

## **About** Company



At Omega Power, we are dedicated to harnessing solar energy to create a sustainable future. Established in 1987, we specialize in providing cutting-edge solar solutions that empower individuals, businesses, and communities to transition to renewable energy sources.

#### **Company Overview**

Omega Power is a leading consultant, manufacturer, and installer of renewable technology products in Pakistan. We take pride in being the first to bring many Tier I renewable energy companies to Pakistan, providing them with a platform to offer their top-tier products and services. Quality is our core focus, and we ensure excellence in every aspect of our operations.

#### **Our Comprehensive Services Include:**

- · Project feasibility studies
- · Alternate energy solutions
- Technical consultancy
- Site surveys
- Support services
- Logistics
- Training
- Power and renewable energy services
- Technology and venture business segments

As a technology-driven Engineering, Procurement, and Construction (EPC) company, Omega Power is committed to making solar energy a competitive and reliable energy source in Pakistan and the Middle East. We have successfully completed numerous solar power projects with a strong focus on quality control.

To ensure exceptional after-sales service, we operate nine labs across Pakistan, providing extensive support and maintenance services to our clients. Our robust bankability underscores our financial stability and reliability, making us a trusted partner in the renewable energy sector.

Omega Power is at the forefront of developing, integrating, and delivering the most reliable and cost-effective solar energy solutions in the region. Our commitment to innovation, quality, and customer satisfaction drives us to lead the transition towards a sustainable energy future.

## CEO MOSSOGO

Omega Power, under the HOPE umbrella, has cultivated a stellar reputation both domestically and internationally, positively impacting the global market. Our core values of respect, honesty, professionalism, and integrity are the cornerstones of our business conduct. We are committed to adhering to the highest standards of ethics, legality, and professionalism in all our operations.



Abdul Waheed
Chief Executive Officer

Since our inception in 1987, I am proud to reflect on our journey of growth and transformation. We have evolved from a single firm into a diverse group of companies within the HOPE framework, consistently achieving our objectives and earning the unwavering trust of our customers. Our success is a testament to our relentless commitment to quality and excellence. Looking ahead, our focus remains on innovation and leadership in the renewable energy sector. We will continue to provide top-tier products and unparalleled services to our esteemed customers. With steadfast dedication, we aim to meet and exceed the expectations of those we serve, ensuring their trust and satisfaction.

Thank you for your continued support and confidence in Omega Power.



Hyquip Source & Services Pvt. Ltd.
Omega Power Technology Pvt. Ltd.
Power Tech International Pvt. Ltd.
Electronic Depots Pvt. Ltd.

## Our Values

#### **Sustainability:**

We are committed to promoting sustainable practices. Our solar solutions are designed to minimize environmental impact and contribute to a cleaner, greener Pakistan.

#### **Innovation:**

Innovation is at the heart of what we do. We continuously invest in research and development to bring the latest advancements in solar technology to our customers, ensuring they benefit from the most efficient and reliable systems available.

#### **Quality:**

Quality is non-negotiable at Omega Power.

From the materials we use in our products, we adhere to the highest standards to ensure our systems perform optimally and stand the test of time.

#### **Customer-Centric Approach:**

Our customers are at the center of everything we do. We take pride in providing personalized service, from the initial consultation through to installation and maintenance. Our goal is to exceed your expectations at every step.



# What We Do?



### Residential Solutions 2Kw-20Kw

We develop solar power products for homes, helping homeowners reduce their energy bills and carbon footprint. Our residential solutions are tailored to meet the unique needs of each household, ensuring maximum efficiency and savings.

## Commercial Solutions 30Kw-100Kw

Our commercial solar products are designed to help businesses of all sizes reduce operational costs and achieve sustainability goals. From small offices to large industrial facilities, we provide scalable solutions that deliver significant financial and environmental benefits.

## Community Projects >100Kw

We believe in the power of community and are proud to partner with many universities and organizations to install community solar projects. These initiatives bring clean energy to underserved areas, electricity power saving and fostering economic growth.



Powering Business Worldwide www.omegapowerus.com





### **INFINI V IV 6KW TWIN**

High Frequency MPPT Hybrid Solar Inverter
Continous Working Solar Inverter without Battery

- > Maximum PV input current 27A
- > Dual outputs for smart load management
- > Touchable button with 4.3" colored LCD Self-consumption
- > and Feed-in to the grid
- > Programmable supply priority for PV, Battery or Grid
- > User-adjustable charging current and voltage
- > Programmable nultiple operation modes:Grid-tie,
- > off-grid and grid-tie with backup
- > Built-in Wi-Fi for mobile monitoring (App is available)
- > Reserved communication port for BMS
- > Parallel operation up to 9 units











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#### Infini V IV 6kW TWIN SOLAR INVERTER SPECIFICATION

Product specifications are subject to change without further notice.

MODEL	Infini V IV 6KW TWIN
PHASE	1-phase in / 1-phase out
MAXIMUM PV INPUT POWER	7000W
RATED OUTPUT POWER MAXIMUM CHARGING POWER	6000W 6000W
	00011
GRID-TIE OPERATION PV INPUT (DC)	
Nominal DC Voltage / Maximum DC Voltage	360 VDC / 500 VDC
Start-up Voltage / Initial Feeding Voltage	120VDC / 150 VDC
MPP Voltage Range	120 VDC ~ 430 VDC
Number of MPP Trackers / Maximum Input Current	1 / 27A
GRID OUTPUT (AC)	220/220/240 1/40
Nominal Output Voltage Output Voltage Range	220/230/240 VAC 184 - 264.5 VAC or 195.5 - 253 VAC (Selectable)
Nominal Output Current	26A
Power Factor	> 0.99
EFFICIENCY	
Maximum Conversion Efficiency (DC/AC)	96%
OFF-GRID OPERATION AC INPUT	
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC / 180 VAC
Acceptable Input Voltage Range Maximum AC Input Current	90 - 280 VAC or 170 - 280 VAC 40 A
PV INPUT (DC)	740
Maximum DC Voltage	500 VDC
MPP Voltage Range	120 VDC ~ 430 VDC
Number of MPP Trackers / Maximum Input Current BATTERY MODE OUTPUT (AC)	1/27A
Nominal Output Voltage	220/230/240 VAC
Output Waveform Efficiency (DC to AC)	Pure sinewave 93%
HYBRID OPERATION	
PV INPUT (DC)	
Nominal DC Voltage / Maximum DC Voltage	360 VDC / 500 VDC
Start-up Voltage / Initial Feeding Voltage	120VDC / 150 VDC
MPP Voltage Range Number of MPP Trackers / Maximum Input Current	120 VDC ~ 430 VDC 1/27A
GRID OUTPUT (AC)	TIZIA
Nominal Output Voltage	220/230/240 VAC
Output Voltage Range	184 - 264.5 VAC or 195.5 - 253 VAC (Selectable)
Nominal Output Current	26A
AC INPUT	
AC Start-up Voltage / Auto Restart Voltage Acceptable Input Voltage Range	120 - 140 VAC / 180 VAC 90 - 280 VAC or 170 - 280 VAC
Maximum AC Input Current	90 - 280 VAC 01 170 - 280 VAC
BATTERY MODE OUTPUT (AC)	79/1
Nominal Output Voltage	220/230/240 VAC
Efficiency (DC to AC)	93%
BATTERY & CHARGER	10100
Nominal DC Voltage  Maximum Solar Charging Current	48 VDC 120A
Maximum AC Charging Current	120A 120A
Maximum Charging Current	120A
GENERAL	
PHYSICAL Dimension, D x W x H (mm)	140 x 295 x 468
Net Weight (kgs) INTERFACE	12
Parallel Function	Yes, 9 units
Communication Port	USB/RS232/RS485/Wifi/Dry-contact
ENVIRONMENT	
Humidity	0 ~ 90% RH (Non-condensing)



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## **New Series Sigma Plus**

#### High Frequency MPPT Hybrid Solar Inverter

### Continous Working Solar Inverter without Battery

- > Status indication with RGB lights
- > Maximum PV input current 27A
- > Dual output for smart load management
- > Built-in Wi-Fi for mobile monitoring (Android/iOS App is available)
- > 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
- > Selectable high power charging current
- > Selectable input voltage range for home appliances and personal computers
- > Compatible to Utility Mains or generator input
- > Built-in anti-dust kit
- > Optional DC output for DC fan, LED bulb, router and so on (only for 8K model)
- > Parallel operation with 6 units









