PRODUCT

Catalog

MOST RELIABLE SOLAR INVERTERS & ENERGY STORAGE

Solar is
the future
it's time to
embrace it.

Our Brand

Knox Solar embodies a fresh, modern, and transparent brand identity that reflects our commitment to shaping a sustainable future for our planet. We believe in the power of clarity—our communication is straightforward because our vision is meant to be understood and embraced by everyone. We aim to make solar energy accessible to all, encapsulating this ethos in our commercial motto:
“Easy to install, reliable, and user-friendly.”

Just like our products, our brand is confident, authentic, and built on years of expertise in manufacturing photovoltaic (PV) equipment and solutions. By focusing on substance over embellishment, we avoid unnecessary visual effects or graphic adornments. Instead, our brand's voice is a testament to the reliability and simplicity that define Knox Solar, reinforcing our role as a trusted leader in renewable energy innovation.

About

Knox Solar is a distinguished name in the global renewable energy sector, celebrated for its premium manufacturing and ODM expertise. Specializing in Residential On-grid, Hybrid, and Off-grid solar inverters, along with Commercial and Industrial (C&I) solar inverters and Residential Energy Storage Systems (ESS), Knox Solar has been revolutionizing solar energy solutions since its establishment in 2019.

With a dynamic presence in over 10 countries and strategically positioned offices in Shenzhen, Dubai, Islamabad, and Manchester, Knox Solar ensures seamless access to cutting-edge technology and exceptional service worldwide. Operating under entities such as Shenzhen Knox Energy Co. Ltd (China), Knox Energy & Technology Co. (UK), Electro Industries Pvt Limited (Pakistan), and Knox FZCO (U.A.E), the company showcases a comprehensive and diversified approach to the solar energy equipment supply chain.

Knox Solar is committed to fostering sustainable progress and shaping a greener future through innovative and reliable energy solutions. As a key player in the solar industry, it continues to empower homes, businesses, and industries globally by harnessing the power of renewable energy. Together, Knox Solar and its partners contribute to the worldwide shift toward a cleaner, more efficient, and eco-conscious future.

Mission

Knox Solar's mission is to design and deliver innovative, high-performance solar products that set the standard for quality and reliability. We are committed to promoting the global adoption of green energy by providing accessible, efficient, and sustainable solutions that meet the evolving needs of our customers. Through cutting-edge technology and a deep dedication to environmental stewardship, we aim to accelerate the transition to renewable energy, reduce the carbon footprint, and contribute to a cleaner, healthier planet for future generations. Our vision is to be a global leader in solar energy, driving positive change and empowering communities around the world to harness the power of the sun.

Corporate Culture

Knox Solar's corporate culture is built on a foundation of innovation, integrity, and sustainability. We foster an environment where creativity thrives, and employees are empowered to think outside the box to develop cutting-edge solar energy solutions. Collaboration and open communication are key pillars of our workplace, as we believe that diverse perspectives drive progress and lead to the best outcomes.

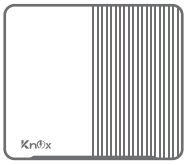
Our culture is deeply rooted in our commitment to environmental stewardship and social responsibility. We encourage our team members to embrace sustainable practices not only in the products we create but also in the way we operate day-to-day. At Knox Solar, we prioritize work-life balance, professional development, and a sense of purpose, ensuring that every individual feels valued and motivated to contribute to our mission of driving the global adoption of clean energy.

As a company, we strive to cultivate a positive, inclusive atmosphere where employees are empowered to take initiative, innovate, and make meaningful contributions to our vision of a greener, more sustainable future. At Knox Solar, we believe in the power of teamwork, and we are united by our shared commitment to transforming the energy landscape and building a cleaner planet for future generations.

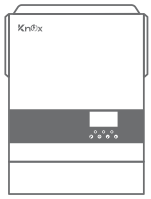
Our Products

Our product range includes ongrid Inverters, hybrid inverters, energy storage system, batteries, vfd, monitoring products and many more.

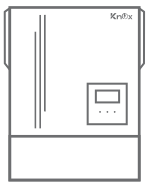
Xerox Series
On-Grid Inverters
Page 07



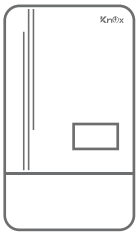
Argon Series
Single Phase Hybrid / Off Grid Inverter
Page 17



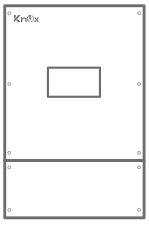
Krypton Eco Series
Hybrid Inverters with Grid Feeding
Page 21



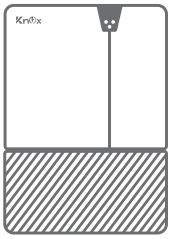
Krypton Series
Hybrid Inverters with Grid Feeding
Page 25



Xenon Series
Single & Three Phase Hybrid Inverters with Grid Feeding & IP66 Protection
Page 29



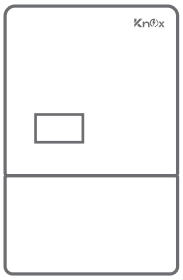
Zynex Series
Single Phase Hybrid Inverters with Grid Feeding & IP66 Protection
Page 33



Zapher Series

Single & Three Phase Hybrid Inverters with Grid Feeding & IP66 Protection

Page 37



Lithium Iron

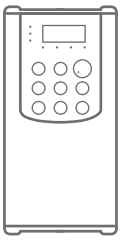
Phosphate Batteries

Page 45

Xentra Series

Water Pump Inverters

Page 61



Connect

& monitor

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Easy to Install
Reliable
User friendly

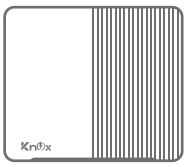
We strive to create the best possible experience for distributors, installers and end users. That's why our products are easy-to install, reliable and user-friendly.

Xerox Series

On-Grid Inverters

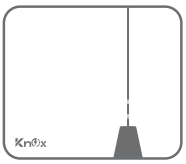
Perfect for home, small business & commercial use

Xerox G4 Pro Series

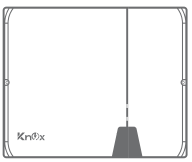


5K/8kpV
6K/9kpV
8K/12kpV
10K/17kpV
13K/20kpV

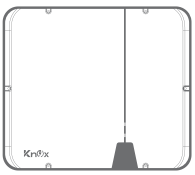
15K/23kpV
17K/26kpV
20K/30kpV
25K/38kpV



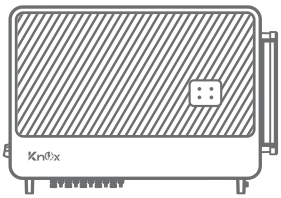
30K/45kpV



40K/60kpV
50K/75kpV

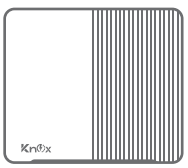


60K/90kpV



100K-LV
110K-LV
125K-LV

Xerox G4 Series

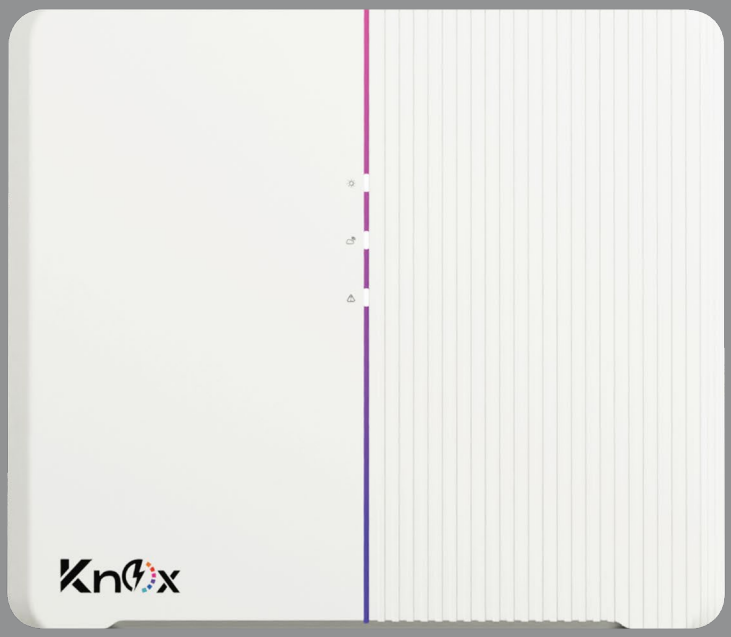


G4 3K/5kpV
G4 4K/6kpV
G4 5K/8kpV
G4 6K/9kpV
G4 8K/12kpV
G4 10K/15kpV

G4 12K/18kpV
G4 13K/20kpV
G4 15K/23kpV
G4 17K/26kpV
G4 20K/30kpV
G4 25K/38kpV

Three Phase Inverter

Xerox G4 Pro 5-25kW



Models:
G4 Pro 5K/8kpV
G4 Pro 6K/9kpV
G4 Pro 8K/12kpV
G4 Pro 10K/17kpV
G4 Pro 13K/20kpV
G4 Pro 15K/23kpV
G4 Pro 17K/26kpV
G4 Pro 20K/30kpV
G4 Pro 25K/38kpV

Easy-to-install

- Quick & easy-to-install with basic tools
- Quick setup and commissioning with Ai Solar app
- Compact wall mount design
- All-aluminium lightweight casing
- International quality standards

Reliable

- 150 % PV array oversizing for higher yields
- IP66 rated design for outdoor use
- Dual MPPT for maximum efficiency.
- All-aluminium design helps reduce internal temperature.
- Built-in internal fan for heat circulation.

User-Friendly

- User friendly app interface
- Max 40A input current, ideal for bifacial and large area PV modules (depends on model)
- Wide MPP voltage range 150V-1000V
- LED indicators for quick analysis

Technical Datasheet

PRODUCT MODEL	G4 Pro 5K/8kpV	G4 Pro 6K/9kpV	G4 Pro 8K/12kpV	G4 Pro 10K/17kpV	G4 Pro 13K/20kpV	G4 Pro 15K/23kpV	G4 Pro 17K/26kpV	G4 Pro 20K/30kpV	G4 Pro 25K/38kpV
INPUT (DC)									
Max. PV array power	7500 Wp STC	9000 Wp STC	12000 Wp STC	18000 Wp STC	19500 Wp STC	22500 Wp STC	25500 Wp STC	30000 Wp STC	37500 Wp STC
Max. input voltage	1100 V								
MPP voltage range / rated input voltage	150 V to 1000 V / 630 V								
Min. input voltage	125 V								
Initial. feed-in voltage	180 V								
Max. operating input current	16 A / 16 A		20A / 16 A	32 A / 20 A			32 A / 32 A	32 A / 20 A	40 A / 32 A
Max. short circuit current	25 A / 25 A		30 A / 25 A	48 A / 30 A			48 A / 48 A	48 A / 30 A	60 A / 48 A
No. of independent MPPT inputs / strings per MPPT input	2 / A:1; B:1			2 / A:2; B:1			2 / A:2; B:2		
OUTPUT (AC)									
Rated active power	5000 W	6000 W	8000 W	12000 W	13000 W	15000 W	17000 W	20000 W	25000 W
Rated apparent power	5000 VA	6000 VA	8000 VA	12000 VA	13000 VA	15000 VA	17000 VA	20000 VA	25000 VA
Max. apparent power	5500 VA	6600 VA	8800 VA	13200 VA	14300VA	16500 VA	18700 VA	22000 VA	27500 W
AC nominal voltage	220 V / 380 V 230 V / 400 V 240 V / 415 V								
AC voltage range	160 V to 300 V								
AC grid frequency / range	50 Hz / 45 Hz to 55 Hz 60 Hz / 55 Hz to 65 Hz								
Max. output current	8.0 A	9.6 A	12.8 A	19.1 A	20.7 A	24 A	27.1 A	31.9 A	39.8A
Adjustable power factor range	0.8 leading to 0.8 lagging								
Feed-in phases	3 / 3-N-PE								
Harmonic distortion (THD) at rated output	< 3%								
EFFICIENCY & PROTECTION									
Max. efficiency / European efficiency	98.3 % / 97.9 %		98.6% / 98.2 %						
DC switch	●								
Ground fault monitoring / grid monitoring	● / ●								
DC reverse polarity protection/ AC short circuit Protection	● / ●								
All-pole-sensitive residual-current monitoring unit	●								
Arc fault circuit interrupter (AFCI)	O								
Anti-Islanding protection	●								
Surge protection	● / Type II								
Protection class (according to IEC 62109-1) / overvoltage category (according to IEC 62109-1)	I / AC : III ; DC : II								
GENERAL DATA									
Dimensions (W / H / D)	503 / 435 / 183 mm								
Weight	16 kg			17 kg					18.6 kg
Operating temperature range	-25°C ... +60°C								
Self-consumption (at night)	< 1 W								
Topology	Non-isolated								
Cooling concept	Natural Convection			Active cooling					
Degree of protection (according to IEC 60529)	IP66								
Climatic category (according to IEC 60721-3-4)	4K4H								
Max. permissible value for relative humidity (non-condensing)	100%								
Max. operating altitude	3000 m								
FEATURES									
DC connection	Plug-in connector								
AC connection	Plug-in Connector								
Mounting type	Wall-mount bracket								
LED Indicators (Status / Fault / Communication)	●								
24/7 monitoring	●								
Communication interface	●/●/O/O (RS485 /Wi-Fi/ LAN /4G)								
Country of manufacture	China								
Certificates and approvals (more available on request)	CE, EN50549, G98/99, VDE-AR-N4105, AS/NZS 4777, C10/C11, VFR 2014 & UTE C15, IEC62109, IEC62116, IEC61727, IEC61683, IEC60068, IEC61000, NB/T 32004								

● Standard features / O optional features / – not available

1) Zero export installations supported with 2-pin RS485 for connection to approved smart meters

Data at nominal conditions. All information is subject to change.

