUTPUT (AC)				
Nominal Output Voltage	230 VAC			
Output Waveform	Pure sine wave			
Efficiency (DC to AC)	0.93			
Transfer Time	10 ms (For Personal Computers) ; 20 ms (For Home Appliances)			
BATTERY & CHARGER				
Nominal DC Voltage	48 VDC			
Floating Charge Voltage	54 VDC			
Overcharge Protection	66 VDC			
Solar Charger type	MPPT			
Maximum Solar Charging Current	150A			
Maximum AC Charging Current	150A			
Maximum Charging Current	150A			
Surge Power	17000VA	20000VA	23000VA	
GENERAL				
PHYSICAL				
Dimension, D x W x H (mm)	156.1 x 460 x 551.8			
Net Weight (kgs)	18.4			
INTERFACE				
Parallel Function	YES, 6 units			
Communication Port	USB/RS232/RS485/Wifi/Dry-contact			
ENVIRONMENT				
Humidity	0 - 90% RH (No condensing)			
Operating Temperature	-10°C to 50°C			
Storage Temperature	-15°C to 60°C			
Certificates and approvals (more available on request)	IEC 61682/Low Voltage Directive 2014/35/EU IEC 62109-1/IEC 62109-2/IEC 61683			

VERSION : MAY 2025