SIGMA PLUS 8KVA/11KVA SOLAR INVERTER SPECIFICAT	SIGMA PLUS 8KW	SIGMA PLUS 11KW
	押	等 ·
Rated Power	8000VA/8000W	11000VA/11000W
Parallel Capability	YES,	, 6 units
NPUT		
√oltage	23	80 VAC
Selectable Voltage Range	170-280 VAC (For Personal Compute	ers); 90-280 VAC (For Home Appliances)
Frequency Range	***************************************	z (Auto sensing)
DUTPUT		
AC Voltage Regulation (Batt. Mode)	230V	AC ± 5%
Surge Power	16000VA	22000VA
Efficiency (Peak)		13%
Transfer Time		ers); 20 ms (For Home Appliances)
Waveform		sine wave
Optional DC Voltage	12 VDC ± 5%, 100W	N/A
BATTERY		
Battery Voltage	48 VDC	48 VDC
Floating Charge Voltage	54 VDC	54 VDC
Overcharge Protection	66 VDC	63 VDC
SOLAR CHARGER & AC CHARGER		
Solar Charger Type	MPPT	MPPT
Maximum PV Array Power	11000W (5500W x 2)	12000W (6000W x 2)
MPPT Range @ Operating Voltage		450 VDC
Maximum PV Array Open Circuit Voltage	50	0 VDC
Maximum PV Input Current	27A×2	(MAX 40A)
Maxmum Solar Charge Current	120 A	150 A
Maximum AC Charge Current	120 A	150 A
Maximum Charge Current	120 A	150 A
PHYSICAL		
Dimension, D x W x H (mm)	147.4 x 4	432.5 x 553.6
Net Weight (kgs)		18.4
Communication Interface	USB/RS232/RS4	185/WiFi/Dry-contact
OPERATING ENVIRONMENT		
Humidity	5% to 95% Relative H	umidity(Non-condensing)
Operating Temperature		C to 50°C
Storage Temperature	-15°0	C to 60°C
STANDARD		
Compliance Safety		CE





## **HYBRID INVERTER**

#### DP Prime 6KW & DP Max 4KW

High Frequency MPPT Hybrid Solar Inverter

- · A combination of inverter, solar charger and battery charger.
- · Powerful bypass function with uninterrupted power supply function.
- · Configurable AC/Solar input priority via LCD setting.
- · Compatible with mains voltage or generator power.
- · Overload, short circuit, over discharge protection.
- · Status indication with RGB lights.
- · Touch screen control module with various communications.
- · Self-consumption and Feed-in to the grid.
- · Compatible with AGM/Sealed, Gel, Flooded, Lithium batteries and a User Mode for custom inputs to work with virtually all battery types.
- · MPPT solar charge controller to maximize and regulate DC power from the solar array to charge the battery bank.
- · Programmable multiple operation modes: Grid-tie, off-grid and grid-tie with backup.



Green Power to Home

Solar Panel





DATASHEET	4KW		6KW
Max. PV Array Power	5000W		6500W
Rated Output Power	4000W		6000W
Maximum PV Array Open Circuit Voltage	500VDC		500VDC
MPPT Range @ Operating Voltage		60Vdc-450Vdc	
MPPT Tracker Number		1	
GRID-TIE OPERATION			
GRID OUTPUT (AC)			
Nominal Output Voltage		220/230/240 VAC	
Output Voltage Range	184	- 264.5 VAC or 195.5 - 253 VAC (Selectable)	
Nominal Output Current	14.5A		26.1A
Power Factor		> 0.99	
EFFICIENCY			
Maximum Conversion Efficiency (DC/AC)	95%		95%
OFF-GRID, HYBRID OPERATION			
GRID INPUT			
Acceptable Input Voltage Range		90 - 280 VAC or 170 - 280 VAC	
requency Range		50 Hz/60 Hz (Auto sensing)	
Maximum AC Input Current	40A		40A
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	24Vdc		48Vdc
Maximum Solar Charge Current	120 A		120 A
Maximum AC Charge Current	100 A		100 A
Maximum Charge Current		120 A	
GENERAL			
PHYSICAL			
Dimension, D x W x H (mm)		128*300*440	
Net Weight (kgs)	8.7		10.6
NTERFACE			
Communication Ports		USB/RS232/RS485/WIFI	
ENVIRONMENT			
lumidity		0 ~ 90% RH (Non-condensing)	
Operating Temperature		-10°C to 50°C	

Product specifications are subject to change without further notice.





## PORSCHE OMP-14/PORSCHE OMP-24

- > Upgraded generation smart and intelligent solar inverter
- > Wide input voltage range
- > New Samrt LCD Display for complete information
- > Battery equalization
- > Adaptable to Grid voltage / Generator Power
- > Configurable AC/ Solar input priority via LCD Setting
- > Advanced MPPT Solar Charger 50A Upgraded Omega Porsche Series









Product specifications are subject to change without further notice

MODEL	Porsche OMP-14	Porsche OMP -24			
	Solar Investor	Solar Investor  THEGER			
CAPACITY	1400VA / 900W	2400VA / 1600W			
INPUT	220	NAC.			
Voltage		VAC			
Selectable Voltage Range		80 VAC			
Frequency Range	50 Hz/60 Hz	(Auto sensing)			
оитрит					
AC Voltage Regulation (Batt. Mode)	230 VA	AC ±10%			
Overload Capability	Load >110%±15%, alarm 5 If decreasing the load until lower than Load >130% ±15%. in	minutes and then inverter fault 100%, the overload alarm can release. verter fault immediately.			
Efficiency (Peak)	82%	85%			
Transfer Time	20	) ms			
Waveform	Simulated Sine Wave				
BATTERY					
Battery Voltage	12 VDC	24 VDC			
Floating Charge Voltage	13.7 VDC ± 0.5 VDC	27.4 VDC ± 0.5 VDC			
Overcharge Protection	15.0VDC ± 0.5 VDC	30.0VDC ±1 VDC			
SOLAR CHARGER & AC CHARGER					
Solar Charger Type	MPPT	MPPT			
Maximum PV Array Open Circuit Voltage	100 VDC	100 VDC			
Maximum PV Array Power	600 W	1200 W			
MPP Range @ Operating Voltage	15 ~ 80 VDC	30 ~ 80 VDC			
Maxmum Solar Charge Current	50A	50A			
Maximum AC Charge Current	10A/20A	10A/20A			
Maximum Charge Current	50A	50A			
PHYSICAL	272 :: 6	142 427			
Dimension, D X W X H (mm)	4.5	212 x 127			
Net Weight (kgs)	4.5	4.8			
OPERATING ENVIRONMENT					
Humidity		nidity (Non-condensing)			
Operating Temperature		o 40°C			
Storage Temperature		to 50°C			

### HIP60000M-D

## On-grid/Off-grid Hybrid Energy Storage PV Inverter

#### **SPECIFICATIONS**





#### Featu res



Multiple operating modes, on-grid, off-grid and UPS, MPPT charger built in.



Controlled by built-in DSP and adopt advanced SPWM technology.



Integrated smart APP, can remotely diagnose and update.



Droop control, Max 6pcs in parallel.



Suitable for customizing various PV Energy Storage System.



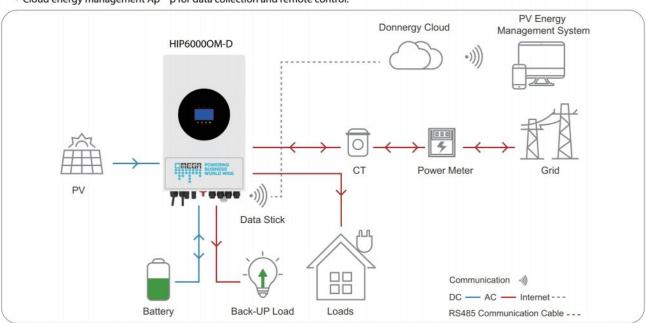
Compatible with almost all 48V LiFePO4 battery pack.

This On-grid/Off-grid Hybrid PV Inverter has both Grid-tied/Off-grid and Energy Storage Function:

- Power gen erated by the PV arr ay or from the Utility Grid can be stored in a battery or to be used to power your loads.
- Power gen erated by the PV arr ay or stored inside the battery can be sold to the Utility Grid or to be used to power your

loads.

- Featured with UPS function, ensure that the load is not powered off.
- Cloud energy management Ap p for data collection and remote control.



