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We, the Smart Energy Innovator

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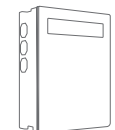
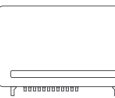
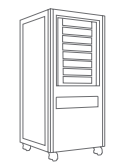
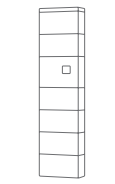
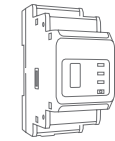
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SMART ENERGY EXPERT

GOODWE

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GoodWe Company Profile

GoodWe is a leading, strategically-thinking enterprise which focuses on research and manufacturing of PV inverters and energy storage solutions. With an accumulative installation of 23 GW installed in more than 100 countries, GoodWe solar inverters have been largely used in residential and commercial rooftops, industrial and utility scale systems, ranging from 0.7kW to 250kW. GoodWe inverters offer reliable operation and excellent performance and are well recognized by customers worldwide. GoodWe's philosophy is to always create win-win partnerships with customers by identifying and integrating the most advanced components and techniques available while offering an unparalleled after-sales service.

Technological innovation is GoodWe's main core competence. With an in-house R&D team of approx. 500 employees in two R&D centers, GoodWe can offer a comprehensive portfolio of products and solutions for residential, commercial and utility scale PV and storage systems, ensuring that performance and quality go hand-in-hand across the entire range.

GoodWe has set up an integrated service system for pre-sales, in-sales and after-sales and has established service centers worldwide, aiming to offer global support to all customers including project consulting, technical training, on-site support and after-sales service.

 **25**
GW Production Capacity

 **15**
Hectare Lands

 **2**
Plants
(Suzhou & Guangde)

 **130+**
Patents

 **2**
R&D Centers

 **500+**
R&D Staff Approx.



2015-2020



2020



2017-2021



2021

GoodWe Milestones



Global Presence



GoodWe Inverter Portfolio

01
Residential Solution 0.7-15kW



XS Series



DNS Series

04
PV + Storage Solution 3-50kW



EH Series



ET Series

02
Commercial and Industrial
Solution 17-136kW



SMT Series



MT Series

03
Utility-scale Solution 225-250kW



HT Series

05
Lithium Batteries



Lynx Home S Series



Lynx Home U Series

XS Series

0.7-3kW | 1 MPPT | Single Phase

The brand new XS model from GoodWe is an ultra-small residential solar inverter specifically designed to bring comfort and quiet operation as well as high efficiency to households. Its capacity ranges from 0.7kW to 3.0kW and its most outstanding characteristic is light weight, which is only 5.8kg and as well as its extremely compact size equivalent to an A4 paper, that make it particularly easy to carry & install. Remarkably, it offers a 130% of DC input oversizing and it's able to achieve a maximum European efficiency of 97.2%. Conveniently, the communication options available on this inverter are both LAN and WiFi.



- A4 size
- Light weight
- 130% DC oversizing
- 97.6% Max. efficiency
- 110% AC overloading
- Lowest start-up voltage @40V

XS Series

Technical Data	GW700-XS	GW1000-XS	GW1500-XS	GW2000-XS	GW2500-XS	GW3000-XS
PV String Input Data						
Max. Input Power (W)	910	1300	1950	2600	3250	3900
Max. DC Input Voltage (V)	500	500	500	500	500	500
MPPT Range (V)	40~450	40~450	50~450	50~450	50~450	50~450
Start-up Voltage (V)	40	40	50	50	50	50
Nominal Input Voltage (V)	360	360	360	360	360	360
Max. Input Current per MPPT (A)	12.5	12.5	12.5	12.5	12.5	12.5
Max. Short Current per MPPT (A)	15.6	15.6	15.6	15.6	15.6	15.6
Number of MPPTs	1	1	1	1	1	1
Number of Strings per MPPT	1	1	1	1	1	1
AC Output Data						
Nominal Output Power (W)	700	1000	1500	2000	2500	3000
Nominal Output Apparent Power (VA)	700	1000	1500	2000	2500	3000
Max. Output Apparent Power (VA)	800*1	1100*1	1650*1	2200*1	2750*1	3300*1
Nominal Output Voltage (V)	230	230	230	230	230	230
Nominal Output Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60
Max. Output Current (A)	3.5	4.8	7.2	9.6	12	14.3
Normal Output Current (A)	3	4.3	6.5	8.7	10.9	13
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)					
Max. Total Harmonic Distortion	<3%	<3%	<3%	<3%	<3%	<3%
Efficiency						
Max. Efficiency	97.2%	97.2%	97.3%	97.5%	97.6%	97.6%
European Efficiency	96.0%	96.4%	96.6%	97.0%	97.2%	97.2%
Protection						
DC Insulation Resistance Detection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Residual Current Monitoring Unit	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
AC Overcurrent Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
AC Short Circuit Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
AC Overvoltage Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
DC Switch	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
DC Surge Arrester	Type III	Type III	Type III	Type III	Type III	Type III
AC Surge Arrester	Type III	Type III	Type III	Type III	Type III	Type III
General Data						
Operating Temperature Range (°C)	-25~60	-25~60	-25~60	-25~60	-25~60	-25~60
Relative Humidity	0~100%	0~100%	0~100%	0~100%	0~100%	0~100%
Operating Altitude (m)	≤4000	≤4000	≤4000	≤4000	≤4000	≤4000
Cooling Method	Natural Convection					
Display	LED, LCD / Wi-Fi+APP / Bluetooth+APP					
Communication	WiFi / LAN / RS485					
Weight (Kg)	5.8	5.8	5.8	5.8	5.8	5.8
Size (Width × Height × Depth mm)	295 × 230 × 113					
Topology	Transformerless					
Night Power Consumption (W)	<1	<1	<1	<1	<1	<1
Ingress Protection Rating	IP65	IP65	IP65	IP65	IP65	IP65
DC Connector	MC4 (2.5~4mm²)					
AC Connector	plug and play connector					

