

On-Grid Inverter with Energy Storage
& IP66 Protection



Xenon 12066



Models:

6.6kW-48-pV12066-TWIN

7" HMI Touchable Screen

Dual MPPT

IP66 Protection



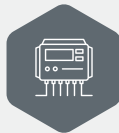
In Built Wifi



IP66 Protection



Dual Output



Dual MPPT



Grid Feeding



Batteryless Operation



Battery Management System



Easy-to-install

- IP66 waterproof and dustproof makes the inverter available for various working conditions.
- Large HMI touchable screen
- Dual outputs, for smart load management
- Reserved communication port for BMS (RS485, CAN-BUS or RS232)



Reliable

- Replaceable fan design for ease of maintenance
- Battery independent design
- Configurable AC/PV output usage timer and prioritization
- Selectable high power charging current



User-Friendly

- Selectable input voltage range for home appliances and personal computers
- Compatible to Utility Mains or generator input
- Parallel operation with 9 units

Technical Datasheet

KNOX SERIES	Xenon 12066
MODEL	6.6kW-48-pV12066-TWIN
Phase	1-phase in / 1-phase out
Maximum PV Input Power	12000 W
Rated Output Power	6600VA/6600W
Maximum Charging Power	6600 W
GRID-TIE OPERATION	
PV INPUT (DC)	
Nominal DC Voltage / Maximum DC Voltage	500 VDC
Start-up Voltage / Initial Feeding Voltage	80 VDC / 150 VDC
MPPT Voltage Range	120 VDC - 500 VDC
Number of MPP Trackers / Maximum Input Current	2 / 22A
GRID OUTPUT (AC)	
Nominal Output Voltage	220/230/240 VAC
Output Voltage Range	182 - 260 VAC or 184 - 264.5 VAC or 195.5 - 253 VAC or 184 - 264.4 VAC (Selectable)
Nominal Output Current	28.7A
Power Factor range	> 0.99
Surge Power	12000VA
No Load Power Consumption	< 60W
EFFICIENCY	
Maximum Conversion Efficiency (DC/AC)	95%
European Efficiency@ Vnominal	95%
OFF-GRID OPERATION	
AC INPUT	
AC Start-up Voltage / Auto Restart Voltage	60 - 80 VAC / 180 VAC
Acceptable Input Voltage Range	90 - 300 VAC or 170 - 300 VAC
Frequency Range	50 Hz/60 Hz (Auto sensing)
PV INPUT (DC)	
Battery Voltage	48 VDC
Floating Charge Voltage	54 VDC
Overcharge Protection	66 VDC
Output Waveform	Pure sine wave
Transfer Time	10 ms (For Personal Computers)
	20 ms (For Home Appliances)
Efficiency (DC to AC)	90% - 93%
BATTERY & CHARGER	
Battery Voltage Range	48 VDC
Maximum Charging / Discharging Current	120 A / 140 A
SOLAR CHARGER & AC CHARGER	
Solar Charger type	MPPT
GENERAL	
PHYSICAL	
Dimension, D x W x H (mm)	192 x 414 x 630
Net Weight (kgs)	32
INTERFACE	
Communication Port	RS-232, RS-485, USB, CAN and Wi-Fi
Intelligent Slot	Optional for SNMP and Modbus cards
Parallel Capability	Yes, 9 units
ENVIRONMENT	
Humidity	0 - 100% RH (No condensing)
Enclosure	IP66
Operating Temperature	-25 to 60°C
Storage Temperature	-15°C to 60 °C
Altitude	0 - 1000 m**
Certificates and approvals (more available on request)	IEC 61682 / Low Voltage Directive 2014/35/EU IEC 62109-1 / IEC 62109-2 / IEC 61683

VERSION : JULY 2025