GH6000TL-LP	Specifications

Model	HIP6000-D
PV input	
Max Input Power	7000
Max Input Voltage	500V
Start-up voltage	150V
PV input range	360V (100V~500V)
MPPT voltage range	120V~450V
MPPT qty	2
Max input current	15A/15A
Output/Input (AC)	
rated power output	6000W
Max output power	6000VA
Rated output current	26.1A
Max output current	28.7A
Grid voltage type	230Vac (single phase)
Rated grid frequency	50Hz/60Hz(option)
off grid output	
Max output power	6000W
Rated output voltage	230Vac (single phase)
Rated output frequency	50Hz/60Hz(option)
Shift time	≤10ms
Total harmonic distortion (linear load)	THD<3% (Linear load<1.5%)
Battery	
Battery voltage range	40~60V
Max battery charge current	100A
Max battery discharge current	130A
Battery type	Lead-acid or Lithium-ion
Communication port	RS485; CAN
Efficiency	
Max efficiency	97%
Eu efficiency	97%
Mppt efficiency	99.9%
Max battery to Ac effiency	94%
System	
Protection Level	IP65
Operating Temperature Range	-25~60 ,>45 Derating
Relative Humidity	0-95%
Cooling Method	Smart cooling
Altitude above sea leavel	Under 2000m
Display	LCD
Communication	RS485/USB/CAN/Wifi(GPRS option)
Warranty	5 years (standard)
Mechanical	Andrew Andrews VI
Size(L*W*H )	580*350*280
Installation method	Wall
Weight	25Kg



## ON/OFF GRID HYBRID SOLAR INVERTER PH1100 EU Series

#### 5~12KW | Three Phase | 380VAC

PH1100 EU is brand new three phase hybrid inverter with low battery voltage 48V, ensuring system safe and reliable. With compact design and high-power density, this series supports 1.3 DC/AC ratio, saving device investment. It supports three phase unbalanced output, extending the application scenarios. Equipped with CAN port (x2) BMS and parallel, x1 RS485 port for BMS, x1 RS232 port for remotely control, x1 DRM port, which makes the system smart and flexible.



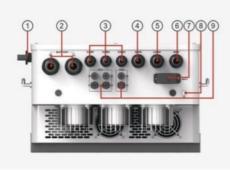






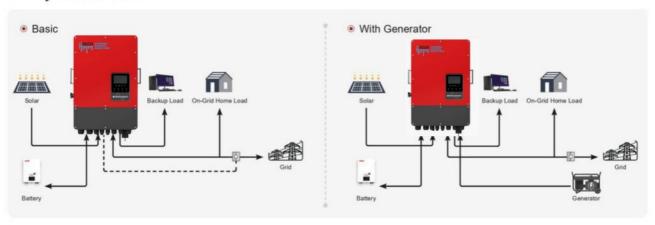
- 100% unbalanced output, each phase max. output up to 50% rated power
- Max. 6 pcs parallel for on-grid and off-grid operation
- AC couple to retrofifit existing solar system
- Support multiple batteries parallel
- Max. charging/discharging current of 240A
- Support storing energy from diesel generator
- 48V low voltage battery, transformer isolation design
- IP65 water-proof and dust-proof
- "Time of use" function: a maximum of 6 time segments can be set
- Wifi monitoring

#### **Back panel description**



- 1. DC switch
- 2. Battery input connectors
- BTS terminals, BMS terminals, load monitor terminals, dry contact terminals, CAN communication terminals, USB terminal and cover
- 4. Circuit breaker of Grid
- 5. Load
- 6. Generator input
- 7. WiFi Interface
- 8. Ground
- 9. PV input with two MPPT

#### Solar system connection



MODEL	PH11-8KL1-EU	PH11-10KL1-EU	PH11-12KL1-EU			
Rated power	8000W	10000W	12000W			
BATTERY INPUT DATA						
Battery type	Le	ad-acid battery / Lithium battery				
Battery voltage range		40~60V				
Max. Charging Current	190A	220A	250A			
Max. Discharging Current	190A	220A	250A			
External Temperature Sensor		Yes				
Charging Curve		3 Stages / Equalization				
Charging Strategy for Li-Ion Battery		Self-adaption to BMS				
PV STRING INPUT DATA						
Max. DC Input Power	10400W	13000W	15600W			
PV Input Voltage(V)	70.000	370V (125V~500V)				
MPPT Range(V)		150~425V				
Full Load DC Voltage Range		200~425V				
Start-up Voltage(V)		125V				
PV Input Current(A)	20+20	26+26+26	26+26+26			
No. of MPPT Trackers	20+20	3	3			
No. of Strings Per MPPT Tracker	1+1	1+1+1	1+1+1			
AC INPUT/OUTPUT DATA	1+1	1+1+1	1+1+1			
	2000W	1000014	1200014			
Rated AC Output Power	8000W	10000W	12000W			
Max AC Output Power	8800W	11000W	13200W			
AC Input/Output Rated Current	36.4/34.8A	45.5/43.5A	54.6/52.2A			
Max.AC Input/Output Current	40/38.3A	50/47.9A	60/57.4A			
Max Continuous AC Passthrough	50A	60A	60A			
Peak Power (off grid)	2 times of rated power, 10 S					
Power Factor		0.8 leading - 0.8 lagging				
AC Output Frequency and Voltage		50/60Hz; 220/230Vac				
Grid Type		Single Phase				
Total Harmonic Distortion (THDi)		<3% (of nominal power)				
DC Current Injection		<0.5% (Rated Current)				
EFFICIENCY						
Max. Efficiency		97.6%				
Euro Efficiency		96.5%				
MPPT Efficiency		>99%				
PROTECTION						
Integrated	PV Arc Fault Detection, PV Input Lightnin Protection, Insulation Resistor Detection Output Sh		nit, Output Over Current Prote			
Surge Protection	DC Type II/ AC Type III	DC Type II/ AC Type II	DC Type II/ AC Type II			
Overvoltage Category	DC Type II/ AC Type III	DC Type II/ AC Type III	DC Type II/ AC Type III			
GENERAL DATA						
Operating Temperature Range		-40~60°C, >45°C Derating				
Cooling		Smart cooling				
Noise		≤55dB				
Communication with BMS		RS485/CAN				
Monitoring mode		WiFi/ APP				
Machine Dimension (W*H*D)(mm)	426*526*255 (Excluding connectors and brackets)	446*5	76*254 tors and brackets)			
Package Dimension (W*H*D)(mm)	/		/			
N.W(kg)	29	3	1			
G.W(kg)	/		/			
	32	IP65				
Protection Degree		11 03				
Protection Degree Installation Style		Wall-mounted				

#### SOFAR 3K~6KTLM-G3

3/3.6/4/4.6/5/6 kW

#### SINGLE-PHASE DUAL MPPT



## C Product advantages

- Max. efficiency up to 98.4%
- · Compact design, lightweight
- · Two MPPTs with 150% DC overload
- · Natural cooling, no fans, low noise
- · Feed-in limitation function
- · RS485/Bluetooth, Optional: WiFi/Ethernet



#### SOFAR 3K~6KTLM-G3

3/3.6/4/4.6/5/6 kW

#### SINGLE-PHASE DUAL MPPT



Model	SOFAR 3KTLM-G3	SOFAR 3.6KTLM-G3-J	SOFAR 3.6KTLM-G3	SOFAR 4KTLM-G3	SOFAR 4.6KTLM-G3	SOFAR 5KTLM-G3	SOFAR 5KTLM-G3-A	SOFAR 6KTLM-G		
Input (DC)										
Max. input voltage				60	oov					
Rated input voltage				34	BOV					
Start-up voltage				9	ov					
MPPT operating voltage range				80V	-550V					
Number of MPP trackers					2					
Number of DC inputs				1 for ea	ch MPPT					
Max. input MPPT current				154	/15A					
Max. input short circuit current				22.54	V/22.5A					
Output (AC)										
Rated output power	3000W	3600W	3680W	4000W	4600W	5000W	5000W	6000W		
Max. apparent power	3300VA	3600VA	3680VA	4400VA	4600VA	5500VA	5000VA	6000VA		
Max. output current	15A	16A	16A	20A	23A	25A	21.7A	29A		
Rated output voltage	100	100	1500				21.77	2011		
Output voltage range		L/N/PE 230Vac 180Vac-276Vac								
Rated output frequency	50/60Hz									
Output frequency range	50/60HZ 45Hz-55Hz/55Hz-65Hz									
Active power adjustable range	0-100%									
THDi										
Power factor	<3% 1 (adjustable +/-0.8)									
				1 (adjust	able 1/ 0.0)					
Efficiency										
Max. efficiency	98.2%	98.2%	98.2%	98.2%	98.4%	98.4%	98.4%	98.4%		
European efficiency	97.3%	97.3%	97.3%	97.3%	97.5%	97.5%	97.5%	97.5%		
Protection										
DC reverse polarity protection				,	/es					
Anti-islanding protection				,	/es					
Leakage current protection				1	/es					
Ground fault monitoring				1	fes					
PV-array string fault monitoring				,	res .					
DC switch				,	res .					
SPD				PV: type II	I. AC: type III					
General Data										
Ambient temperature range				-30°0	-+60°C					
Self-consumption at night				<	ıw					
Topology				Transfo	ormerless					
Degree of protection					P65					
Allowable relative humidity range					00%					
Max. operating altitude					00m					
Cooling					tural					
Dimension (W+H+D)					4×164mm					
Weight		9.3	tkg	343-34		1	0kg			
Display		9.2		100 8 800	etooth +APP	,	9			
Communication				H548	5/WiFi					

\*SOFAR 3.6KTLM-G3-J is only for Jordan.

<sup>\*</sup>All specifications are subject to change without notice.