Three Phase Inverter

Xerox G4 Pro 30-60kW

Models:

G4 Pro 30K/45kpV
G4 Pro 40K/60kpV
G4 Pro 50K/75kpV
G4 Pro 60K/90kpV

Easy-to-install

- Quick and easy-to-install with standard tools
- Phoenix Contact connectors for reliable tool-free DC connection
- Fuse-free design thereby reducing BOS cost
- Compact wall mount design
- Setup, commissioning and monitoring via the Ai Solar app

Reliable

- Internationally accredited standards
- 150 % PV array oversizing for higher yields
- IP66 rated design for indoor and outdoor use
- Up to 5 MPPT's for flexible PV array design
- Integrated DC switches

User-Friendly

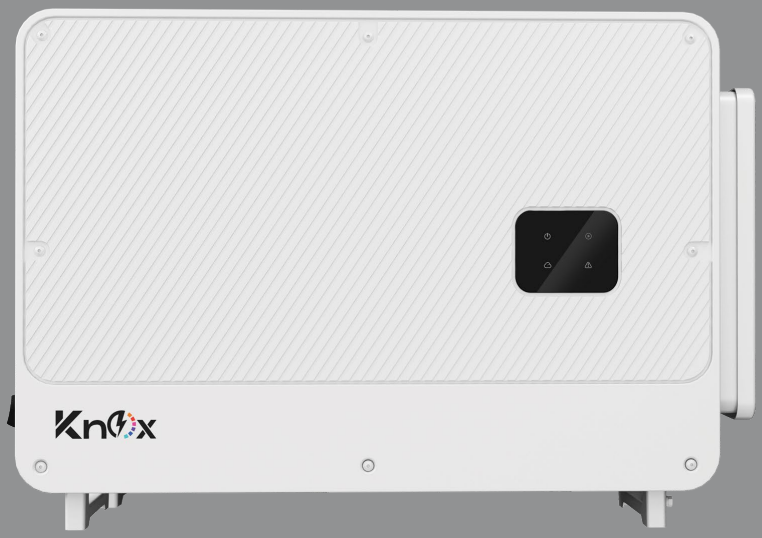
- Max. 20A input current per string, ideal for bifacial and large area PV modules
- Wide MPP voltage range 150V-1000V
- ShadeSol - improved generation under non-ideal conditions
- Type II AC & DC Surge Protection

Technical Datasheet

PRODUCT MODEL	G4 Pro 30K/45kpV	G4 Pro 40K/60kpV	G4 Pro 50K/75kpV	G4 Pro 60K/90kpV
INPUT (AC)				
Max. PV array power	45000 Wp STC	60000 Wp STC	75000 Wp STC	90000Wp STC
Max. input voltage	1100 V			
MPP voltage range / rated input voltage	150 V - 1000 V / 630 V	180 V - 1000 V / 630 V		200 V - 1000 V / 630 V
Min. input voltage	125 V	160 V		200 V
Initial. feed-in voltage	180 V	200 V		250 V
Max. short circuit current	40 / 20 A /40 A	40 A / 32 A / 20 A / 20 A	40 A / 40 A / 20 A / 32 A	40 A / 32 A / 32A / 40 A / 32 A
Max. operating input current	50 A /25 A / 50 A	50 A / 40 A / 25 A / 25 A	50 A / 50 A / 25 A / 40 A	60 A / 48 A / 48 A / 60 A / 48 A
No. of independent MPPT inputs / strings per MPPT input	3 / A:2; B:1; C:2	4 / A:2; B:2; C:1; D:1	4 / A:2;B:2;C:1;D:2	5/2
OUTPUT (AC)				
Rated active power	30000 W	40000 W	50000 W	60000 W
Rated apparent power	30000 VA	40000 VA	50000 VA	60000 VA
Max. apparent power	33000 VA	44000 VA	55000 VA	60000 VA
AC nominal voltage	230 V / 380 V	230 V / 400 V		220 V / 380 V 230 V / 400 V
AC voltage range	160 V - 300 V / 320 V - 520 V			180 V - 305 V / 312 V - 528 V
AC grid frequency / range	50 Hz / 45 Hz - 55 Hz 60 Hz / 55 Hz - 65 Hz			
Max. output current	47.8 A	63.8 A	79.7 A	95.3 A
Rated output current	43.5 A	58.0 A	72.5 A	
Adjustable power factor range	0.8 leading to 0.8 lagging			
Feed-in phases	3 / 3-N-PE			
Harmonic distortion (THD) at rated output	< 3%			
EFFICIENCY & PROTECTION				
Max. efficiency / European efficiency	98.6% / 98.3%	98.7% / 98.3%		98.6% / 98.3%
DC Switch	●			
Ground fault monitoring / grid monitoring	● / ●			
DC reverse polarity protection / AC short circuit protection	● / ●			
All-pole-sensitive residual-current monitoring unit	●			
Arc fault circuit interrupter (AFCI)				
Anti-Islanding protection	●			
Surge protection	● / Type II			
Protection class (according to IEC 62109-1) / overvoltage category (according to IEC 62109-1)	I / AC: III; DC: II			
GENERAL DATA				
Dimensions (W / H / D)	488 / 425.5 / 179 mm	574 / 513.5 / 234.5 mm		670 / 640 / 270 mm
Weight	20.0 kg	29.5 kg	30.5 kg	42.5 kg
Operating temperature range	–30 °C ... +60 °C			–25 °C ... +60 °C
Self-consumption (at night)	< 1 W			
Topology	Non-isolated			
Cooling concept	Active cooling			
Degree of protection (according to IEC 60529)	IP66			
Climatic category (according to IEC 60721-3-4)	4K4H			
Max. permissible value for relative humidity (non-condensing)	1			100%
Max. operating altitude	3000 m			4000 m
FEATURES				
DC connection	Plug-in connector			
AC connection	Plug-in connector			OT/DT connector
Mounting type	Wall-mount bracket			
LED indicators (Status / Fault / Communication)	●			
Communication interface[1]	● / ● / O / O (RS485 / Wi-Fi / LAN / 4G)			
Country of manufacture	China			
Certi cates and approvals (more available on request)	IEC62109-1 / IEC62109-2 / IEC62727 / IEC62683 / IEC62116			CE, IEC 62109-1/2, IEC 61727, IEC 62116, IEC 61683, G98/G99, VDE4110, VDE4105, EN50549-1/2

Three Phase Inverter

Xerox G4 Pro 100-125kW



Models:

G4 Pro 100K-LV
G4 Pro 110K-LV
G4 Pro 125K-LV

BUILT-IN
AFCI Protection

Easy-to-install

Higher Yields

Reliable & Safe

Optimal Generation for Higher Return

- 21A DC input current per string
- 8/10 MPPTs, max. Efficiency 99.0%
- 150% DC input oversizing & 110% AC output overloading
- No derating at 45°C

Superb Safety & Reliability

- Type II SPD on AC & DC sides
- IP66 and optional C5 protection
- Built-in AFCI protection

Smart Control & Monitoring

- String level monitoring
- Remote or onsite upgrade supported

Friendly & Thoughtful Design

- Lightweight design and high power density for easy installation
- Easy & quick replacement of fan
- Fuse free design

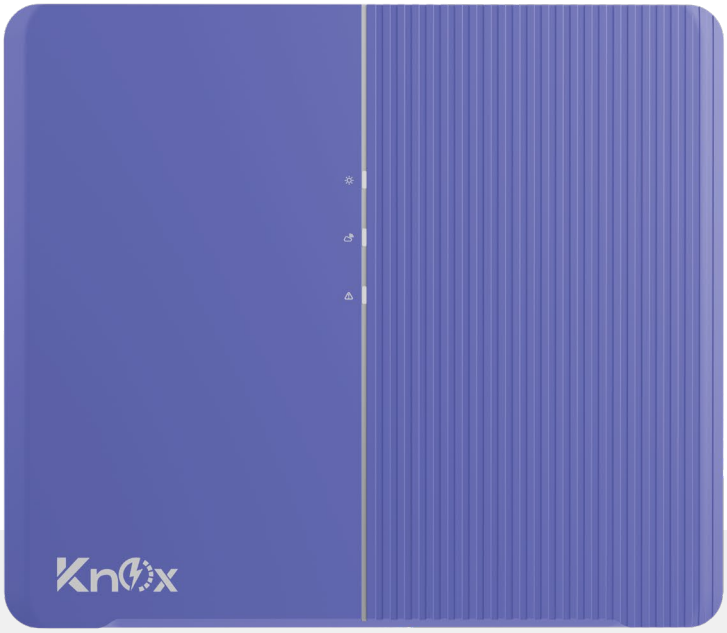
Technical Datasheet

PRODUCT MODEL	G4 Pro 100K-LV	G4 Pro 110K-LV	G4 Pro 125K-LV
INPUT			
Max. Input Voltage (V)	1100[*11]	1100[*11]	1100[*11]
MPPT Operating Voltage Range (V)[*12]	180 ~ 1000	180 ~ 1000	180 ~ 1000
Start-up Voltage (V)	200		
Nominal Input Voltage (V)	600	600	600
Max. Input Current per MPPT (A)	42		
Max. Short Circuit Current per MPPT (A)	52.5		
Number of MPP Trackers	8	10	10
Number of Strings per MPPT	2		
OUTPUT			
Nominal Output Power (kW)	100[*1]	110	125
Nominal Output Apparent Power (kVA)	100[*1]	110	125
Max. AC Active Power (kW)[*3]	110.0[*1]	121.0[*4]	137.5[*2]
Max. AC Apparent Power (kVA)[*3]	110.0[*1]	121.0[*4]	137.5[*2]
Nominal Output Voltage (V)	220 / 380, 230 / 400, 3L / N / PE or 3L / PE		
Output Voltage Range (V)	304 ~ 460	304 ~ 460	304 ~ 460
Nominal AC Grid Frequency (Hz)	50 / 60		
AC Grid Frequency Range (Hz)	45 ~ 55 / 55 ~ 65		
Max. Output Current (A)[*5]	167.1	183.4	199.4
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)		
Max. Total Harmonic Distortion	<3%		
EFFICIENCY			
Max. Efficiency	98.8%	98.8%	99.0%
European Efficiency	98.4%	98.4%	98.5%
PROTECTION			
PV String Current Monitoring	Integrated		
PV Insulation Resistance Detection	Integrated		
Residual Current Monitoring	Integrated		
PV Reverse Polarity Protection	Integrated		
Anti-islanding Protection	Integrated		
AC Overcurrent Protection	Integrated		
AC Short Circuit Protection	Integrated		
AC Overvoltage Protection	Integrated		
DC Switch	Integrated		
DC Surge Protection	Type II (Type I + II Optional)		
AC Surge Protection	Type II		
AFCI	Optional[*9]	Optional[*9]	Optional[*9]
Emergency Power Off	Optional	Optional	Optional
Rapid Shutdown	Optional		
Remote Shutdown	Optional	Optional	Optional
PID Recovery	Optional		
Reactive Power Compensation at Night	Optional	Optional	Optional
Power Supply at Night	Optional[*10]	Optional[*10]	Optional[*10]
GENERAL DATA			
Operating Temperature Range (°C)	-30 ~ +60		
Relative Humidity	0 ~ 100%		
Max. Operating Altitude (m)	4000		
Cooling Method	Smart Fan Cooling		
User Interface	LED, LCD (Optional), WLAN + APP		
Communication	RS485, WiFi + LAN or 4G or PLC (Optional)		
Communication Protocols	Modbus-RTU (SunSpec Compliant)		
Weight (kg)	85	88	88
Dimension (W × H × D mm)	930 × 650 × 300		
Topology	Non-isolated		
Self-consumption at Night (W)	<2	<2	<2
Ingress Protection Rating	IP66		
DC Connector	MC4 (4 ~ 6mm²)		
AC Connector	OT / DT terminal (Max. 240mm²)		

*1: For Australia is 99.99kW / kVA.
*2: For VDE4105 Max. AC Active Power (kW) and Max. AC Apparent Power (kVA): GW125K-GT is 134.9.
*3: For Chile and Brazil Max. AC Active Power (kW) and Max. AC Apparent Power (kVA): GW100K-GT is 100; GW110K-GT is 110; GW125K-GT is 125.
*4: For Australia is 110kW / kVA.
*5: For Australia Max. Output Current (A): GW100K-GT is 145, GW110K-GT is 159.5.
*6: For Colombia Max. AC Active Power (kW): GW75K-GT-LV-G10 is 70.9@208V.
*7: For Colombia Nominal Output Voltage (V): GW75K-GT-LV-G10 is 120 / 208, 3L / N / PE or 3L / PE.
*8: For Brazil and Colombia is Integrated.
*9: For Australia, GW100K-GT/GW110K-GT/GW125K-GT AFCI: Integrated.
*10: For Australia, GW100K-GT/GW110K-GT/GW125K-GT Power Supply at Night: Integrated.
*11: When the input voltage ranges from 1000V to 1100V, the inverter will enter the standby state. When the input voltage returns to the MPPT operating voltage range, the inverter will resume normal operating state.
*12: Please refer to the user manual for the MPPT Voltage Range at Nominal Power.
*: Please visit GoodWe website for the latest certificates.
*: All pictures shown are for reference only. Actual appearance may vary.