*1: For Belgium Max. Output Apparent Power (VA): GW700-XS is 700; GW1000-XS is 1000; GW1500-XS is 1500; GW2000-XS is 2000; GW2500-XS or GW2500N-XS is 2500; GW3000-XS or GW3000N-XS is 3000.
*: Please visit GoodWe website for the latest certificates.

Color Options: White (EMEA), Red (None-EMEA)

DNS Series

3-6kW | 2 MPPTs | Single Phase

GoodWe DNS series is a perfect match for residential installations thanks to its compact size and light weight. Manufactured for durability and longevity under modern industrial standards, GoodWe DNS series is IP65 rated so it can be mounted either inside or outside your home. With a low start-up voltage of only 80V and the widest MPPT voltage range of 80-550V, these inverters can provide greater options for your household system. The GoodWe DNS series is also extremely light, 30% lighter than other inverters.



Start-up Voltage @80V



Wide Range of MPPT Voltage



Small, Light weight and Easy to install



Fanless and Noiseless



Built-in Anti-reverse Function

DNS Series

Technical Data	GW3000D-NS	GW3600D-NS	GW4200D-NS	GW5000D-NS	GW6000D-NS
PV String Input Data					
Max. Input Power (W)	3900	4680	5460	6500	7200
Max. Input Voltage (V)	600	600	600	600	600
MPPT Range (V)	80~550	80~550	80~550	80~550	80~550
Start-up Voltage (V)	80	80	80	80	80
Nominal Input Voltage (V)	360	360	360	360	360
Max. Input Current per MPPT (A)	11 / 11	11 / 11	11 / 11	11 / 11	11 / 11
Max. Short Circuit Current per MPPT (A)	13.8 / 13.8	13.8 / 13.8	13.8 / 13.8	13.8 / 13.8	13.8 / 13.8
Number of MPPTs	2	2	2	2	2
Number of Strings per MPPT	1	1	1	1	1
AC Output Data					
Nominal Output Power (W)	3000*1	3680*1	4200*1	5000*1	6000*1
Nominal Output Apparent Power (VA)	3000	3680	4200	5000	6000
Max. AC Apparent Power (VA)	3000	3680	4200	5000	6000
Nominal Output Voltage (V)	220 / 230	220 / 230	220 / 230	220 / 230	220 / 230
Nominal AC Grid Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60
Max. Output Current (A)	13.6	16	19	22.8	27.3
Nominal Output Current (A)	13.6 / 13	16 / 15.6	19 / 18.2	22.8 / 21.7	27.3 / 26.1
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)				
Max. Total Harmonic Distortion	<3%	<3%	<3%	<3%	<3%
Efficiency					
Max. Efficiency	97.8%	97.8%	97.8%	97.8%	97.8%
European Efficiency	97.5%	97.5%	97.5%	97.5%	97.5%
Protection					
Anti-Islanding Protection	Integrated	Integrated	Integrated	Integrated	Integrated
DC Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated	Integrated
Residual Current Monitoring Unit	Integrated	Integrated	Integrated	Integrated	Integrated
AC Over Current Protection	Integrated	Integrated	Integrated	Integrated	Integrated
AC Short Protection	Integrated	Integrated	Integrated	Integrated	Integrated
AC Over Voltage Protection	Integrated	Integrated	Integrated	Integrated	Integrated
DC Surge Arrester				Type III	
AC Surge Arrester				Type III	
General Data					
Operating Temperature Range (°C)	-25~60	-25~60	-25~60	-25~60	-25~60
Relative Humidity	0~100%	0~100%	0~100%	0~100%	0~100%
Operating Altitude (m)	≤4000	≤4000	≤4000	≤4000	≤4000
Cooling Method	Natural Convection				
Display	LCD / LCD / WiFi+App				
Communication	RS485 / WiFi / LAN				
Weight (Kg)	13	13	13	13	13.5
Size (Width × Height × Depth mm)	354 × 433 × 147	354 × 433 × 147	354 × 433 × 147	354 × 433 × 147	354 × 433 × 147
Ingress Protection Rating	IP65	IP65	IP65	IP65	IP65
Night Power Consumption (W)	<1	<1	<1	<1	<1
Topology	Transformerless				