#### SOFAR 3.3K~12KTLX-G3

3.3 / 4.4 / 5.5 / 6.6 / 8.8 / 11 / 10 / 12 kW

#### THREE-PHASE DUAL MPPT



### C Product advantages

- · Maximum efficiency 98.6%
- · Low start-up voltage, wide MPPT voltage
- · Maximum DC input voltage 1100 V
- · Smart string level monitoring
- · Remote firmware upgrade
- · Natural cooling, no fans, low noise
- · Type II SPD for both DC and AC side



#### SOFAR 3.3K~12KTLX-G3

3.3 / 4.4 / 5.5 / 6.6 / 8.8 / 11 / 10 / 12 kW

#### THREE-PHASE DUAL MPPT



Model	SOFAR 3.3KTLX-G3	SOFAR 4.4KTLX-G3	SOFAR 5.5KTLX-G3	SOFAR 6.6KTLX-G3	SOFAR 8.8KTLX-G3	SOFAR 11KTLX-G3	SOFAR 10KTLX-G3-A	SOFAR 12KTLX-G			
Input (DC)											
Max. input voltage				110	00V						
Rated input voltage				65	ov						
Start-up voltage					ov						
MPPT operating voltage range		140V-1000V									
Number of MPP trackers					2						
Number of DC inputs			1	/I			1/2				
Max. input MPPT current		15A/15A									
Max. input short circuit current				15A/3 22.5A/							
				/22.5A							
Output (AC)	700011	400004	500004	500011	000044	1000014/	1000004	1200011			
Rated output power	3000W	4000W	5000W	6000W	8000W	10000W	10000W	12000W			
Max. apparent power	3300VA	4400VA	5500VA	6600VA	8800VA	11000VA	10000VA	13200VA			
Max. output current	5A	6.7A	8.3A	10A	13.3A	16.7A	15.2A	20A			
Rated output voltage		3/N/PE, 230/400Vac									
Output voltage range		310Vac-480Vac									
Rated output frequency		50/60Hz									
Output frequency range		45Hz-55Hz/55Hz-65Hz									
Active power adjustable range		0-100%									
THDI				<3	196						
Power factor				1 (adjusta	ble+/-0.8)						
Efficiency											
Max. efficiency	98.40%	98.40%	98.40%	98.40%	98.50%	98.50%	98.50%	98.50%			
European efficiency	97.50%	97.50%	97.50%	97.50%	98.00%	98.00%	98.00%	98.00%			
Protection											
DC reverse polarity protection				Y	es						
Anti-islanding protection					es						
Leakage current protection					es						
Ground fault monitoring					es						
PV-array string fault monitoring					es						
DC switch					es AC time II						
SPD				PV: type II,	AC: type II						
General Data											
Ambient temperature range				-30,C	-+60°C						
Self-consumption at night				<1	W						
Topology				Transfor	rmerless						
Degree of protection		IP65									
Allowable relative humidity range		0-100%									
Max. operating altitude				400	00m						
Cooling				Nat	ural						
Dimension (W×H×D)				430×385	×182mm						
Weight			17kg				18kg				
Display				LCD & Blue	tooth +APP						
				2010	5/WiFi						

#### SOFAR 15K~24KTLX-G3

15/17/20/22/24 kW

#### THREE-PHASE DUAL MPPT



### **G** Product advantages

- Maximum efficiency 98.6%
- · Low start-up voltage, wide MPPT voltage
- · Maximum DC input voltage 1100 V
- · Smart string level monitoring
- · Type II SPD for both DC and AC side
- · Remote firmware upgrade
- · 110% long-time overload ability



### SOFAR 15K~24KTLX-G3

15/17/20/22/24 kW

#### THREE-PHASE DUAL MPPT



Model	SOFAR 15KTLX-G3	SOFAR 17KTLX-G3	SOFAR 20KTLX-G3	SOFAR 22KTLX-G3	SOFAR 24KTLX-G3			
Input (DC)								
Max. input voltage			1100V					
Rated input voltage			650V					
Start-up voltage			160V					
MPPT operating voltage range			140V-1000V					
Number of MPP trackers			2					
Number of DC inputs			2/2					
Max. input MPPT current	26A/26A	26A/26A	26A/26A	26A/26A	26A/26A			
Max. input short circuit current	36A/36A	36A/36A	36A/36A	36A/36A	36A/36A			
Output (AC)								
Rated output power	15000W	17000W	20000W	22000W	24000W			
Max. apparent power	16500VA	18700VA	22000VA	24200VA	26400VA			
Max. output current	23.9A	27.1A	31.9A	35.1A	38.3A			
Rated output voltage	, and the second	30.00	3/N/PE, 230V/400Vac		1,2,2,2,0			
Output voltage range			310Vac-480Vac					
Rated output frequency			50/60Hz					
Output frequency range			45Hz-55Hz/55Hz-65Hz					
Active power adjustable range			0-100%					
THDI			<3%					
Power factor			1 (adjustable +/-0.8)					
Efficiency								
Max. efficiency	98.6%	98.6%	98.6%	98.6%	98.6%			
European efficiency	98.2%	98.2%	98.2%	98.2%	98.2%			
	20.2.10	2027	30.270	30270	30.270			
Protection								
DC reverse polarity protection			Yes					
Anti-islanding protection			Yes					
Leakage current protection			Yes					
Ground fault monitoring			Yes					
PV-array string fault monitoring			Yes					
DC switch			Yes					
SPD			PV: type II, AC: type II					
General Data								
Ambient temperature range			-30°C-+60°C					
Self-consumption at night			<1W					
Topology			Transformerless					
Degree of protection			IP65					
Allowable relative humidity range			0-100%					
Max. operating altitude			4000m					
Cooling			Smart air cooling					
Dimension (W+H+D)			520×430×189mm					
Weight	20kg	22kg	22kg	23kg	23kg			
Display			LCD & Bluetooth + APP					
Communication	RS485/WiFi							

'All specifications are subject to change without notice.

#### HYD 3000~6000-EP

3000 / 3680 / 4000 / 4600 / 5000 / 5500 / 6000 W

#### SINGLE-PHASE ENERGY STORAGE INTEGRATED INVERTER



## C Product advantages

- · Various operational modes available
- · Smart fanless cooling design
- Flexible configuration, allowing both lead-acid and lithium batteries
- · EPS function (switchover time less than 10 ms)
- · Feed-in limitation function
- · Supports both on- and off-grid operation
- · IP65 design for outdoor