Three Phase Inverter

Xerox G4 3-25kW



Models:

G4 3K/5kpV
G4 4K/6kpV
G4 5K/8kpV
G4 6K/9kpV
G4 8K/12kpV
G4 10K/15kpV
G4 12K/18kpV
G4 13K/20kpV
G4 15K/23kpV
G4 17K/26kpV
G4 20K/30kpV
G4 25K/38kpV

Easy-to-install

- Quick & easy-to-install with basic tools
- Quick setup and commissioning with Ai Solar app
- Compact wall mount design
- All-aluminium lightweight casing
- International quality standards

Reliable

- 150 % PV array oversizing for higher yields
- IP66 rated design for outdoor use
- Dual MPPT for maximum efficiency.
- All-aluminium design helps reduce internal temperature.
- Built-in internal fan for heat circulation.

User-Friendly

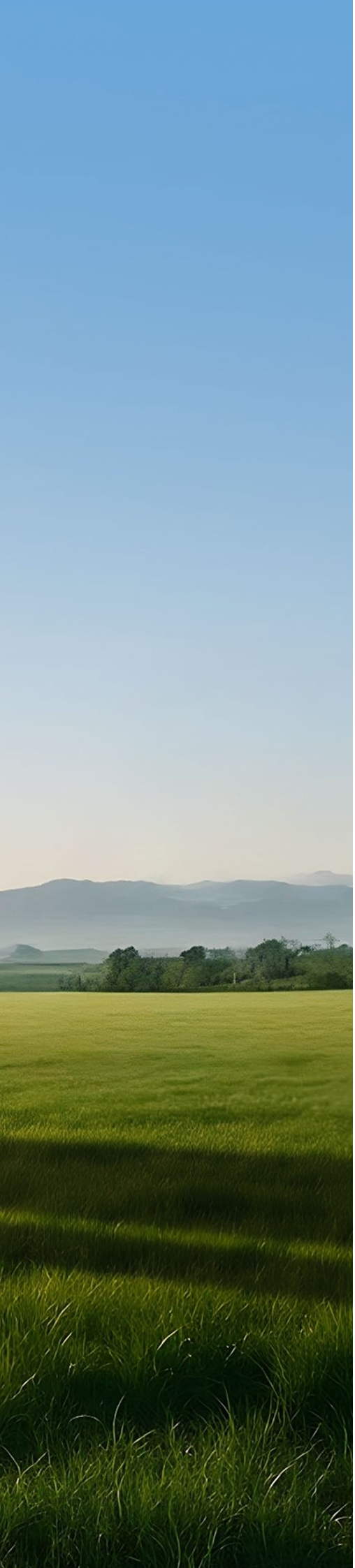
- User friendly app interface
- Max 30A input current, ideal for bifacial and large area PV modules (depends on model)
- Wide MPP voltage range 150V-1000V
- LED indicators for quick analysis

Technical Datasheet

PRODUCT MODEL	G4 3K/5kpV	G4 4K/6kpV	G4 5K/8kpV	G4 6K/9kpV	G4 8K/12kpV	G4 10K/15kpV	G4 12K/18kpV	G4 13K/20kpV	G4 15K/23kpV	G4 17K/26kpV	G4 20K/30kpV	G4 25K/38kpV
INPUT (DC)												
Max. PV modules power (W)	4500 Wp STC	6000 Wp STC	7500 Wp STC	9000 Wp STC	12000 Wp STC	15000 Wp STC	18000 Wp STC	19500 Wp STC	22500 Wp STC	25500 Wp STC	30000 Wp STC	32500 Wp STC
Max. input voltage (V)	1100											
Initial feed-in voltage (V)	180											
Min. input voltage (V)	125											
Rated input voltage (V)	630											
MPPT Voltage Range (V)	150 ~ 1000											
Full load DC voltage range (V)	270 ~ 850				400 ~ 850							
Max. DC input current (A)	16/16	16/16	16/16	16/16	20/16	20/16	32/20	32/20	32/20	32/32	32/32	40/32
Isc PV, Absolute current (A)	25/25	25/25	25/25	25/25	30/25	30/25	48/30	48/30	48/30	48/48	48/48	60/48
Number of MPPT Trackers	2											
Strings per MPPT Tracker	1/1						2/1			2/2		
OUTPUT (AC)												
Max. Output apparent power (VA)	3300	4400	5500	6600	8800	11000	13200	14300	16500	18700	22000	27500
Rated Output power (W)	3000	4000	5000	6000	8000	10000	12000	13000	15000	17000	20000	25000
Max. AC Output Current (A)	4.8	6.4	8.0	9.6	12.8	16.0	19.1	20.7	24.0	27.1	31.9	39.8
Nominal Grid Voltage (V)	230, 3/N/PE											
Nominal Frequency (Hz)	50/60											
Power factor	0.8 ind ~ 0.80 cap											
EFFICIENCY & PROTECTION												
Max. efficiency / European efficiency	98.6% / 98.2%											
DC switch	●											
Ground fault monitoring / grid monitoring	● / ●											
DC reverse polarity protection/ AC short circuit Protection	● / ●											
All-pole-sensitive residual-current monitoring unit	●											
Surge protection	● / Type II											
Anti-Islanding protection	●											
Night monitoring	O											
Protection class (according to IEC 62109-1) / overvoltage category (according to IEC 62109-1)	I / AC: III; DC: II											
GENERAL DATA												
Weight	16kg											
Dimensions (W / H / D)	503/435/183 mm											
Operating temperature range	-25°C ... +60°C											
Self-consumption (at night)	< 1 W											
Topology	Non-isolated											
Cooling concept	Natural Convection											
Degree of protection (according to IEC 60529)	IP66											
Climatic category (according to IEC 60721-3-4)	4K4H											
Max. permissible value for relative humidity (non-condensing)	1											
Max. operating altitude	3000 m											
FEATURES												
DC connection	Plug-in connector											
AC connection	Plug-in Connector											
AC grid frequency range	50 Hz / 45 Hz to 55 Hz 60 Hz / 55 Hz to 65 Hz											
Mounting type	Wall-mount bracket											
LED Indicators (Status / Fault / Communication)	●											
Communication interface [1 & 2]	Wi-Fi / RS485											
Certificates and approvals (more available on request)	CE, IEC 62109-1 / IEC 62109-2 / IEC 61727 / IEC 62116 / IEC 61683											

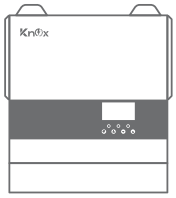
Argon Series

Single Phase Hybrid / Off Grid Inverter



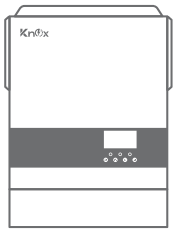
Perfect for home, small business & commercial use

Argon 1500 | 2500 | 3500



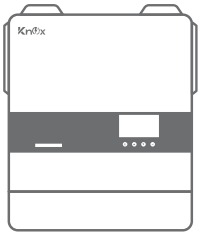
1.5kW-12-pV2000
2.5kW-24-pV3000
3.5kW-24-pV4000

Argon 4200 | 6200



4.2kW-24-pV5000-Twin
6.2kW-48-pV6500-Twin

Argon 8500 | 11000



8.5kW-48-pV10000-TwinPL
11kW-48-pV11000-TwinPL

Single Phase Hybrid / Off Grid Inverter

Argon Series

1500 | 2500 | 3500 | 4200 | 6200
8500 | 11000

Models:

1.5kW-12-pV2000
2.5kW-24-pV3000
3.5kW-24-pV4000
4.2kW-24-pV5000-Twin
6.2kW-48-pV6500-Twin
8.5kW-48-pV10000-TwinPL
11kW-48-pV11000-TwinPL

WiFi | No Battery Mode | Anti-Shock Design Terminal | RGB Lights | Colored LCD | Dual Output | Dual MPPT | BMS

Easy-to-install

- Pure sine wave solar inverter
- Maximum PV Input Voltage of 500 Vdc
- Detachable dust cover for harsh environments
- Capable to work without battery (Battery-independent design)
- EQ function to optimize battery performance and extend lifecycle
- Lithium battery activation function (by PV or Utility for 4200/6200/8500/11000)
- Reserved communication port for BMS (1500/2500/3500)
- Battery Management System (BMS) included (4200/6200)
- Built-in MPPT 60A-100A and Single MPPT unit (1500/2500/3500)
- Built-in MPPT 100A/120A and Single MPPT unit (4200/6200)
- Built-in MPPT 120A/160A and Two (2) MPPTs (8500/11000)

Reliable

- UTL, SOL, SBU, SUB (1500/2500/3500/4200/6200)
- SBU, SUB, SUF (8500/11000)
- WiFi remote monitoring optional (1500/2500/3500/4200/6200)
- Built-in Wi-Fi for mobile monitoring (8500/11000)
- Single output (1500/2500/3500)
- Dual output for smart load management (4200/6200/8500/11000)
- Compatible with LiFePO4 battery via RS485 communication (4200/6200/8500/11000)
- Power factor 1.0 (8500/11000)
- Parallel operation up to 6 units (8500/11000)
- Colored LCD with RGB lights (8500/11000)

User-Friendly

Technical Datasheet

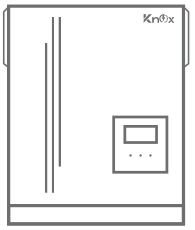
KNOX SERIES	Argon 1500	Argon 2500	Argon 3500	Argon 4200	Argon 6200	Argon 8500	Argon 11000
MODEL	1.5kW-12-pV2000	2.5kW-24-pV3000	3.5kW-24-pV4000	4.2kW-24-pV5000-Twin	6.2kW-48-pV6500-Twin	8.5kW-48-pV10000-TwinPL	11kW-48-pV11000-TwinPL
Phase	Single Phase						
Maximum PV Input Power	2000	3000	4000	5000	6500	10000	11000
Capacity	1500VA/1500W	2500VA/2500W	3500VA/3500W	4200VA/4200W	6200VA/6200W	8.5KVA/8.5KW	11KVA/11KW
Twin AC Output Function	-					YES	
Parallel Capability	NO					YES, upto 6	
Lithium Battery Activation	YES (By PV)			YES (By PV or Utility)			
Lithium battery Communication	NO			YES(RS485)			
Built-in WiFi	-			Optional		YES	
INPUT							
Nominal Voltage	230VAC						
Acceptable Voltage Range	170-280VAC (For personal Computer) / 90-280VAC (For Home Appliances)						
Frequency	50/60 Hz (Auto sensing)						
OUTPUT							
Nominal Voltage	220/230VAC ±5%					220/230/240VAC	
Rated Power	1500VA/1500W	2500VA/2500W	3500VA/3500W	4200VA/4200W	6200VA/6200W	8500VA/8500W	11000VA/11000W
Battery Mode Power	1200VA/1200W	2500VA/2500W	3000VA/3000W	4200VA/4200W	6200VA/6200W	5000VA/5000W	5500VA/5500W
Surge Power	3000VA	5000VA	7000VA	8400VA	12400VA	17000VA	22000VA
Frequency	50/60 Hz						
Waveform	Pure Sine wave						
Dual Outputs	-			Yes			
Transfer Time	10ms (For personal Computer) / 20ms (For Home Appliances)						
Peak Efficiency (PV to INV)	96%			94%			
Peak Efficiency (Battery to INV)	93%			-			
Overload Protection	5s @ ≥140% load, 10s @ 100%–140% load						
Crest Factor	3:01			-			
Adjustable Power Factor	0.6–1 (Inductive or capacitive)						
BATTERY							
Battery Voltage	12Vdc	24Vdc		24VDC	48VDC	48VDC	
Floating Charge Voltage	13.5Vdc	27Vdc		27VDC	54VDC	54VDC	
OverCharge Protection	16.5Vdc	32Vdc		33VDC	63VDC	63VDC	
Charging Method	CC/CV						
Max. Discharge Current	-					180A	220A
SOLAR CHARGER & AC CHARGER							
Solar Charger Type	MPPT						
Max. PV Array Power	2000W	3000W	4000W	5000W	6500W	5000W*2	5500W*2
Max. PV Array Open Circuit Voltage	500VDC						
PV Array MPPT Voltage Range	30VDC – 500VDC					60VDC–500VDC	
Max. Solar Input Current	15A			1 / 27A		27A*2	
Max. Solar Charge Current	100A				120A		160A
Max. AC Charger Current	60A			80A		100A	120A
Max. Charge Current (AC + PV)	100A				120A	140A	160A
PHYSICAL							
Dimensions, D x W x H (mm)	330*278*96			368x312x109.5	438x313x112	540x403x122	
Package Dimensions, D x W x H (mm)	400*365*174			-		637x495x214	
Net Weight (kg)	3.8	3.95		6.7	11	14.5	14.8
Communications Interface	RJ45 for WiFi			RS485(RJ45)/RS232(DB9)		RS232/RS485/DRY CONTACT	
LCD	-					Colorful Screen+RGB Light	
ENVIRONMENT							
Operating Temperature Range	–10◦C to 55◦C						
Storage temperature Humidity	–15◦C–60◦C						
Humidity	5% to 95% Relative Humidity (Non-condensing)						
Ingress Protection	IP21						