*1: For CEI 0-21 Nominal Output Power GW3000D-NS is 2700, GW3600D-NS is 3350, GW4200D-NS is 3800, GW5000D-NS is 4540, GW6000D-NS is 5450.
*: Please visit GoodWe website for the latest certificates.

MS Series

5-10kW | 3 MPPTs | Single Phase

The MS Series is GoodWe's answer to the residential segment's expanding needs. This 5-10 kW, Single Phase, 3 MPPTs inverter is a powerful and versatile solution. It is truly a champion in terms of DC oversizing, offering as much as 200%, way above the competition, making it possible as well to achieve 110% AC overloading. With a start-up voltage of only 80V the MS is able to generate electricity earlier than equivalent products, achieving a high efficiency of 97.7%. This inverter is compatible with bifacial modules and outstandingly and its maximum current input reaches 12.5A per string. The MS comes with an AFCI integrated protection and the light weight allows for effortless installation.



 3 MPPTs

 80V Startup Voltage

 Up to 110% AC output overloading

 Up to 200% DC input oversizing

MS Series

Technical Data	GW5000-MS	GW6000-MS	GW7000-MS	GW8500-MS	GW10K-MS
PV String Input Data					
Max. DC Input Power (Wp)	10000	12000	13500	13500	13500
Max. DC Input Voltage (V)	600	600	600	600	600
MPPT Range (V)	80~550	80~550	80~550	80~550	80~550
Start-up Voltage (V)	80	80	80	80	80
Min. Feed-in Voltage(V)	120	120	120	120	120
Nominal DC Input Voltage (V)	360	360	360	360	360
Max. Input Current (A)	12.5 / 12.5 / 12.5	12.5 / 12.5 / 12.5	12.5 / 12.5 / 12.5	12.5 / 12.5 / 12.5	12.5 / 12.5 / 12.5
Max. Short Current (A)	15 / 15 / 15	15 / 15 / 15	15 / 15 / 15	15 / 15 / 15	15 / 15 / 15
Number of MPPTs	3	3	3	3	3
Number of Strings per MPPT	1 / 1 / 1	1 / 1 / 1	1 / 1 / 1	1 / 1 / 1	1 / 1 / 1
AC Output Data					
Nominal Output Power (W)	5000	6000	7000	8500	10000
Max. Output Apparent Power (VA)	5500	6600	7700	9350	10000
Nominal Output Voltage (V)	220 / 230	220 / 230	220 / 230	220 / 230	220 / 230
Nominal Output Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60
Max. Output Current (A)	25	30	35	42.5	45.5
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)				
Output THDi (@Nominal Output)	<3%	<3%	<3%	<3%	<3%
Efficiency					
Max. Efficiency	97.7%	97.7%	97.7%	97.7%	97.7%
European Efficiency	97.3%	97.3%	97.3%	97.3%	97.3%
Protection					
Anti-islanding Protection	Integrated	Integrated	Integrated	Integrated	Integrated
Input Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated	Integrated
Insulation Resistor Detection	Integrated	Integrated	Integrated	Integrated	Integrated
Residual Current Monitoring Unit	Integrated	Integrated	Integrated	Integrated	Integrated
Output Over Current Protection	Integrated	Integrated	Integrated	Integrated	Integrated
Output Short Protection	Integrated	Integrated	Integrated	Integrated	Integrated
Output Over Voltage Protection	Integrated	Integrated	Integrated	Integrated	Integrated
DC SPD Protection	Type II				
AC SPD Protection	Type III (Type II Optional)				
General Data					
Operating Temperature Range (°C)	-25~60	-25~60	-25~60	-25~60	-25~60
Relative Humidity	0~100%	0~100%	0~100%	0~100%	0~100%
Operating Altitude (m)	≤4000	≤4000	≤4000	≤4000	≤4000
Cooling Method	Natural Convection				
User Interface	LED&LCD				
Communication	RS485 / WiFi / LAN (Optional)				
Weight (Kg)	22.5	22.5	22.5	22.5	22.5
Size (Width × Height × Depth mm)	511 × 415 × 175	511 × 415 × 175	511 × 415 × 175	511 × 415 × 175	511 × 415 × 175
Protection Degree	IP65	IP65	IP65	IP65	IP65
Night Self Consumption (W)	<1	<1	<1	<1	<1
Topology	Transformerless				

*: Please visit GoodWe website for the latest certificates.