#### SINGLE-PHASE ENERGY STORAGE INTEGRATED INVERTER

Model	HYD 3000-EP	HYD 3680-EP	HYD 4000-EP	HYD 4600-EP	HYD 5000-EP	HYD 5500-EP	HYD 6000-EP					
PV Input												
Recommended Max. PV Input Power	4500Wp	5400Wp	6000Wp	6900Wp	7500Wp	7500Wp	9000Wp					
Max. Input Voltage				550 Vd.c.								
Start-up Voltage				100 Vd.c.								
Rated Input Voltage		360 Vd.c.										
MPPT Voltage Range				85-520 Vd.c.								
Number of MPPT Trackers				1/1								
Max. Input Current				13/13 A								
Max. Isc				18/18 A								
Battery												
Voltage Range				42-58 Vd.c.								
Number of Battery Input Channels				1								
Max. Charging Power	3.75 kW	4 kW	4.25 kW	5 kW	5 kW	5 kW	5 kW					
Max. Discharging Power	3.75 kW	4 kW	4.25 kW	5 kW	5 kW	5 kW	5 kW					
Max. Charging Current	75 A	80 A	85 A	100 A	100 A	100 A	100 A					
Max. Discharging Current	75 A	80 A	85 A	100 A	100 A	100 A	100 A					
	75 A	80 A	85 A		100 A	100 A	100 A					
Battery Type [1] BMS Communication				Lithium-ion & Lead-acid								
BMS Communication				CAN/RS485								
AC Input(Grid)												
Rated Input Voltage				L+N+PE,230 Va.c.								
Rated Input Frequency				50/60 Hz								
Max. Input Current	293 A	33.4 A	35.9 A	41.7 A	43.5 A	43.5 A	43.5 A					
AC Output(Backup)												
				W1117-1-1-1-1								
Rated Output Voltage				L+N+PE.230 Va.c.								
Rated Output Frequency				50/60 Hz								
Rated Output Power	3 kW	3.68 kW	4 kW	4.6 kW	5 kW	5 kW	5 kW					
Rated Output Current	13.0 A	16.0 A	17.4 A	20.0 A	21.7 A	21.7 A	21.7 A					
Rated Apparent Power	3 kVA	3.68 kVA	4 kVA	4.6 kVA	S kVA	5 kVA	S kVA					
Max. Apparent Power	3 kVA	3.68 kVA	4 kVA	4.6 kVA	5 kVA	5 kVA	5 kVA					
Max. Output Current	13.0 A	16.0 A	17.4 A	20.0 A	21.7 A	21.7 A	21.7 A					
Peak Output Apparent Power	4500VA, 30s	4800VA, 30s	\$100VA,30s	6000VA, 30s	6000VA, 30s	6000VA, 30s	6000VA, 30					
THDv(@ linear load)				<3%								
Switching Time				10ms default								
AC Output(Grid)												
The state of the s												
Rated Output Voltage				L+N+PE,230 Va.c.								
Rated Output Frequency				50/60 Hz								
Rated Output Power	3 kW	3.68 kW	4 kW	4.6 kW	S kW	S kW	6 kW					
Rated Output Current	13.0 A	16.0 A	17.4 A	20.0 A	21.7 A	21.7 A	26.1 A					
Max. Apparent Power	3.3 kVA	3.68 kVA	4.4 kVA	4.6 kVA	5 kVA	5.5 kVA	6 kVA					
Max. Output Current	14.3 A	16.0 A	19.1 A	20.0 A	21.7 A	23.9 A	26.1 A					
THDI				<316								
Power Factor Range				0.8 lagging-0.8 leading								
Efficiency												
Max. MPPT Efficiency				99.9%								
	07.614	97.6%	40.44		47.00	07.00	00.004					
Max. Efficiency	97.6%		97.6%	97.8%	97.8%	97.8%	98.0%					
European Efficiency	97.2%	97.2%	97.2%	97.3%	97.3%	97.3%	97.5%					
Max. efficiency of Charging/Discharging [2]				94.6%								
Protection												
DC Switch				Yes								
PV Reverse Connection Protection				Yes								
Output Short Circuit Protection				Yes								
Output Overcurrent Protection				Yes								
Output Overvoltage Protection				Yes								
Insulation Impedance Detection				Yes								
Residual Current Detection												
Anti-Island Protection				Yes								
				Yes								
Surge protection				PV. Type III, AC: Type III								
General Parameter												
Inverter Topology			High	-frequency Isolation (For Bat	tery)							
Protective class				Class I								
P Rating				IP65								
Overvoltage Category				AC III, DC II								
Operating Temperature Range			-1/	"C-+60"C (derating above +45	r'C)							
				5%-95%								
Relative Humidity Range	4000m (derating above 2000m)											
Relative Humidity Range Max. Operating Altitude		<10W										
Relative Humidity Range Max. Operating Altitude Standby Self-consumption [3]												
Relative Humidity Range  Max. Operating Altitude  Standby Self-consumption [3]  Installation Method				Wall Mounted								
Relative Humidity Range Max. Operating Altitude												
Relative Humidity Range  Max. Operating Altitude  Standby Self-consumption [3]  Installation Method				Wall Mounted								
Relative Humidity Range Max. Operating Altitude Standity Self-consumption [3] Installation Method Dimensions (W'H'D)				Wall Mounted 482°503'183mm								

#### HYD 5~20KTL-3PH

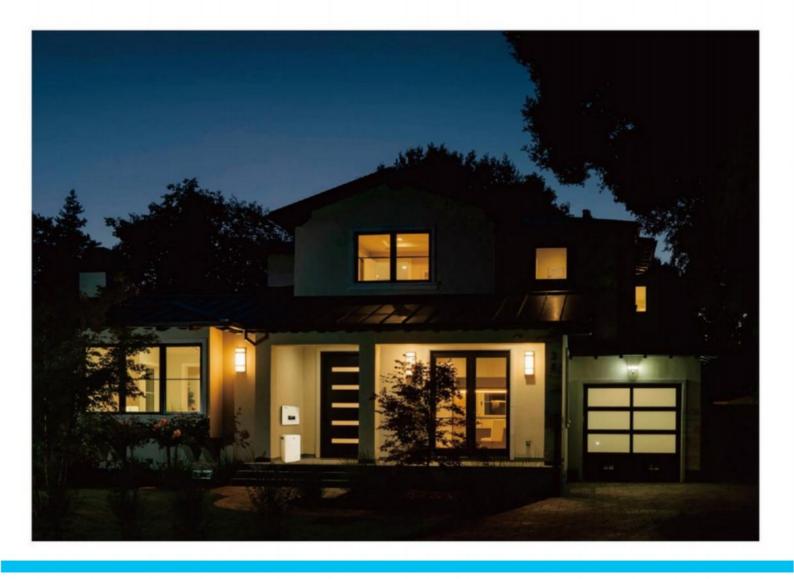
5/6/8/10/10/15/20 kW

#### THREE-PHASE ENERGY STORAGE INTEGRATED INVERTER



### C Product advantages

- · Various operational modes for optimal performance
- Off-grid output can be connected to unbalanced load, three-phase separate output is supported
- · Up to 2 MPPTs, allowing a flexible configuration
- · Multiple parallel systems, more flexible system solutions
- Maximum two battery inputs
- · Fully digital operation, enabling higher control accuracy



#### THREE-PHASE ENERGY STORAGE INTEGRATED INVERTER

Model	HYD 5KTL-3PH	HYD 6KTL-3PH	HYD 8KTL-3PH	HYD 10KTL-3PH	HYD 10KTL-3PH-A	HYD 15KTL-3PH	HYD 20KTL-3PF
PV Input							
ecommended Max. PV Power	7500Wp	9000Wp	12000Wp	15000Wp	15000Wp	22500Wp	30000Wp
lax. Input Voltage				1000 Vd.c.			
tart-up Voltage				200 Vd.c.			
ated Input Voltage				600 Vd.c.			
IPPT Voltage Range				180-960 Vd.c.			
umber of MPPT Trackers		1/1			2,	/2	
fax. Input Current		12.5/12.5 A			25/2	25 A	
lax. Isc		15/15 A			30/3	50 A	
Battery							
oltage Range				180-800 Vd.c.			
lumber of Battery Input Channels		1				2	
lax. Charging Power	5 kW	6 kW	8 kW	10/10 kW	10/10 kW	15/15 kW	20/20 kW
lax. Discharging Power	5 kW	6 kW	8 kW	10/10 kW	10/10 kW	15/15 kW	20/20 kW
lax. Charging Current	25 A	25 A	25 A	25/25 A	25/25 A	25/25 A	25/25 A
ax. Discharging Current	25 A	25 A	25 A	25/25 A	25/25 A	25/25 A	25/25 A
attery Type III				Lithium-ion & Lead-acid			
MS Communication				CAN/RS485			
C Input(Grid)							
The control of the co				TAN - DE TROMPONION			
sted Input Voltage				3(N)PE380/400/415 Va.c.			
ited Input Frequency	18 10 1 10 1 1	16375-7-1	94 0 00 0 00 0 0	50/60 Hz	To the other to	approxime to	page - 200 - 1
ax. Input Current	15.2/14.5/13.9 A	18.2/17.4/16.7 A	24.2/23.2/22.2 A	30.3/29.0/27.8 A	30.3/29.0/27.8 A	45.5/43.5/41.7 A	60.6/58.0/55.6
AC Output(Backup)							
ated Output Voltage				3N→PE.380/400/415 Va.c.			
ated Output Frequency				50/60 Hz			
ated Output Power	5 kW	6 kW	8 kW	10 kW	10 kW	15 kW	20 kW
ated Output Current	7.6/7.2/6.9 A	9.1/8.7/8.3 A	12.1/11.6/11.1 A	15.2/14.5/13.9 A	15.2/14.5/13.9 A	22.7/21.7/20.8 A	30.3/29.0/27.8
ated Apparent Power	5 kVA	6 kVA	8 kVA	10 kVA	10 kVA	15 kVA	20 kVA
lax. Apparent Power	5.5 kVA	6.6 kVA	8.8 kVA	11 kVA	11 kVA	16.5 kVA	22 kVA
lax. Output Current	8.3/8.0/7.6 A	10.0/9.6/9.2 A	13.3/12.8/12.2 A	16.7/15.9/15.3 A	16.7/15.9/15.3 A	25.0/23.9/22.9 A	33.3/31.9/30.6
eak Output Apparent Power	7500VA, 60s	9000VA, 60s	12000VA, 60s	15000VA, 60s	15000VA, 60s	22500VA, 60s	26000VA, 60s
HDv(@ linear load)				<3%			
witching Time				10ms default			
AC Output(Grid)							
				3(N)-+PE.380/400/415 Va.c.			
Rated Output Voltage Rated Output Frequency				50/60 Hz			
tated Output Power	F 1444	6 kW	0.000		10 144	25 144	20 kW
	5 kW		8 kW	10 kW	10 kW	15 kW	
lated Output Current  Max. Apparent Power	7.6/7.2/6.9 A 5.5 kVA	9.1/8.7/8.3 A 6.6 kVA	12.1/11.6/11.1 A 8.8 kVA	15.2/14.5/13.9 A 11 kVA	15.2/14.5/13.9 A 10 kVA	22.7/21.7/20.8 A 16.5 kVA	30.3/29.0/27.8 / 22 kVA
Nax. Apparent Power  Max. Output Current					152/145/13.9 A		1.0000000000000000000000000000000000000
HDI	8.3/8.0/7.6 A	10.0/9.6/9.2 A	13.3/12.8/12.2 A	16.7/15.9/15.3 A <3%	15.2/19.5/13.9 A	25.0/23.9/22.9 A	33.3/31.9/30.6
lower Factor Range				0.8 lagging-0.8 leading			
Efficiency							
tax. MPPT Efficiency				99.9%			
ax. Efficiency	98.0%	98.0%	98.0%	98.2%	98.2%	98.2%	98.2%
uropean Efficiency	97.5%	97.5%	97.5%	97.7%	97.7%	97.7%	97.7%
ax. efficiency of Charging/Discharging (2)	97.6%	97.6%	97.6%	97.8%	97.8%	97.8%	97.8%
Protection							
C Switch				Yes			
V Reverse Connection Protection				Yes			
attery Reverse Connection Protection				Yes			
utput Short Circuit Protection				Yes			
output Overcurrent Protection				Yes			
output Overvoltage Protection				Yes			
sulation Impedance Detection				Yes			
esidual Current Detection				Yes			
nti-island Protection				Yes			
urge protection				PV: Type II , AC: Type II			
				A coppe in our type ii			
General Parameter							
nverter Tapology				Non-Isolation			
rotective class				Class I			
Rating				IP65			
vervoltage Category				AC III, DC II			
perating Temperature Range			-30	"C-+60"C (derating above +4	5°C)		
elative Humidity Range				5%-95%			
ax. Operating Altitude			4	000m (derating above 2000r	n)		
tandby Self-consumption (2)				<25W			
stallation Method				Wall Mounted			
imensions (W"H"D)				587°515°261mm			
poling Mode		Natural			Forced	airflow	
Aeight	33kg	33kg	33kg	37kg	37kg	37kg	37kg
communication			CA	N/RS485/WiFi, Optional: 4C/	LAN		