Krypton Eco Series

Hybrid Inverters with Grid Feeding

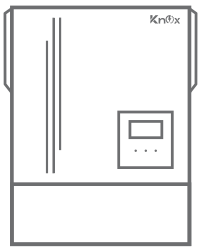
Perfect for home, small business applications

Krypton Eco 4000



3kW-24-pV4000

Krypton Eco 5000 & 6600



4kW-24-pV5000-TWIN
6.2kW-48-pV6600-TWIN

Hybrid Inverter with Grid Feeding

Krypton Eco Series

4000 | 5000 | 6600

Models:

- 3kW-24-pV4000

Grid Feed 3kW

- 4kW-24-pV5000-TWIN

Grid Feed 4.2kW

- 6.2kW-48-pV6600-TWIN

Grid Feed 6.2kW

In Built Wifi

Intelligent Load Management

Dual Output

Grid Feeding

Batteryless Operation

BMS

Easy-to-install

- Pure sine wave solar inverter
- Reserved communication port for BMS
- Wide PV input range
- Advanced 18A PV controller

Reliable

- Battery independent design
- Maximum charging current 100A
- Built-in anti-dust kit
- Feed into grid

User-Friendly

- Battery equalization function to optimize battery performance and extend lifecycle
- Battery management system

Technical Datasheet

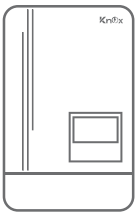
KNOX SERIES	Krypton Eco 4000	Krypton Eco 5000	Krypton Eco 6600
MODEL	**3kW-24-pV4000**	**4kW-24-pV5000-TWIN**	**6.2kW-48-pV6600-TWIN**
Rated Power	4000VA /4000W	5000VA /5000W	6600VA/6600W
Battery Mode Power	2500W	4000W	5000W
PV+Bat Output Power	3000W	4200W	6200W
INPUT			
Voltage	230 VAC		
Selectable Voltage Range	184 - 264 or 195.5 - 253 VAC		
FrequencyRange	50 Hz/60 Hz(Auto sensing)		
OUTPUT			
AC Voltage Regulation (Batt. Mode)	230VAC ±5%		
Surge Power	6000VA	8400VA	18000VA
Efficiency (Peak)	93%		
Transfer Time	10 ms (For Personal Computers) ; 20 ms (For Home Appliances)		
Waveform	Pure sine wave		
BATTERY			
Battery Voltage	24 VDC	24 VDC	48 VDC
Floating Charge Voltage	27 VDC	27 VDC	54 VDC
Overcharge Protection	32 VDC	32 VDC	63 VDC
SOLAR CHARGER & AC CHARGER			
Solar Charger Type	MPPT		
Maximum PV Array Open Circuit Voltage	450 VDC	500 VDC	
Maximum PV Array Power	4000W	5000W	6600W
MPP Range @ Operating Voltage	30 ~ 400VDC	30 ~ 450VDC	90 ~ 450VDC
PV Rated Current	13A	18A	
Max. Input Current (Isc)	16A	20A	
Maximum Solar Charge Current	80A	100A	
Maximum AC Charge Current	80A	120A	
Maximum Charge Current	80A	120A	
PHYSICAL			
Dimension, D x W x H (mm)	95 x288 x357	115 x300 x435	
Net Weight (kgs)	7.1	9	10.4
Communication Interface	RS232/RS485,WiFi	RS232,WiFi	
ENVIRONMENT			
Humidity	5% to 95% Relative Humidity (Non-condensing)		
Operating Temperature | Storage Temperature	-10°C to 50°C | -15°C to 60°C		

Krypton Series

Hybrid Inverters with Grid Feeding

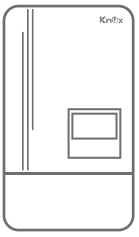
Perfect for home, small business & commercial use

Krypton 6000 & 6500



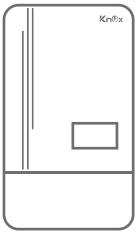
4kW-24-pV6000-TWIN
4.5kW-24-pV6500-TWIN

Krypton 9000



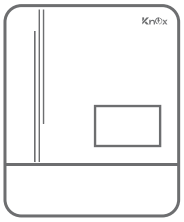
6.2kW-48-pV9000-TWIN

Krypton 9055



6.5kW-48-pV9055-TWIN

Krypton 12002 | 13002 | 15002



8.5kW-48-pV12kW-TWIN
10kW-48-pV13kW-TWIN
11.5kW-48-pV15kW-TWIN

Hybrid Inverter with Grid Feeding

Krypton Series

6000 | 6500 | 9000 | 9055
12000 | 12002 | 13002 | 15002

Models:

4kW-24-pV6000-TWIN
4.5kW-24-pV6500-TWIN
6.2kW-48-pV9000-TWIN
6.5kW-48-pV9055-TWIN
8kW-48-pV12kW-TWIN
8.5kW-48-pV12kW-TWIN
10kW-48-pV13kW-TWIN
11.5kW-48-pV15kW-TWIN

In Built Wifi | HMI Touchscreen | Dual MPPT | Intelligent Load Management | Dual Output | Grid Feeding | Batteryless Operation | BMS

Easy-to-install

- Large HMI touchscreen (9055 and 12002/13002/15002 models).
- Dual outputs for smart load management.
- Maximum PV input current:
  1. Increases to 30A (ISC 40A) (6000, 6500, 9000).
  2. Increases to 30A X 2 (12002, 13002, 15002).
  3. Increases to 23A (9055).
- Wide PV input voltage range of 90VDC - 450VDC.
- Status indication with RGB lights.
- Built-in Wi-Fi for mobile monitoring (Android/iOS App is available).
- Supports USB On-the-Go function.
- Reserved communication port for BMS:
  1. RS485 only (6000, 6500).
  2. RS485, CAN-BUS or RS232 (9000, 9055, 12002/13002/15002).

Reliable

- Replaceable fan design for ease of maintenance.
- Battery independent design.
- Configurable AC/PV output usage timer and prioritization.
- USB-A OTG firmware upgrades.
- Compatible with Utility Mains or generator input.
- Built-in anti-dust kit
- Built-in DC output for DC fan, LED bulb, router and so on (9000, 12002/13002/15002).
- CT function for self-consumption (optional) (9055).
- Parallel operation with 9 units (9000, 9055).
- Parallel operation with 6 units (12002, 13002, 15002)

User-Friendly

Technical Datasheet

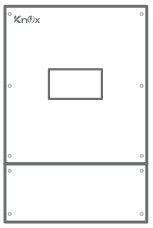
KRYPTON SERIES	Krypton 6000	Krypton 6500	Krypton 9000	Krypton 9055	Krypton 11008	Krypton 12002	Krypton 13002	Krypton 15002
MODEL	4kW-24 PV6000-TWIN	4.5kW-24 PV6500-TWIN	6.2kW-48 PV9000-TWIN	6.5kW-48 PV9055-TWIN	8kW-48 PV12kW-DU	8.5kW-48 PV12kW-TWIN	10kW-48 PV13kW-TWIN	11.5kW-48 PV15kW-TWIN
Phases	Single Phase							
Maximum PV Input Power	6000 W	6500 W	9000 W	4500 W x 2	12000 W	12000 W	13000 W	15000 W
Rated Output Power	4000 W	4500 W	6200 W	6500 W	8000 W	8500 W	10000 W	11500 W
Battery + PV Output Power	4000 W	4500 W	6200 W	8000 W	8000 W	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	60 ~ 450 VDC		120 VDC ~ 430 VDC			90 ~ 450VDC		
Number of MPP Trackers / Maximum Input Current	1x30A (MAX 40A)			2x22A / Isc 2x30A		3x18A (MAX45A)		
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)		184-264.5 VAC or 195.5-253 VAC (Selectable)			170-280 VAC (For Personal Computers) 90-280 VAC (For Home Appliances)		
Nominal Output Current	17.4 A	19.5 A	28.26 A	29.50 A		39A	45A	52A
Power Factor	> 0.99							
EFFICIENCY								
Maximum Conversion Efficiency (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)	93%							
Transfer Time	10 ms (For Personal Computers) ; 20 ms (For Home Appliances)							
BATTERY & CHARGER								
Nominal DC Voltage	24VDC		48 VDC					
Floating Charge Voltage	27 VDC		54 VDC					
Overcharge Protection	32 VDC		63 VDC			66VDC		
Solar Charger Type	MPPT							
Maximum Solar Charging Current	120 A		142A	150A				
Maximum AC Charging Current	120 A					150A		
Maximum Charging Current	120A					150A		
Surge Power	8000VA	9000VA	12400VA	13000VA	16000VA	17000VA	20000VA	23000VA
GENERAL								
PHYSICAL								
Dimension, D x W x H (mm)	119 x 313.6 x 457.5		138 x 320 x 550	140 x 295 x 468		156.1 x 460 x 551.8		
Net Weight (kgs)	10	12	13.7	13.5		18.4		
INTERFACE								
Parallel Function			Yes, 9 Units			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 61683 / Low Voltage Directive 2014/35/EU IEC 62109-1 / IEC 62109-2 / IEC 61683							

Xenon Series

Single & Three Phase Hybrid Inverter with Grid Feeding & IP66 Protection

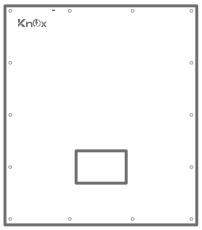
Perfect for home, small business & commercial use

Xenon 12066



6.6kW-48-pV12066-TWIN

Xenon 18000 & 22500



12kW-48-pV18000-TWIN
15kW-48-pV22500-TWIN

Single & Three Phase Hybrid Inverter with
Grid Feeding & IP66 Protection

Xenon Series

12066 | 18000 | 22500

Models:

6.6kW-48-pV12066-TWIN
12kW-48-pV18000-TWIN
15kW-48-pV22500-TWIN

Dual MPPT

IP66 Protection

In Built Wifi | 7" HMI Touchscreen | Dual MPPT | Intelligent Load Management | Dual Output | Grid Feeding | IP66 Protection | BMS | Parallel upto 9 Units

Easy-to-install

- IP66 waterproof and dustproof makes the inverter available for various working conditions.
- Large HMI touchscreen
- 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 (12066)

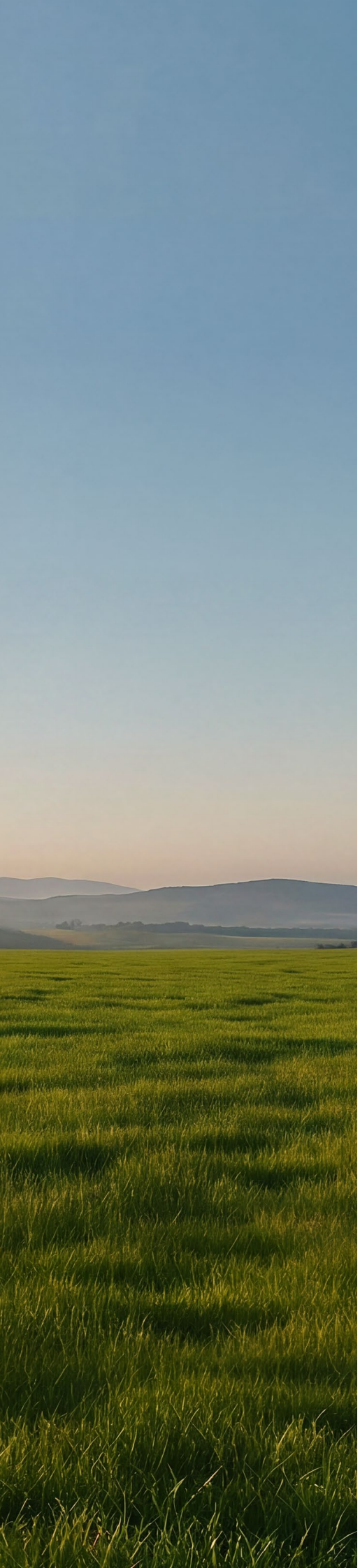
  Parallel operation with 6 units (18000, 22500)