<sup>[1]</sup> Please refer to document "SOFAR inverter Model compatible battery list" [2] Battery-AC maximum efficiency of battery charge and discharge [3] Standby loss at rated input voltage





#### Smart Control & Monitoring

- · 24/7 load consumption monitoring\*
- · Multiple communication protocols supported



#### **Optimal Generation**

- · Max. 16A input current per string
- 150% DC input oversizing & 110% AC output overloading



#### Superb Safety & Reliability

- · Optional AFCI preventing electrical fires
- · Optional AC & DC Type II SPD & SPD failure alarm



#### Friendly & Thoughtful Design

- · IP66 ingress protection
- · Low noise level thanks to fanless cooling



Technical Data	GW3000-DNS-30			GW5000-DNS-30	
Input					
Max. Input Voltage (V)	600			600	
MPPT Operating Voltage Range (V)	40 ~ 560			40 ~ 560	
Start-up Voltage (V)	50			50	
Nominal Input Voltage (V)	360			360	
Max. Input Current per MPPT (A)	16			16	
Max. Short Circuit Current per MPPT (A)	23			23	
Number of MPP Trackers	2			2	
Number of Strings per MPPT	1			1	
Output					
Nominal Output Power (W)	3000			5000	
Nominal Output Apparent Power (VA)	3000			5000	
Max. AC Active Power (W)*4	3300			5500	
Max. AC Apparent Power (VA)*4	3300			5500	
Nominal Output Voltage (V)	220 / 230 / 240			230 / 240	
Output Voltage Range (V)	220 / 230 / 240			230 / 240	
Nominal AC Grid Frequency (Hz)	50 / 60			50 / 60	
AC Grid Frequency Range (Hz)	00700		45 ~ 55 / 55 ~ 65		
Max. Output Current (A)	14.4			24.0	
Power Factor	14.4	~1 (Adjusta	ble from 0.8 leading to		
Max. Total Harmonic Distortion	<3%	(riajaota	bio nom bio reading to	<3%	
Efficiency	4070			4070	
Max. Efficiency	97.9%	97.9%	97.9%	97.9%	97.9%
European Efficiency	97.9%	97.0%	97.2%	97.3%	97.4%
	97.0%	97.0%	91.270	97.3%	97.470
Protection					
PV String Current Monitoring	Integrated			Integrated	
PV Insulation Resistance Detection	Integrated			ntegrated	
Residual Current Monitoring	Integrated			Integrated	
PV Reverse Polarity Protection	Integrated			Integrated	
Anti-islanding Protection	Integrated			Integrated	
AC Overcurrent Protection	Integrated			Integrated	
AC Short Circuit Protection	Integrated			Integrated	
AC Overvoltage Protection	Integrated			Integrated	
DC Switch	Integrated			Integrated	
DC Surge Protection			ype III (Type II Option		
AC Surge Protection		T	ype III (Type II Option	al)	
AFCI	Optional			Optional	
Emergency Power Off	Optional			Optional	
Remote Shutdown	Optional			Optional	
Power Supply at Night	Optional			Optional	
General Data					
Operating Temperature Range (°C)	-25 ~ +60			-25 ~ +60	
Relative Humidity	0 ~ 100%			0 ~ 100%	
Max. Operating Altitude (m) <sup>*3</sup>	4000			4000	
Cooling Method			Natural Convection		
Display			CD (Optional), WLAN		
Communication	WiF	, RS485 or LAN or	r 4G or DI (Ripple Cor	ntrol or DRM) (Optional)	
Communication Protocols		Modb	us-RTU (SunSpec Cor	mpliant)	
Weight (kg)	12.8			12.8	
Dimension (W × H × D mm)	350 × 410 × 143			350 × 410 × 143	
Noise Emission (dB)	<25			<25	
Topology	Non-isolated			Non-isolated	
Self-consumption at Night (W)	<1			<1	
Self-Consumption at right (W)					
Ingress Protection Rating	IP66			IP66	

<sup>\*:</sup> All pictures shown are for reference only. Actual appearance may vary.
\*: Optional functions or devices are purchased separately.
\*: Please visit GoodWe website for the latest certificates.

<sup>\*1:</sup> For Malaysia GW4200-DNS-30 Nominal Output Power (W) and Nominal Output Apparent Power (VA) and Max. AC Active Power (W) and Max. AC Apparent Power (VA) is 4000.

<sup>\*2:</sup> For Netherland Max. AC Active Power (W) and Max. AC Apparent Power (VA) GW3600-DNS-30 is 3600, GW4200-DNS-30 is 4200; Max. Output Current (A) and Nominal Output Current (A) GW3600-DNS-30 is 15.7, GW4200-DNS-30 is 18.3.
\*3: For Australia Max. Operating Altitude (m) GW3000-DNS-30, GW3600-DNS-30, GW4200-DNS-30, GW5000-DNS-30 is 3000.

<sup>\*4:</sup> For Chile Max. AC Active Power (W) & Max.Output Apparent Power (VA) GW3000-DNS-30 is 3000, GW3600-DNS-30 is 3600, GW4200-DNS-30 is 4200, GW5000-DNS-30 is 5000, GW6000-DNS-30 is 5000, GW600-DNS-30 is DNS-30 is 6000.

<sup>\*:</sup> For Australia Nominal Output Current (A) GW3000-DNS-30 is 14.4, GW3600-DNS-30 is 17.3, GW4200-DNS-30 is 20.1, GW5000-DNS-30 is 24.0, GW6000-DNS-30 is 28.8. For Belgium Nominal Output Current (A) GW3000-DNS-30 is 13.0, GW3600-DNS-30 is 15.7, GW4200-DNS-30 is 18.3, GW5000-DNS-30 is 21.7, GW6000-DNS-30 is 26.1.





#### Smart Control & Monitoring

- · Smart Shadow Scan with adjustable scan interval "1
- · Multi-protocol compatibility for smart home integration



#### High Generation to Cut Bills

- · Up to 200% DC input oversizing & 110% AC output overloading
- · Up to 16 A max. DC input current per string



#### Superb Safety & Reliability

- · Optional AFCI\*\*2
- · Optional exchangeable DC Type II SPD & SPD failure alarm "2



#### Friendly & Thoughtful Design

- · Fanless design for quiet operations "3
- · Elegant and compact design

<sup>\*\*1:</sup> For SDT G2 Plus+ 8-20kW only.
\*\*2: Optional functions or devices are purchased separately.
\*\*3: For SDT G2 Plus+ 4-10kW only.