Technical Datasheet

KNOX SERIES	Xenon 12066	Xenon 18000	Xenon 22500
MODEL	**6.6kW-48-pV12066-TWIN**	**12kW-48-pV18000-TWIN**	**15kW-48-pV22500-TWIN**
Phase	1-phase in / 1-phase out	Three Phase	
Maximum Pv Input Power	12000 W	18000 W	22500 W
Rated Output Power	6600VA/6600W	12000 W	15000 W
Maximum Charging Power	6600 W	12000 W	15000 W
GRID-TIE OPERATION			
PV INPUT (DC)			
Nominal DC Voltage / Maximum DC Voltage	500 VDC	900 VDC	1000 VDC
Start-up Voltage / Initial Feeding Voltage	80 VDC / 150 VDC	150 VDC - 900 VDC	350 VDC - 1000 VDC
MPPT Voltage Range	120 VDC ~ 500 VDC	350 ~ 950 VDC	
Number of MPP Trackers / Maximum Input Current	2 / 22A	2 / A: 27A, B: 27A	
Number of Strings Per MPP Tracker		A: 2, B: 2	
GRID OUTPUT (AC)			
Nominal Output Voltage	220/230/240 VAC	3/N/PE, 230/400 VAC	
Output Voltage Range	182 - 260 VAC or 184 - 264.5 VAC or 195.5 - 253 VAC or 184 - 264.4 VAC (Selectable)	184 - 264.5 VAC or 195.5 - 253 VAC or 184 - 264.4 VAC (Selectable)	
Nominal Output Current	28.7A	17.4 A per phase	21.7 A per phase
Power Factor range	> 0.99	0.9 lag ~ 0.9 lead	
Surge Power	12000VA	24000VA	30000VA
No Load Power Consumption	< 60W	60W/P	
EFFICIENCY			
Maximum Conversion Efficiency (DC/AC)	95%	96%	
European Efficiency@ Vnominal	95%		
OFF-GRID OPERATION			
AC INPUT			
AC Start-up Voltage / Auto Restart Voltage	60 - 80 VAC / 180 VAC	120 - 140 VAC / 180 VAC	
Acceptable Input Voltage Range	90 - 300 VAC or 170 - 300 VAC	170 - 290 VAC per phase	
Frequency Range	50 Hz/60 Hz (Auto sensing)	50 Hz	
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%	91%	
BATTERY & CHARGER			
Battery Voltage Range	48 VDC	40 ~ 60 VDC	
Maximum Charging Current	120 A / 140 A	240 A	300 A
SOLAR CHARGER & AC CHARGER			
Solar Charger type	MPPT		
GENERAL			
PHYSICAL			
Dimension, D x W x H (mm)	192 x 414 x 630	255 x 660 x 750	
Net Weight (kgs)	32	70	73
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	YES, 6 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**		
Certi cates and approvals(more available on request)	IEC 61682 / Low Voltage Directive 2014/35/EU IEC 62109-1 / IEC 62109-2 / IEC 61683		

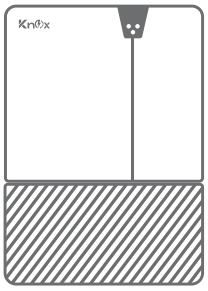
Zynex Series

Single Phase Hybrid Inverter with Grid Feeding & IP66 Protection



Perfect for home, small business & commercial use

Zynex Series



ZX-3M-0816
ZX-3M-1020

Single Phase Hybrid Inverter with Grid Feeding
& IP66 Protection

Zynex 8kW & 10kW

Models:
ZX-3M-0816
ZX-3M-1020

3 MPPT

IP66 Protection

In Built Wifi

IP66 Protection

Dual Output

3 MPPT

Grid Feeding

Batteryless Operation

Battery Management System

Easy-to-install

- 3 independent MPPTs for flexible and optimized large PV array design
- Max. 20 A input current per MPPT, ideal for bifacial and large area PV modules
- Up to 200% PV array oversizing for higher energy yields
- ShadeSol shadow management

Reliable

- UPS-level switching time < 10 ms
- IP66 rated design for indoor and outdoor use
- Up to 200% power output for 10s during power outages
- Multi-source design for black start integrating PV, battery, and generator

User-Friendly

- Expandable up to 30 kW in on-grid and off-grid mode
- Compatible with both lead-acid and lithium batteries
- Smart setup, commissioning and monitoring via KNOX App

Technical Datasheet

PRODUCT MODEL	ZX-3M-0816	ZX-3M-1020
PV INPUT		
Max. PV array power	16000 Wp	20000 Wp
Max. input voltage	550 V	
MPP voltage range / rated input voltage	40-530 V / 380 V	
Min. input voltage / start voltage	40 V / 50 V	
No. of independent MPPT trackers / strings per MPPT input	3 / 1	
Max. input current / Max. power per MPP tracker	20 A / 10000 W	20 A / 10000 W
Max. short-circuit current per MPP tracker	25 A	
BATTERY INPUT		
Battery voltage range	40 V to 60V	
Max. charge / discharge power	8000 W	10000 W
Max. charge current / Max. discharge current	190 A	210 A
Battery type	LiFePO4 / Lead-acid	
AC OUTPUT		
AC voltage range / Nominal AC voltage	154 V to 276 V / 220, 230, 240, L/N	
Rated AC grid frequency	50 Hz / 60 Hz	
AC grid frequency range	45-55 Hz / 55-65 Hz	
Rated apparent power	8000 VA	10000 VA
Max. apparent power	8800 VA	11000 VA
Rated grid output current (@230 V)	34.8 A	43.5 A
Max. grid output current (@230 V)	38.3 A	47.8 A
Harmonic distortion (THD) at rated output	< 3 % (of nominal power)	
Power factor at rated power / adjustable range	1 / 0.8 leading to 0.8 lagging	
AC INPUT		
Nominal AC voltage	220, 230, 240 V, L/N	
Rated grid frequency	50 Hz / 60 Hz	
Max. input power from grid	16000 W	18000 W
Max. input current from grid	69.6 A	78.3 A
EPS OUTPUT		
Nominal AC voltage	220, 230, 240 V, L/N	
Nominal output frequency	50 Hz / 60 Hz	
Rated apparent power	8000 VA	10000 VA
Peak output apparent power (off-grid upto 10s)	16000 VA	20000 VA
Rated current (@230 V)	34.8 A	43.5 A
Max. current (@230V, continuous on-grid / off-grid)	38.3 A	47.8 A
Max. switch time	< 10 ms	
Output THDv (@ Linear load)	2 %	
GENERATOR SIDE		
Max. intput apparent power	8000 VA	10000 VA
Max. charge / discharge power	8000 VA	10000 VA
Max. input current	36.4 A	45.5 A
Rated AC voltage	220, 230, 240 V, L/N	
Rated AC frequency	50 Hz / 60 Hz	
EFFICIENCY		
MPPT efficiency	99.9 %	
European efficiency / Max. efficiency	97 % / 97.6 %	
SAFETY PROTECTION		
Surge protection	● / Type II	
Insulation resistance detection	●	
PV string input reverse polarity protection	●	
Ground fault monitoring	●	
Residual current monitoring unit	●	
AC short circuit protection	●	
Anti-islanding protection	●	
GENERAL DATA		
Dimensions (W / H / D)	484 / 679 / 230 mm	
Weight	34.5 kg	
Operating temperature range	-25 °C ... +60 °C	
Cooling concept	Smart cooling	
Degree of protection (as per IEC 60529)	IP66	
Max. relative humidity	100 %	
Max. operating altitude	3000 m	
GENERAL DATA		
User interface	LED & App	
BMS interface	CAN	
Communication interfaces	Dongle: WiFi (2.4 GHz) / LAN (100 Mbps) Inverter: RS485 (ModBus RTU), LAN (100Mbps, Modbus TCP only)	
Digital output (dry contact) / No. of outputs	● / 2	
Digital input (dry contact) / No. of inputs	● / 6	
Integrated power control / export power control	● / ●	

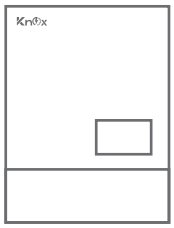
● standard features ○ optional features

Zapher Series

Single & Three Phase Hybrid Inverter with Grid Feeding & IP66 Protection

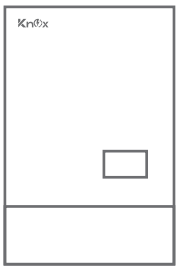
Perfect for home, small business & commercial use

Zapher 6.6kW



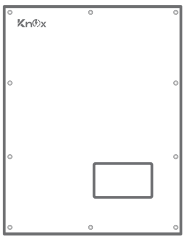
XZ-6.6kW-12000pV

Zapher 9.2kW | 11.2kW



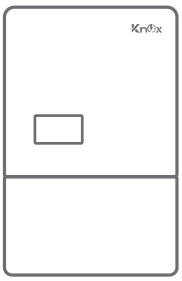
XZ-9.2kW-16000pV
XZ-11.2kW-18000pV

Zapher 12kW | 15kW



XZ-12kW-18000pV.3P
XZ-15kW-24000pV.3P

Zapher 30kW | 50kW



XZ-30kW-48000pV
XZ-50kW-65000pV

Single Phase Hybrid Inverter with Grid Feeding
& IP66 Protection

Zapher 6.6kW | 9.2kW | 11.2kW

Models:
XZ-6.6kW-12000pV
XZ-9.2kW-16000pV
XZ-11.2kW-18000pV

Dual Input GEN/AC

Dual MPPT

IP65 & IP66 Protection

In Built Wifi | HMI Touchscreen | Dual MPPT | Dual Input (GEN/AC) | Intelligent Load Management | Dual Output | Grid Feeding | IP65 & IP66 Protection | BMS | Parallel upto 9 Units

Easy-to-install

- IP65 & IP66 waterproof and dustproof makes the inverter available for various working conditions.
- HMI touchscreen
- 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
- Built-in 2 MPP trackers based on models

User-Friendly

- Selectable input voltage range for home appliances and personal computers
- Compatible to Utility Mains or generator input
- Parallel operation with 9 units
- Dual Input (GEN/AC) for flexible power source connectivity and automatic switching between generator and AC input.

Technical Datasheet

MODEL	XZ-6.6kW-12000pV	XZ-9.2kW-16000pV	XZ-11.2kW-18000pV
Rated Output Power	6600W	9200VA/9200W	11200VA/11200W
Max. PV Power	12000W	16000W	18000W
Max. PV Array Open Circuit Voltage	500 VDC		
MPPT Range @ Operating Voltage	120 VDC~450 VDC		
Max. PV Array Maximum Imp/per MPPT	2×21A	2×27A	2×34A
Max. PV Array Maximum Isc/per MPPT	28.7A		
Number of MPPT Tracker	2		
GRID-TIE OPERATION			
GRID OUTPUT (AC)			
Nominal Output Voltage	220/230/240 VAC		
Feed-in Grid Voltage Range	195.5~253 VAC @India regulation 184 ~ 264.5 VAC @Germany regulation 184 ~ 264.5 VAC @South America regulation 195.5~253 VAC @South Africa 182 ~ 260 VAC @ Pakistan		
Feed-in Grid Frequency Range	49~51Hz @India regulation 47.5~51.5Hz @Germany regulation 57~62Hz @South America 47~52Hz @ South Africa 45.1~54.9Hz @ Pakistan	49.5Hz~50.5Hz @India regulation 47.5~51.5Hz @Germany regulation 57~62Hz @South America 47.5~52Hz @South Africa 45.1~54.9Hz @Pakistan	
Nominal Output Current	26.25A	40A	48.7A
Power factor Range	>0.99		
Maximum Conversion Efficiency (DC/AC)	97%		
OFF-GRID, HYBRID OPERATION			
GRID INPUT			
Acceptable Input Voltage Range	90 - 290 VAC or 170 - 290 VAC	90 - 300 VAC	
Frequency Range	50 Hz/60 Hz (Auto sensing)		
Transfer Time	< 15ms for single system operation < 50ms (for parallel system operation)	< 20ms (for home appliances) < 50ms (for parallel system operation)	
Rating of AC Transfer Relay	40A	60A	
GENERATOR INPUT			
Acceptable Input Voltage Range	90 - 290 VAC	90 - 300 VAC	
Frequency Range	50 Hz/60 Hz (Auto sensing)		
Rating of AC Transfer Relay	40A	60A	
BATTERY MODE OUTPUT (AC)			
Nominal Output Voltage	220/230/240 VAC		
Output Waveform	Pure Sine Wave		
Efficiency (DC to AC)	93%		
BATTERY & CHARGER			
Nominal DC Voltage	48 VDC		
Maximum Charging Current (from Grid)	135A	190A	210A
Maximum Charging Current (from PV)	135A	190A	210A
Maximum discharging Current	135A	190A	210A
GENERAL			
Dimension, D X W X H (mm)	435 x 325 x 171	192 x 418 x 633	
Net Weight (kgs)	16	28	29
Parallel-able	Yes		
External Safety Box (Optional)	Yes		
INTERFACE			
Communication	USB or RS232 / WIFI / BMS RS485 / CAN		
ENVIRONMENT			
Humidity	0 ~ 95% RH (no condensing)		
Operating Temperature	-25°C to 50°C		

Three Phase Hybrid Inverter with Grid Feeding
& IP66 Protection

Zapher 12kW & 15kW

Models:
XZ-12kW-18000pV.3P
XZ-15kW-24000pV.3P

Dual Input GEN/AC

Dual MPPT

IP66 Protection

In Built Wifi | HMI Touchscreen | Dual MPPT | Dual Input (GEN/AC) | Intelligent Load Management | Dual Output | Grid Feeding | IP66 Protection | BMS | Parallel upto 6 Units

Easy-to-install

- IP66 waterproof and dustproof makes the inverter available for various working conditions.
- HMI touchscreen
- Dual outputs, for smart load management
- Reserved communication port for BMS (RS485)
- Built-in WiFi for mobile monitoring (App is available)
- User-adjustable charging current

Reliable

- Replaceable fan design for ease of maintenance
- 150% unbalaned load support
- Configurable AC/PV output usage timer and prioritization
- Two independent AC power sources connected and switched automatically
- Built-in 2 MPP trackers based on models

User-Friendly

- Selectable input voltage range for home appliances and personal computers
- Compatible to Utility Mains or generator input
- Parallel operation with 6 units
- Dual Input (GEN/AC) for flexible power source connectivity and automatic switching between generator and AC input.

Technical Datasheet

MODEL	XZ-12kW-18000pV.3P	XZ-15kW-24000pV.3P
Maximum Pv Input Power	18000W	24000W
Rated Output Power	12000W	15000W
Maximum Charging Power	12000W	15000W
GRID-TIE OPERATION		
PV INPUT (DC)		
Nominal DC Voltage	720 VDC	
Maximum DC Voltage	900 VDC	
Start-up Voltage / Initial Feeding Voltage	150 VDC / 150 VDC	
MPP Voltage Range	150 VDC ~ 850 VDC	
Full MPP Voltage Range	400 VDC ~ 850 VDC	
Number of MPP Trackers / Maxium Input Current	2 / A: 27A, B: 18A	2 / A: 36A, B: 36A
Number of Strings Per MPP Tracker	A: 2, B: 2	
GRID/UTILITY OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Output Voltage Range	184 - 265 VAC* per phase	
Output Frequency Range	47.5 ~ 51.5 Hz or 59.3 ~ 60.5 Hz	
Nominal Output Current	17.4A per phase	21.7A per phase
Power Factor range	0.9 lag ~ 0.9 lead	
EFFICIENCY		
Maximum Conversion Efficiency (DC/AC)	>96%	
European Efficiency@ Vnominal	>95%	
OFF-GRID OPERATION		
AC INPUT		
AC Start-up Voltage	120 - 140 VAC per phase	
Auto Restart Voltage	180 VAC per phase	
Acceptable Input Voltage Range	170 - 290 VAC per phase	
Maximum AC Input Current	40 A	60 A
PV INPUT (DC)		
Maximum DC Voltage	900 VDC	
MPP Voltage Range	150 VDC ~ 850 VDC	
Full MPP Voltage Range	400 VDC ~ 850 VDC	
Number of MPP Trackers / Maxium Input Current	2 / A: 27A, B: 18A	2 / A: 36A, B: 36A
Number of Strings Per MPP Tracker	A: 2, B: 2	
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Output Frequency	50 Hz / 60 Hz (auto sensing)	
Output Waveform	Pure sine wave	
Efficiency (DC to AC)	>93%	
HYBRID OPERATION		
PV INPUT (DC)		
Nominal DC Voltage	720 VDC	
Maximum DC Voltage	900 VDC	
Start-up Voltage / Initial Feeding Voltage	150 VDC / 150VDC	
MPP Voltage Range	150 VDC ~ 850 VDC	
Full MPP Voltage Range	400 VDC ~ 850 VDC	
Number of MPP Trackers / Maxium Input Current	2 / A: 18A, B: 18A	2 / A:36A, B:36A
Number of Strings Per MPP Tracker	A: 2, B: 2	
GRID/UTILITY OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	230 VAC (P-N) / 400 VAC (P-P)
Output Voltage Range	184 - 265 VAC* per phase	184 - 265 VAC* per phase
Output Frequency Range	47.5 ~ 51.5 Hz or 59.3 ~ 60.5 Hz	47.5 ~ 51.5 Hz or 59.3 ~ 60.5 Hz
Nominal Output Current	17.4A per phase	21.7A per phase
Power Factor range	0.9 lag ~ 0.9 lead	0.9 lag ~ 0.9 lead
AC INPUT		
AC Start-up Voltage	120 - 140 VAC per phase	120 - 140 VAC per phase
Auto Restart Voltage	180 VAC per phase	180 VAC per phase
Acceptable Input Voltage Range	170 - 290 VAC per phase	170 - 290 VAC per phase
Maximum AC Input Current	40 A	60 A
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	230 VAC (P-N) / 400 VAC (P-P)
Output Frequency	50 Hz / 60 Hz (auto sensing)	50 Hz / 60 Hz (auto sensing)
Output Waveform	Pure sine wave	Pure sine wave
Maximum Discharging Current	250A	280A
Efficiency (DC to AC)	>93%	>93%
BATTERY & CHARGER		
Battery Voltage Range	40 ~ 60 VDC	40 ~ 60 VDC
Maximum Charging Current	240A	280A
GENERAL		
PHYSICAL		
Dimension, D X W X H (mm)	247 x 500 x 650	247 x 504.4 x714.4
Net Weight (kgs)	54	59
INTERACE		
Communication Port	RS-232, RS-485, USB, CAN and Wi-Fi	
Intelligent Slot	Optional for SNMP and Modbus cards	
Intelligent Slot	7-inch HMI	
ENVIRONMENT		
Humidity	0 ~ 100% RH (Non-condensing)	
Operating Temperature	-25 to 60°C > 45°C power derating	
PROTECTION & CERTIFICATE		
Safety	IEC 62116, IEC 62727, IEC 61683, IEC 62109, IEC 61000-6-2:2019, IEC 61000-6-4:2019, IEC 61000-3-11:2019, EN 61000-3-12: 2011	

Three Phase Hybrid Inverter with Grid Feeding
& IP65 Protection

Zapher 30kW & 50kW

Models:
XZ-30kW-48000pV
XZ-50kW-65000pV

Dual Input GEN/AC

4 MPPT

IP65 Protection

In Built Wifi | HMI Touchscreen | 4 MPPT | Dual Input (GEN/AC) | Intelligent Load Management | Dual Output | Grid Feeding | IP65 Protection | BMS | Parallel upto 4 Units

Easy-to-install

- IP65 waterproof and dustproof makes the inverter available for various working conditions.
- HMI touchscreen
- Dual outputs, for smart load management
- Reserved communication port for BMS (RS485, CAN)

Reliable

- Wide Battery Input Range 200-900VDC
- 200A AC passthrough capability only for 50kW
- Two Independent AC power sources connected and switched automatically
- Built-in 4 MPP trackers based on models

User-Friendly

- User adjustable charging current upto 50A or 100A based on model
- Compatible to Utility Mains or generator input
- Parallel operation with 4 units
- Dual Input (GEN/AC) for flexible power source connectivity and automatic switching between generator and AC input.

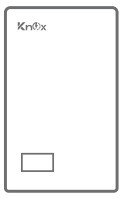
Technical Datasheet

MODEL	XZ-30kW-48000pV	XZ-50kW-65000pV
Maximum Pv Input Power	48000 W	65000 W
Rated Output Power	30000 W	50000 W
Maximum Charging Power	30000 W	50000 W
GRID-TIE OPERATION		
PV INPUT (DC)		
Nominal DC Voltage / DC Voltage Range	720 VDC / 300 VDC ~ 1000 VDC	
Start-up Voltage / Initial Feeding Voltage	300 VDC / 350 VDC	
MPP Voltage Range	350 VDC ~ 900 VDC	
Number of MPP Trackers / Maximum Input Current	3 / 36A for each	4 / 36A for each
Number of Strings Per MPP Tracker	2	
GRID/UTILITY OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Output Voltage Range	184 - 265 VAC per phase	
Output Frequency Range	47.5 ~ 51.5 Hz or 59.3 ~ 60.5 Hz	
Power Factor	0.9 lag to 0.9 lead	
EFFICIENCY		
Maximum Conversion Efficiency (DC/AC)	96.50%	
European Efficiency @ Vnominal	96%	
OFF-GRID OPERATION		
AC INPUT		
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC / 180 VAC per phase	
Acceptable Input Voltage Range	170 - 280 VAC per phase	
Maximum AC Input Current	50 A	83 A
PV INPUT (DC)		
Nominal DC Voltage / DC Voltage Range	720 VDC / 300 VDC ~ 1000 VDC	
MPP Voltage Range	350 VDC ~ 900 VDC	
Number of MPP Trackers / Maximum Input Current	3 / 36A for each	4 / 36A for each
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Output Waveform	Pure sine wave	
Efficiency (DC to AC)	97%	
HYBRID OPERATION		
PV INPUT (DC)		
Nominal DC Voltage / DC Voltage Range	720 VDC / 300 VDC ~ 1000 VDC	
Start-up Voltage / Initial Feeding Voltage	300 VDC / 350 VDC	
MPP Voltage Range	350 VDC ~ 900 VDC	
Number of MPP Trackers / Maximum Input Current	3 / 36A for each	4 / 36A for each
GRID OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Output Voltage Range	184 - 265 VAC per phase	
Nominal Output Current	43.5 A per phase	73 A per phase
AC INPUT		
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC / 180 VAC per phase	
Acceptable Input Voltage Range	170 - 280 VAC per phase	
Maximum AC Input Current	50 A	83 A
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Efficiency (DC to AC)	97%	
BATTERY & CHARGER		
Battery Voltage Range	200 ~ 900 VDC	
Maximum Charging/Discharging Current	50 A	100 A
GENERAL		
PHYSICAL		
Dimension, D x W x H (mm)	290 x 580 x 900	
Net Weight (kgs)	90	
INTERFACE		
Communication Port	RS-232, USB, dry contact, RS-485, CAN, Wi-Fi	
Intelligent Slot	Optional SNMP or MODBUS	
ENVIRONMENT		
Humidity	0 ~ 100% RH	
Operating Temperature	-25°C to 60°C (>45°C De-rating)	
Altitude	0 ~ 1000 m**	
PROTECTION & CERTIFICATE		
EMI/Safety	IEC 61000, EN 62920, EN 62477	
Grid Connection Standard	NRS097-2-1, VDE-AR-N4105, G99, IEC 61683, IEC 61727, IEC 62116	

Lithium Iron Phosphate Batteries

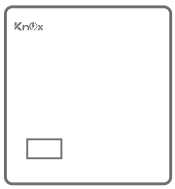
Perfect for home, small business & commercial use

Powerwall

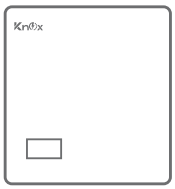


Powerwall 3.0
Lio 2.56-IP20

Powerwall 4.15
Lio 3.84-IP54



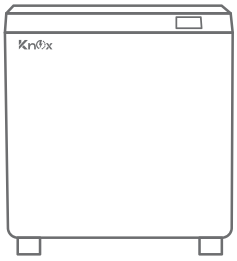
Powerwall 6.0
Lio 5.20-IP20



Powerwall 6.11
Lio 5.32-IP54

Powerbase 10
51.2V200AH - IP54

Powerbase 16
51.2V314AH - IP54



Powerbase 32
51.2V628AH - IP54

Compatible with Inverter Brands

Many More.....