Technical Data		GW10K- SDT-20	GW12K- SDT-20	GW15K- SDT-20	GW20K SDT-20
Input					
Max.Input Voltage (V)		1100	1100	1100	1100
MPPT Operating Voltage Range (V)		140 ~ 950	140 ~ 950	140 ~ 950	140 ~ 95
Start-up Voltage (V)		180	180	180	180
Nominal Input Voltage (V)		620	620	620	620
Max. Input Current per MPPT (A)		15	30	30	30
Max. Short Circuit Current per MPPT (A)		18.7	37.5	37.5	37.5
Number of MPP trackers		2	2	2	2
Number of Strings per MPPT		1	2	2	2
Output					
Nominal Output Power (W)		10000	12000	15000	20000
Nominal Output Apparent Power (VA)		10000	12000	15000	20000
Max. AC Active Power (W)"1		11000	13200	16500	22000
Max. AC Apparent Power (VA) <sup>*1</sup>		11000	13200	16500	22000
Nominal Output Voltage (V)	400, 3L / N / PE	380 / 400 / 415, 3L	/N/PE	220 / 127, 3L / N / PE 380 /	400 / 415, 3L / N / PE
Output Voltage Range (V)		180 ~ 270	180 ~ 270	180 ~ 270	180 ~ 27
(according to local standard)					2 200.00
Nominal AC Grid Frequency (Hz)		50 / 60	50 / 60	50 / 60	50 / 60
AC Grid Frequency Range (Hz)			/ 55 ~ 65		
Max. Output Current (A)		16.0	19.1	24.0	32.0
Power Factor		~1 (Adjustable from 0.8			001
Max. Total Harmonic Distortion		<3%	<3%	<3%	<3%
Efficiency					
Max. Efficiency		98.3%	98.4%	98.4%	98.4%
European Efficiency		97.6%	97.8%	97.8%	97.8%
Protection					
PV Insulation Resistance Detection		Integrated	Integrated	Integrated	Integrate
Residual Current Monitoring		Integrated	Integrated	Integrated	Integrate
PV Reverse Polarity Protection		Integrated	Integrated	Integrated	
Anti-islanding Protection		Integrated	Integrated	Integrated	Integrate
AC Overcurrent Protection		Integrated	Integrated	Integrated	
AC Short Circuit Protection		Integrated	Integrated	Integrated	Integrate
AC Overvoltage Protection			Integrated	Integrated	
DC Switch			Integrated	Integrated	Integrate
DC Surge Protection		Type III (Typ	e II Optional		
AC Surge Protection	Tpye III			III (Type II Optional)	
AFCI		Optional	Optional	Optional	Optiona
Emergency Power Off		Optional	Optional	Optional	Optiona
Remote Shutdown		Optional	Optional	Optional	Optiona
General Data					
Operating Temperature Range (°C)		-30 ~ +60	-30 ~ +60	-30 ~ +60	
Relative Humidity		0 ~ 100%	0 ~ 100%	0 ~ 100%	0 ~ 1009
Max. Operating Altitude (m) <sup>2</sup>		4000	4000	4000	4000
Cooling Method	Natural Co			Smart Fan Coo	oling
Display		LED, LCD (Option			
Communication		WiFi, RS485 or LA			
Weight (kg)		20.5	23.5	26.0	26.0
Dimension (W × H × D mm)	354 × 433 × 147	415 × 511 × 175		415 × 511 ×	
Noise Emission (dB)		<25	<50	<50	<50
Topology			solated		
Self-consumption at Night (W)		<1	<1	<1	<1
Ingress Protection Rating		IP65	IP65	IP65	IP65
DC Connector			~ 6mm²)		

<sup>\*1:</sup> For Chile Max. AC Active Power (W) & Max. Output Apparent Power (VA): GW4000-SDT-20 is 4000, GW5000-SDT-20 is 5000, GW6000-SDT-20 is 6000, GW8000-SDT-20 is 8000, GW10K-SDT-20 is 10000, GW12K-SDT-20 is 12000, GW12K-SDT-20 is 12000, GW15K-SDT-20 is 15000, GW17K-SDT-20 is 17000, GW20K-SDT-20 is 20000.

\*2: For Australia, Max. Operating Altitude (m) is 3000.

\*2: Please visit GoodWe website for the latest certificates.

\*3: All pictures shown are for reference only. Actual appearance may vary.

### GOODWE



## ES Uniq Series

8-12kW I Single Phase I 2 MPPTs Hybrid Inverter (LV)

The ES Uniq Series is a dedicated single-phase hybrid inverter engineered for residential applications, delivering cost-effective energy storage solutions with a capacity ranging from 8 to 12kW. Tailored for households, this inverter is adaptable to both lithium and lead-acid batteries, enabling the creation of comprehensive energy storage systems.

This inverter is designed to work seamlessly with 182mm modules, providing a 200% oversizing capacity. Crucially, it can manage up to a 200% overload, ensuring dependable performance, especially during peak usage. It facilitates the parallel connection of up to 16 inverters for both on-grid and off-grid operations, making it well-suited for expanding energy requirements. Moreover, the ES Uniq inverter facilitates generator management and allows for the storage of energy generated by generators.





- · Smart load control
- · Backup with UPS-level switching <10ms

#### Superb Safety & Reliability

- · Optional AFCI1
- · IP65 ingress protection
- · Optional Type II SPD on the DC side1



COMING

#### Friendly & Thoughtful Design

- · Plug & Play installations
- · Elegant and compact design



#### Flexible & Adaptable Applications

- · Max. 16A DC input current per string
- · Up to 200% DC input oversizing
- Parallel connection capability for increased output power



Technical Data	GW8000-ES-C10	GW10K-ES-C10	GW12K-ES-C1
Battery Input Data			
Battery Type		Li-lon / Lead-acid	
Nominal Battery Voltage (V) Battery Voltage Range (V)		48 40 ~ 60	
Max. Continuous Charging Current (A)	160	200	240
Max. Continuous Discharging Current (A)*1	160 (176 at 10min)	200 (220 at 10min)	240 (264 at 10min)
Max. Charging Power (W) Max. Discharging Power (W)	8000 8800	10000	12000 13200
	8800	11000	13200
PV String Input Data	40000	20000	04000
Max. Input Power (W) Max. Input Voltage (V)	16000	20000 600	24000
MPPT Operating Voltage Range (V)		60 ~ 550	
Start-up Voltage (V) Nominal Input Voltage (V)		58 360	
Max. Input Current per MPPT (A)*4	32 / 16	32 / 32	32/32
Max. Short Circuit Current per MPPT (A)	48 / 24	48 / 48	48 / 48
Number of MPP Trackers Number of Strings per MPPT	2/1	2 2/2	2/2
AC Output Data (On-grid)	27.	272	6.76
Nominal Apparent Power Output to Utility Grid (VA)	8000	10000	12000
Max. Apparent Power Output to Utility Grid (VA)	8800	11000	13200
Max. Apparent Power from Utility Grid (VA)	16500	16500	16500
Nominal Output Voltage (V) Output Voltage Range (V)		220 / 230 / 240 170 ~ 280	
Nominal AC Grid Frequency (Hz)		50 / 60	
AC Grid Frequency Range (Hz)  Max. AC Current Output to Utility Grid (A)	40	45 ~ 55 / 55 ~ 65 50	60
Max. AC Current From Utility Grid (A)	40	75	- 60
Power Factor	~1 (/	Adjustable from 0.8 leading to 0.8 lags	ging)
Max. Total Harmonic Distortion		<3%	
AC Output Data (Back-up)			
Back-up Nominal Apparent Power (VA)	8000 (10000 et 10e)	10000	12000
Max. Output Apparent Power (VA)  Max. Output Current (A)	8800 (16000 at 10s) 40	11000 (20000 at 10s) 50	13200 (24000 at 10s 60
Nominal Output Voltage (V)	4	220 / 230 / 240	
Nominal Output Frequency (Hz) Output THDv (@Linear Load)		50 / 60	
AC Data (Generator)		10%	
Nominal Apparent Power from AC generator (VA)	8000	10000	12000
Max. Apparent Power from AC generator (VA)	11000	12000	12000
Nominal Output Voltage (V)		220 / 230 / 240	
Output Voltage Range (V) Nominal AC generator Frequency (Hz)		170 ~ 280 50 / 60	
AC generator Frequency Range (Hz)		45 ~ 55 / 55 ~ 65	
Max. AC Current From AC generator (A)	50.0	54.5	54.5
Nominal AC Current From AC generator (A) Nominal Output Gurrent (A)	36.4 / 34.8 / 33.3 36.4 / 34.8 / 33.3	45.5 / 43.5 / 41.7 45.5 / 43.5 / 41.7	54.5 / 52.2 / 50.0 54.5 / 52.2 / 50.0
Efficiency			
Max. Efficiency		97.6%	
European Efficiency		96.2%	
Max. Battery to AC Efficiency MPPT Efficiency		95.5% 99.9%	
Protection		33.376	
PV String Current Monitoring		Integrated	
PV Insulation Resistance Detection		Integrated	
Residual Current Monitoring		Integrated	
PV Reverse Polarity Protection  Battery Reverse Polarity Protection*2		Integrated Optional	
Anti-islanding Protection		Integrated	
AC Overcurrent Protection		Integrated	
AC Short Circuit Protection AC Overvoltage Protection		Integrated Integrated	
DC Switch		Integrated	
DC Surge Protection* <sup>3</sup>		Type III (Type II Optional)	
AC Surge Protection AFCI		Type III Optional	
Remote Shutdown		Integrated	
General Data			
Operating Temperature Range (°C)		-35 ~ +60	
Relative Humidity  Max. Operating Altitude (m)		0 ~ 95% 3000	
Cooling Method		Smart Fan Cooling	
User Interface		LED, WLAN + APP	
Communication with BMS Communication with Meter		CAN RS485	
Communication with Meter  Communication with Portal		LAN / WiFi	
Weight (kg)		29	
Dimension (W × H × D mm) Topology		560 × 444.5 × 226 Non-isolated	
		IP65	
Ingress Protection Rating Mounting Method			

<sup>\*1:</sup> The max. transient discharging current is especially based on the off-gird scenario.
\*2: This function is only for Brazil market.
\*3: SPD Type II is only for Brazil market.
\*4: As for mppt with two strings of pv module, the maximum input current of per string is 16A.