Lithium Iron Phosphate Battery

Powerwall 3.0 25.6V100AH

Model: LIO 2.56-IP20

- IP20 Protection
- LCD Display
- Continuous Charge / Discharge
- 6000 Cycles
- 5 Years Warranty
- 100AH Capacity
- LiFePO4 Cells
- PACE BMS
- Parallel upto 15 Units

Easy-to-install

Reliable

User-Friendly

- A grade brand new prismatic LFP (LiFePO4 cells)
- 6000 cycles @90% DOD
- Over charge, over discharge, over temperature, low temperature, over current and short circuit protection
- LCD display screen to monitor cell SOC, voltage, temperature and alarm status
- Cell balance function
- Metal Case, excellent heat dissipation, more safety
- Certificate: UN38.3, MSDS
- Parallel upto 15 Units

Technical Data Sheet

MODEL	**LIO 2.56-IP20**
ELECTRICAL PARAMETER	
Battery Type	LFP (LiFePO4)
Nominal Voltage	25.6V
Nominal Capacity	100Ah
Energy	2560Wh
Continuous Discharge Current	100A
Charge Cut-off Voltage	28.8V
Discharge Cut-off Voltage	20.8V
Maximum Charge Current	100A
Maximum Discharge Current	110A@1S
Peak Discharge Current	150A@500ms
Recommend Discharge Current	50A
Open-circuit Voltage	25.44~26.8V
Communication	RS485 RS232 CAN
Display	LCD
Cycle Life	>6000
Number of parallel	upto 15 units
Certification	UN38.3 MSDS
Charge & Discharge Temperature (°C)	Charge: 0°C ~ +55°C / Discharge: -20°C ~ +60°C
Storage Temperature Range	-5°C~+0°C/35°C~+45°C (≤2 month); 5°C~+35°C (≤3 months, Optimum storage temperature); 15°C~+35°C (≤6 months)
Relative Humidity	60%±20% RH
Connect Terminal	Wall feedthrough
Dimensions (LWH) (mm)	470mm × 300mm × 150mm
Weight (Kg)	26±0.5kg
IP Class	IP20
Warranty	5 year warranty (3 year BMS & 5 year Cell warranty)

Lithium Iron Phosphate Battery

Powerwall 4.15 25.6V100AH

Model: LIO 3.84

- IP54 Protection
- 4.3" HMI Touchscreen
- 1.5C Continuous Charge / Discharge
- 6000 Cycles
- 5 YEARS Warranty
- 100AH Capacity
- LiFePO4 Cells
- BMS PACE BMS
- Parallel upto 4 Units

Easy-to-install

Reliable

User-Friendly

- A grade brand new prismatic LiFePO4 cells
- 6000 cycles @80% DOD
- Over charge, over discharge, over temperature, low temperature, over current and short circuit protection
- HMI touchscreen with low power consumption, high brightness, and long visual distance.
- Cell balance function
- Metal Case, excellent heat dissipation, more safety
- Certificate: UN38.3, MSDS
- Max 4 battery packs can be connected in parallel

Technical Data Sheet

MODEL	**LIO 3.84**
ELECTRICAL PARAMETER	
Battery Type	LiFePO4
Nominal Voltage (V)	25.6
Nominal Capacity (AH)	100
Energy (WH)	2560
Pack Mode	8S1P
Continuous Discharge Current (A)	150
Charge Cut-off Voltage (V)	28.8
Discharge Cut-off Voltage (V)	20.8
Max. Charge Current (A)	100
Max. Discharge Current (A)	150
Peak Discharge Current (A)	180
Recommend Discharge Current (A)	50
Recommend Discharge Depth (%)	80
Cycle Life	> 6000
Function	---
Communication	RS485
Display	HMI Touchable
Mounting	Wall-mounted
ENVIRONMENTAL PARAMETER	
Charge & Discharge Temperature (°C)	Charge: 0°C ~ +55°C / Discharge: -20°C ~ +60°C
Optimal Storage Temperature (°C)	5°C ~ +35°C
Relative Humidity	40% ~ 80%
Ingress Protection	IP54
MECHANICAL PARAMETER	
Terminal	Quick Plug
Dimensions (L*W*H) (mm)	350*180*450
Weight (Kg)	25.6 ± 0.5
Certificate	UN38.3 MSDS

Lithium Iron Phosphate Battery

Powerwall 6.0 51.2V100AH

Model: LIO 5.20-IP20

- IP20 Protection
- LCD Display
- Continuous Charge / Discharge
- 6000 Cycles
- 5 Years Warranty
- 100AH Capacity
- LiFePO4 Cells
- PACE BMS
- Parallel upto 15 Units

Easy-to-install

Reliable

User-Friendly

- A grade brand new prismatic LFP (LiFePO4 cells)
- >6000 cycles @ 90% DOD
- Over charge, over discharge, over temperature, low temperature, over current and short circuit protection
- LCD with low power consumption, high brightness, and long visual distance.
- Cell balance function
- Metal Case, excellent heat dissipation, more safety
- Certificate: UN38.3, MSDS
- Parallel upto 15 Units

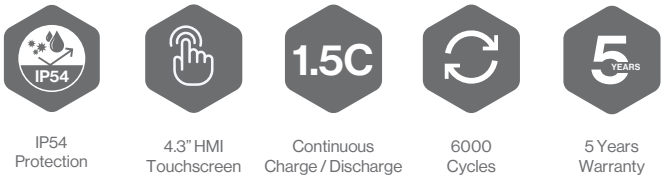
Technical Data Sheet

MODEL	**LIO 5.20-IP20**
ELECTRICAL PARAMETER	
Battery Type	LFP (LiFePO4)
Nominal Voltage	51.2V
Nominal Capacity	100Ah
Energy	5120Wh
Continuous Discharge Current	100A
Charge Cut-off Voltage	57.6V
Discharge Cut-off Voltage	41.6V
Maximum Charge Current	100A
Maximum Discharge Current	110A@1S
Peak Discharge Current	150A@500ms
Recommend Discharge Current	50A
Open-circuit Voltage	50.88~53.6V
Communication	RS485 RS232 CAN
Display	LCD
Cycle Life	>6000
Number of parallel	upto 15 units
Certification	UN38.3 MSDS
Charge & Discharge Temperature (°C)	Charge: 0°C ~ +55°C / Discharge: -20°C ~ +60°C
Storage Temperature Range	-5°C~+0°C/35°C~+45°C (≤2 month); 5°C~+35°C (≤3 months, Optimum storage temperature); 15°C~+35°C (≤6 months)
Relative Humidity	60%±20% RH
Connect Terminal	Wall feedthrough
Dimensions (LWH) (mm)	500mm × 470mm × 150mm
Weight (Kg)	44.5±0.5kg
IP Class	IP20
Warranty	5 year warranty (3 year BMS & 5 year Cell warranty)

Lithium Iron Phosphate Battery

Powerwall 6.11 51.2V100AH

Model: LIO 5.32



IP54 Protection | 4.3" HMI Touchscreen | Continuous Charge / Discharge | 6000 Cycles | 5 Years Warranty

100AH Capacity | LiFePO4 Cells | PACE BMS | Parallel upto 8 Units

Easy-to-install

Reliable

User-Friendly

- A grade brand new prismatic LiFePO4 cells
- 6000 cycles @80% DOD
- Over charge, over discharge, over temperature, low temperature, over current and short circuit protection
- HMI touchscreen with low power consumption, high brightness, and long visual distance.
- Cell balance function
- Metal Case, excellent heat dissipation, more safety
- Certificate: UN38.3, MSDS
- Max 8 battery packs can be connected in parallel

Technical Data Sheet

MODEL	**LIO 5.32**
ELECTRICAL PARAMETER	
Battery Type	LiFePO4
Nominal Voltage (V)	51.2
Nominal Capacity (AH)	100
Energy (WH)	5120
Pack Mode	16S1P
Continuous Discharge Current (A)	150
Charge Cut-off Voltage (V)	57.6
Discharge Cut-off Voltage (V)	41.6
Max. Charge Current (A)	100
Max. Discharge Current (A)	150
Peak Discharge Current (A)	180
Recommend Discharge Current (A)	50
Recommend Discharge Depth (%)	80
Cycle Life	> 6000
Function	---
Communication	RS485/RS232/CAN
Display	HMI Touchable
Mounting	Wall-mounted
ENVIRONMENTAL PARAMETER	
Charge & Discharge Temperature (°C)	Charge: 0°C ~ +55°C / Discharge: -20°C ~ +60°C
Optimal Storage Temperature (°C)	5°C ~ +35°C
Relative Humidity	40% ~ 80%
Ingress Protection	IP54
MECHANICAL PARAMETER	
Terminal	Quick Plug
Dimensions (L*W*H) (mm)	460*180*500
Weight (Kg)	44.1 ± 0.5
Certificate	UN38.3 MSDS

Lithium Iron Phosphate Battery

Powerbase 10 51.2V200AH

IP54 Protection

4.3" HMI Touchscreen

Continuous Charge / Discharge

1C

8000 Cycles

5 YEARS

5 Years Warranty

200AH Capacity

LiFePO4 Cells

BMS

PACE BMS

Parallel upto 15 Units

Easy-to-install

Reliable

User-Friendly

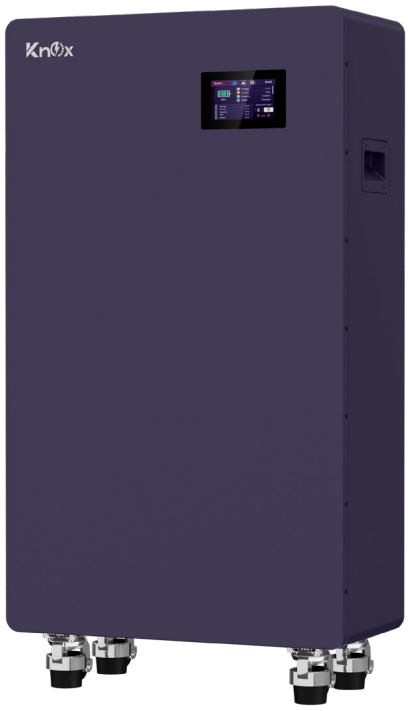
- A grade brand new prismatic LFP (LiFePO4 cells)
- 8000 cycles @90% DOD
- Over charge, over discharge, over temperature, low temperature, over current and short circuit protection
- HMI touchscreen with low power consumption, high brightness, and long visual distance.
- Cell balance function
- Metal Case, excellent heat dissipation, more safety
- Certificate: UN38.3, MSDS
- Max 15 battery packs can be connected in parallel

Technical Data Sheet

MODEL	**Powerbase 10**
ELECTRICAL PARAMETER	
Battery Type	LFP (LiFePO4)
Nominal Voltage (V)	51.2
Nominal Capacity (AH)	200
Energy (WH)	10240
Continuous Discharge Current (A)	200
Charge Cut-off Voltage (V)	57.6
Discharge Cut-off Voltage (V)	43.2
Max. Charge Current (A)	100
Max. Discharge Current (A)	210@1S
Peak Discharge Current (A)	250@500ms
Recommend Discharge Current (A)	100
Open Circuit Voltage (V)	50.88-53.6
Cycle Life	> 8000 cycles
Number of Parallel	Upto 15 units
Communication	RS485/RS232/CAN
Display	HMI Touchable
Mounting	Wall-mounted
ENVIRONMENTAL PARAMETER	
Charge & Discharge Temperature (°C)	Charge: 0°C ~ +55°C / Discharge: -20°C ~ +60°C
Storage Temperature Range (°C)	-5°C~+0°C / 35°C~+45°C (≤2 month); 5°C~+35°C (≤3 months, Optimum storage temperature); 15°C~+35°C (≤6 months)
Relative Humidity	60%±20% RH
Ingress Protection	IP54
MECHANICAL PARAMETER	
Connect Terminal	Wall Feedthrough
Dimensions (L*W*H) (mm)	615*500*260
Weight (Kg)	88.5±1.5kg
Certificate	UN38.3 MSDS
Warranty	5 Year Warranty (3 year BMS & 5 year Cell warranty)

Lithium Iron Phosphate Battery

Powerbase 16 51.2V314AH



IP54 Protection

4.3" HMI Touch screen

0.6C Continuous Charge / Discharge

8000 Cycles

5 YEARS Warranty

314 AH 314AH Capacity

LiFe PO4 LiFePO4 Cells

BMS PACE BMS

Parallel upto 8 Units

Easy-to-install

Reliable

User-Friendly

- A grade brand new prismatic LFP (LiFePO4 cells)
- 8000 cycles
- Over charge, over discharge, over temperature, low temperature, over current and short circuit protection
- HMI touchscreen with low power consumption, high brightness, and long visual distance.
- Cell balance function
- Metal Case, excellent heat dissipation, more safety
- Certificate: UN38.3, MSDS
- Max. 8 batteries can be connected in parallel.

Technical Data Sheet

MODEL	POWERBASE 16
ELECTRICAL PARAMETER	
Battery Type	LFP (LiFePO4)
Nominal Voltage (V)	51.2
Nominal Capacity (AH)	314
Energy (WH)	16076
Continuous Discharge Current (A)	200
Charge Cut-off Voltage (V)	57.6
Discharge Cut-off Voltage (V)	41.6
Max. Charge Current (A)	150
Max. Discharge Current (A)	200
Peak Discharge Current (A)	360@(10s)
Recommend Discharge Current (A)	150
Open Circuit Voltage (V)	50.88 ~ 53.6
Cycle Life	> 8000 cycles
Number of Parallel	Upto 8 units
Communication	RS485 RS232
Display	HMI Touchable
ENVIRONMENTAL PARAMETER	
Charge & Discharge Temperature (°C)	Charge: 0°C ~ +55°C / Discharge: -20°C ~ +60°C
Storage Temperature Range (°C)	-5°C~+0°C / 35°C~+45°C (≤2 month); 5°C~+35°C (≤3 months, Optimum storage temperature); 15°C~+35°C (≤6 months)
Relative Humidity	60%±20% RH
Ingress Protection	IP54
MECHANICAL PARAMETER	
Connect Terminal	Quick Plug
Dimensions (L*W*H) (mm)	520*245*880
Weight (Kg)	119.5Kg
Certificate	UN38.3 MSDS
Charge & Discharge Current	0.6C
Warranty	5 Year Warranty

Lithium Iron Phosphate Battery

Powerbase 32 51.2V628AH

IP54 Protection

4.3" HMI Touchscreen

0.5C Continuous Charge / Discharge

8000 Cycles

5 YEARS Warranty

628 AH 628AH Capacity

LiFe PO4 LiFePO4 Cells

BMS PACE BMS

Parallel upto 8 Units

Easy-to-install

Reliable

User-Friendly

- A grade brand new prismatic LFP (LiFePO4 cells)
- 8000 cycles
- Over charge, over discharge, over temperature, low temperature, over current and short circuit protection
- HMI touchscreen with low power consumption, high brightness, and long visual distance.
- Cell balance function
- Metal Case, excellent heat dissipation, more safety
- Certificate: UN38.3, MSDS
- Max. 8 batteries can be connected in parallel.