<sup>\*:</sup> Please visit GoodWe website for the latest certificates.

\*: All pictures shown are for reference only. Actual appearance may vary.

\*: As a part of our policy of continuous improvement, we reserve the right to alter design and specifications without further notice.

## Lithium Battery

48V 100Ah Server Rack





#### **Product Description**

- 1. 6000 times charge and discharge cycle, more than 10 years lifespan.
- 2. Built-in safty and higher energy density Lithium iron phosphate power battery.
- 3. Support parallel and series connection.
- 4. Suitable for home use and RV use.
- 5. BMS Support multiple protections to prevent the battery cells.

### appliation:



## ALLIN ONE Solar Energy Storage System







**1536 Hours** (10W)



**192 Hours** (80W)



**51.2 Hours** (300W)



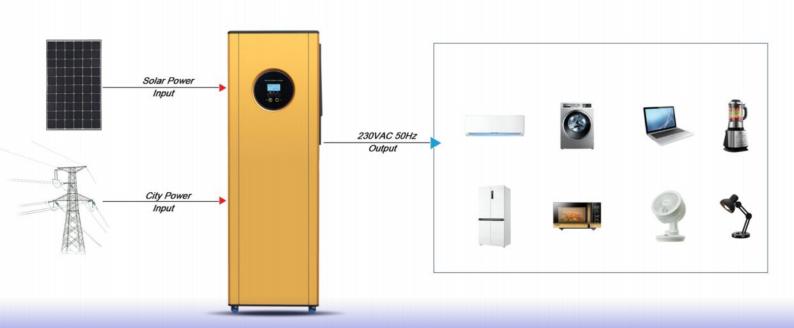
**307 Hours** (50W)



**10.4 Hours** (150W)



**19.2 Hours** (800W)



## **ALL IN ONE**

Solar Energy Storage System





**ALL IN ONE** Solar Energy Storage System

16 kWh/ Battery Energy 5.5 KW/ inverter

JD-S300 D



**ALL IN ONE** Solar Energy Storage System

**8.0** kWh / Battery Energy

3.5 KW/inverter

JD-S200 **D** 



ALL IN ONE Solar Energy Storage System

**4.0** kWh / Battery Energy

2.5 KW/inverter

JD-S150 **D** 

Model Name	JD-S300
Operating temperature range	-10-55°C
IP Grade	lp20
AC input Voltage Range	170-280Vac
Frequency	50Hz/60 Hz
Max.AC charging current	80A
PV input	
Max.power	5500W
Max.open voltage	550V
MPPT input voltage range	120-450Vdc
Max.input current	100A
AC Output	
Rated power	5500VA/5500W
Voltage	230Vac±5%
Rated Current	23.9A
PV Output	
Max.Power	5500W
Max.Charging Current	100A
Battery Type	Li-Battery
Voltage Range	40-60Vdc
Rated Voltage	51.2Vdc
Battery Energy	15360WH
Battery Ca Pacity	300Ah
DOD	93%
Weight	≈124KG
Size	1370X422X245mm

Model Name	JD-S200	
Operating temperature range	-10-55°C	
IP Grade	lp20	
AC input Voltage Range	170-280Vac	
Frequency	50Hz/60 Hz	
Max.AC charging current	80A	
PV input		
Max.power	4500W	
Max.open voltage	450V	
MPPT input voltage range	60-450Vdc	
Max.input current	100A	
AC Output		
Rated power	3500VA/3500W	
Voltage	230Vac±5%	
Rated Current	15.2A	
PV Output		
Max.Power	4500W	
Max.Charging Current	100A	
Battery Type	Li-Battery	
Voltage Range	20-30Vdc	
Rated Voltage	25. 6Vdc	
Battery Energy	7680WH	
Battery Ca Pacity	300Ah	
DOD	93%	
Weight	≈69KG	
Size	970X422X245mm	

Model Name	JD-S150	
Operating temperature range	-10-55°C	
P Grade	lp20	
AC input Voltage Range	170-280Vac	
Frequency	50 Hz/60 Hz	
Max.AC charging current	49A	
PV input		
Max.power	900W	
Max.open voltage	150V	
MPPT input voltage range	15-150Vdc	
Max.input current	60A	
AC Output		
Rated power	2500VA/2500W	
Voltage	230Vac±5%	
Rated Current	9.1A	
PV Output		
Max.Power	900W	
Max.Charging Current	60A	
Battery Type	Li-Battery	
Voltage Range	10-15Vdc	
Rated Voltage	12.8Vdc	
Battery Energy	3840WH	
Battery Ca Pacity	300Ah	
DOD	85%	
Weight	≈55KG	
Size	840X422X245mm	





# HOME & OFFICES SOLAR ENERGY STORAGE SYSTEM



Top Brand Solar inverter
 TLithium battery

Tener

## **ALL IN ONE**

Solar Energy Storage System





**ALL IN ONE** Solar Energy Storage System

16 kWh/Battery Energy

JD-T300 **●** 



**ALL IN ONE** Solar Energy Storage System

8.0 kWh / Battery Energy

JD-T200 **●** 



ALL IN ONE Solar Energy Storage System

4.0 kWh / Battery Energy

2.5 KW/inverter

(JD-T150 **○**)

Model Name	JD-T300		
Operating temperature range	-10-55°C		
IP Grade	lp20		
AC input Voltage Range	170-280Vac		
Frequency	50Hz/60 Hz		
Max.AC charging current	80A		
PV input			
Max.power	5500W		
Max.open voltage	550V		
MPPT input voltage range	120-450Vdc		
Max.input current	100A		
AC Output			
Rated power	5500VA/5500W		
Voltage	230Vac±5%		
Rated Current	23.9A		
PV Output			
Max.Power	5500W		
Max.Charging Current	100A		
Battery Type	Li-Battery		
Voltage Range	40-60Vdc		
Rated Voltage	51.2Vdc		
Battery Energy	15360WH		
Battery Ca Pacity	300Ah		
DOD	93%		
Weight	≈124KG		
Size	1360X480X255mm		

Model Name	JD-T200	
Operating temperature range	-10-55°C	
IP Grade	lp20	
AC input Voltage Range	170-280Vac	
Frequency	50Hz/60 Hz	
Max.AC charging current	80A	
PV input		
Max.power	4500W	
Max.open voltage	450V	
MPPT input voltage range	60-450Vdc	
Max.input current	100A	
AC Output		
Rated power	3500VA/3500W	
Voltage	230Vac±5%	
Rated Current	15.2A	
PV Output		
Max.Power	4500W	
Max.Charging Current	100A	
Battery Type	Li-Battery	
Voltage Range	20-30Vdc	
Rated Voltage	25. 6Vdc	
Battery Energy	7680WH	
Battery Ca Pacity	300Ah	
DOD	93%	
Weight	≈69KG	
Size	960X480X255mm	

Model Name	JD-T150		
Operating temperature range	-10-55°C		
P Grade	lp20		
AC input Voltage Range	170-280Vac		
requency	50 Hz/60 Hz		
Max.AC charging current	49A		
PV input			
Max.power	900W		
Max.open voltage	150V		
MPPT input voltage range	15-150Vdc		
Max.input current	60A		
AC Output			
Rated power	2500VA/2500W		
/oltage	230Vac±5%		
Rated Current	9.1A		
V Output			
Max.Power	900W		
Max.Charging Current	60A		
Battery Type	Li-Battery		
/oltage Range	10-15Vdc		
Rated Voltage	12.8Vdc		
Battery Energy	3840WH		
Battery Ca Pacity	300Ah		
OOD	85%		
Veight	≈55KG		
Size	830X480X255mm		

## **Batteries &** Accessories







## **Business Partners** Worldwide



## Our Valuable Customers



































































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#### Thank You!



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