Technical Data Sheet

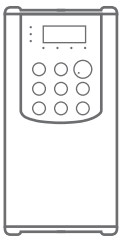
MODEL	POWERBASE 32
ELECTRICAL PARAMETER	
Battery Type	LFP (LiFePO4)
Nominal Voltage (V)	51.2
Nominal Capacity (AH)	628
Energy (WH)	32153.6
Continuous Discharge Current (A)	300
Charge Cut-off Voltage (V)	58.4
Discharge Cut-off Voltage (V)	43.2
Max. Charge Current (A)	150
Max. Discharge Current (A)	300
Peak Discharge Current (A)	360@(10s)
Recommend Discharge Current (A)	150
Open Circuit Voltage (V)	50.88 ~ 53.6
Cycle Life	> 8000 cycles
Number of Parallel	Upto 8 units
Communication	RS485 RS232
Display	HMI Touchable
ENVIRONMENTAL PARAMETER	
Charge & Discharge Temperature (°C)	Charge: 0°C ~ +55°C / Discharge: -20°C ~ +60°C
Storage Temperature Range (°C)	-5°C~+0°C / 35°C~+45°C (≤2 month); 5°C~+35°C (≤3 months, Optimum storage temperature); 15°C~+35°C (≤6 months)
Relative Humidity	60%±20% RH
Ingress Protection	IP54
MECHANICAL PARAMETER	
Connect Terminal	Quick Plug
Dimensions (L*W*H) (mm)	760*400*760
Weight (Kg)	248Kg
Certificate	UN38.3 MSDS
Charge & Discharge Current	0.5C
Warranty	5 Year Warranty

Xentra Series

Water Pump Inverters

Perfect for Agriculture Use

Xentra VFD



0.75K-3.7K
5.5K-22K

Water Pump Inverter

Xentra VFD

Model:
0.75K-3.7K
5.5K-22K

Easy-to-install

Reliable

User-Friendly

- V/F Control , Sensor-less Vector Control (SVC) and Feedback Vector Control (FVC) selectable
- Automatic torque boost and slip compensation
- Fast acceleration and deceleration performance
- 150% torque at 0.5Hz
- Provide precise speed control <0.5%
- Acceptable wide input voltage from 300V to 480V
- Conformal coating to withstand harsh environment
- Built-in RS-485 MODBUS communication
- In-Built dynamic braking unit
- Simplified parameter setting for easy startup
- Standard potentiometer and support external keypad
- Flexible programmable I/O connection
- Control motor to deceleration to stop while sudden power failure to prevent damage

Technical Data Sheet

Model	0.75K-3.7K	5.5K-22K
INPUT		
Input Voltage	AC,1PH,220V(-15%)~240V(+10%) AC,3PH,380V(-15%)~440V(+10%)	AC, 3PH, 380V(-15%) ~ 480V(+10%)
Rated Frequency	50/60 Hz	
Frequency Range	±5% (47.5 ~ 63Hz)	
OUTPUT		
Output Voltage	0- Input Voltage	
Maximum Output Frequency	0.1 ~ 500HZ	
Output Power	Please refer to Rated Parameter table	
Output Current	Please refer to Rated Parameter table	
BASIC PARAMETERS		
Highest frequency	Vector control: 0 ~ 500Hz	Vector control: 0 ~ 320Hz
	Vector control: 0 ~ 500Hz	
Carrier frequency	0.8KHz-8KHz (Support up to 16KHz carrier frequency)	0.8KHz-16KHz
	Adjusted automatically according to the load characteristics	
Input frequency resolution	Digital setting: 0.01Hz	
	Analog setting: Highest frequency×0.025%	
Control mode	Open-loop vector control (SVC) V/F control	Close-loop vector control (FVC) Open-loop vector control (SVC), V/F control
Starting torque	0.5Hz/150% (SVC)	0.5Hz/150% (SVC) ; 0Hz / 180% (FVC)
Adjustable speed ratio	1 : 100 (SVC)	1 : 100 (SVC) ; 1 : 1000 (FVC)
Speed control accuracy	±0.5% (SVC)	±0.5% (SVC) ; ±0.02% (FVC)
Overload capability	150% of rated current: 60 seconds 170% of rated current: 12 seconds 190% of rated current: 1.5 seconds	150% of rated current: 60 seconds 220% of rated current: 1 second
Torque boost	Auto torque boost; Range of manual torque boost 0.1%~30.0%	
V/F curve	Three types: Linear, Multi-point, square curve	
	(1.2 power, 1.4 power, 1.6 power, 1.8 power, 2 power)	
V/F separation	Full separation, Half separation	
Acceleration and deceleration time	Linear and S-curve acceleration and deceleration modes available. The range of acceleration and deceleration time is 0.0~6500.0s.	Linear and S-curve acceleration and deceleration modes available. Four kinds of acceleration and deceleration time,The range of acceleration and deceleration time is 0.0~6500.0s.
DISPLAY BUTTONS		
Keypad	0.75K-3.7K model: standard keypad (Optional detachable keypad can be purchased seperately)	
	5.5K-22K model: standard detachable keypad	
Copy parameters (Only for 5.5-22K model)	Parameters can be copied through the standard external keyboard	
LED display	Display parameters	
Key lock and function selections	It allows users to partially or fully lock the keys or define operated range for partial keys to prevent misoperation	
Protective function	Motor short-circuit detection at power-on, output phase loss protection, over-current protection, over-voltage protection, under-voltage protection, overheat protection, overload protection and etc.	
ENVIRONMENT		
Storage temperature	-20°C ~ 60°C	
Operation temperature	-10°C ~ 50°C (If temperarture is higher than 40°C, the output capacity will be derated 1% per 1°C increase)	
Storage humidity	< 90%RH	
Operation humidity	< 90%RH	
Noise Level	50dBA max.	
STANDARD		
EMC	Standards:IEC 61800-3, C3	
Safety	Standards:IEC 61800-5-1	
INTERACE		
Communication Port	RS-485	

Connect & monitor

Smart cloud-based monitoring & communication systems

Cloud Based Monitoring

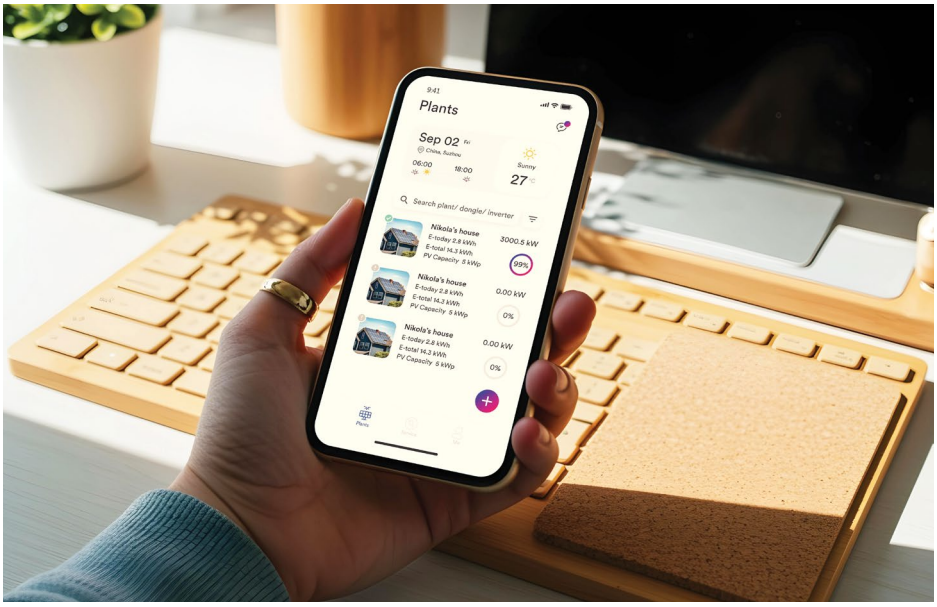
Knox Cloud and App

Com Stick Series

Wi-Fi Stick
4G Stick

Smart cloud-based monitoring system

Cloud & App



PV Plant monitoring plays an important role in our approach to revolutionizing access to solar energy. Your energy generation and consumption are presented in simple and easy to read graphs giving you a complete picture of your daily, monthly and yearly usage. Our monitoring solution will help you adjust your consumption behaviours to match your generation allowing you to make the most of your PV plant.

Real time and historical data are readily available via our cloud-based monitoring portal, allowing you to compare your current performance to past results. Knox Cloud, our new online monitoring portal, is perfect for home owners, business owners and PV developers who want to monitor their PV Plants from anywhere in the world.

Easy-to-install

- Quick setup and commissioning of Knox inverters
- Quick active/reactive and export power control setup
- Available on Android and iOS devices and accessible via web browsers

Reliable

- Cloud-based monitoring system
- Centralized management of all plant data

User-friendly

- Intuitive navigation
- Clear readability of key plant data
- Performance reports sent via email

Wireless & broadband cellular network communication module

Wi-Fi / 4G Stick

The WiFi / 4G stick allows inverters to connect to the Knox Cloud and App. The inverter and meter data is collected and sent to the Knox Cloud via the internet to allow for easy PV plant monitoring.

Easy-to-install

- Plug and play design, easy-to-install
- Supports monitoring for up to 5 devices per stick

Reliable

- IP66 protection class
- Minimum seven day data storage
- Reliable and regular data upload

User-friendly

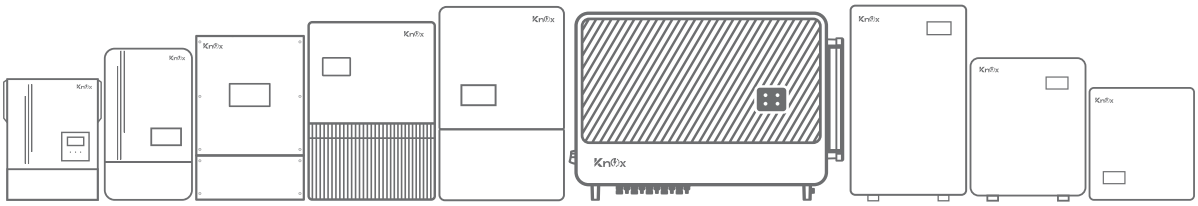
- QR codes for quick identification and registration
- LED status indicators
- Supports all mainstream WLAN & broadband cellular network protocols

Technical Datasheet

		Wi-Fi Stick	4G Stick
Technical Data	Supported device	Solplanet inverters	
	Number of devices supported	5 units	5 units
	Indicators	2x LED´s (Inv. Comms/Network)	
Communication interface	WLAN	2.4GHz 802.11 b/g/n	FDD-LTE: B1, B3, B5, B7, B8, B20
Power supply	Average power consumption	2 W	5 W
Operation environment	Operating temperature range	-30°C ... +70°C	
	Max. permissible relative humidity (non-condensing)	100 %	
	Max. operation altitude	3000 m	
	Protection class	IP66	
Basic data	Dimension (W/H/D)	51 / 112 / 27 mm	
	Mounting method	Plug and play	
	Certificate	CE	

Thank you!

MOST RELIABLE SOLAR INVERTERS & ENERGY STORAGE



Shenzhen KNOX Energy Co. Ltd.

+86 198 7944 1124
+86 186 6629 8892

cn@knoxpv.com

www.knoxpv.com

No.910 Building B, Kexing Science Park,
FuhuaRoad, Longhua, Shenzhen, China.

KNOX Energy & Technology (UK)

hello@knoxpv.com

www.knoxpv.com

51 Charlton Avenue,
Hyde, Cheshire, SK14 4ER.

Ultratech General Trading L.L.C (KNOX Showroom)

+971 4 852 2644
+971 50 119 6495

hello@knoxpv.com

www.knoxpv.com

006, Al Nakheel Building,
Naif, Deira, Dubai.

Electro Industries (Pvt) Ltd.

+92 304 111 4669

hello@knoxpv.com

www.knoxpv.com

Fareed Business Park , Service Rd East,
I-10/3 Islamabad.