A-MS Series

(North America only)
5-9.6kW | up to 4 MPPTs | Split-phase

The A-MS is an inverter of the highest quality and we take great pride in it. This product was conceived to be a solid element of your residential array for the long term. Put your faith and confidence in its quality, its extended warranty of 10 years and GoodWe will be on your side for any issue along the way.



Compatible with Bifacial Panels



Low Start-up Voltage 95V



150% DC Input Oversizing



4 MPPTs



AFCI & Rapid Shutdown

A-MS Series

Technical Data	GW5000A-MS	GW6000A-MS	GW7000A-MS	GW7600A-MS	GW8600A-MS	GW9600A-MS
PV String Input Data						
Max. DC Input Power (W)	7500	9000	10500	11400	12900	15000
Max. DC Input Voltage (V)*1	600	600	600	600	600	600
MPPT Range (V)	80~550	80~550	80~550	80~550	80~550	80~550
Start-up Voltage (V)	95	95	95	95	95	95
MPPT Range for Full Load (V)	300~500	360~500	210~500	230~500	260~500	300~500
Nominal DC Input Voltage (V)	380	380	380	380	380	380
Max. Input Current (A)	12.5 / 12.5	12.5 / 12.5	12.5 / 12.5 / 12.5 / 12.5			
Max. Short Current (A)	15.2 / 15.2	15.2 / 15.2	15.2 / 15.2 / 15.2 / 15.2			
Number of MPPTs	2	2	4	4	4	4
Number of Strings per MPPT	1 / 1	1 / 1	1 / 1 / 1 / 1	1 / 1 / 1 / 1	1 / 1 / 1 / 1	1 / 1 / 1 / 1
AC Output Data (On-grid)						
Output Voltage Range (Vac)	211 to 264 @240 / 183 to 229 @208					
Nominal Output Frequency (Hz)	60	60	60	60	60	60
Nominal Apparent Power Output to Grid (VA)	5000 / 5000	6000 / 6000	7000 / 7000	7600 / 7600	8600 / 8600	9600 / 9600
Nominal AC Current Output to Grid (A)	20.8 / 24	25 / 28.8	29.2 / 33.6	31.7 / 36.5	35.8 / 41.3	40 / 46.1
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)					
Output THDi (@Nominal Output)	<3%	<3%	<3%	<3%	<3%	<3%
Efficiency						
Max. Efficiency	97.6%	97.6%	97.6%	97.6%	97.6%	97.6%
CEC Efficiency	97.5%@240	97.5%@240	97%@240	97%@240	97%@240	97%@240
	97%@208	97%@208	96.5%@208	96.5%@208	96.5%@208	96.5%@208
Protection						
PV Arc Fault Detection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
PV String Input Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Insulation Resistor Detection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Residual Current Monitoring Unit	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Output Over Current Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Output Over Voltage Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
General Data						
Operating Temperature Range	-31°F~-140°F (-35°C~60°C)					
Relative Humidity	0~95%	0~95%	0~95%	0~95%	0~95%	0~95%
Operating Altitude	≤13123ft (4000m)					
Cooling Method	Natural Conection	Natural Conection	Intelligent Fan	Intelligent Fan	Intelligent Fan	Intelligent Fan
Noise (dB)	<30	<30	<45	<45	<45	<45
User Interface	LED & APP	LED & APP	LED & APP	LED & APP	LED & APP	LED & APP
Communication with Portal	Wi-Fi; LAN (Optional)					
Communication with RSD	SUNSPEC	SUNSPEC	SUNSPEC	SUNSPEC	SUNSPEC	SUNSPEC
Weight	62.8lb (28.5Kg)	62.8lb (28.5Kg)	70.5lb (32Kg)	70.5lb (32Kg)	70.5lb (32Kg)	70.5lb (32Kg)
Size (Width × Height × Depth)	16.3in × 31.1in × 6.9in (415mm × 791mm × 175mm)					
Mounting	Wall Bracket	Wall Bracket	Wall Bracket	Wall Bracket	Wall Bracket	Wall Bracket
Protection Degree	NEMA Type 4X	NEMA Type 4X	NEMA Type 4X	NEMA Type 4X	NEMA Type 4X	NEMA Type 4X
Standby Self-Consumption (W)	<20	<20	<20	<20	<20	<20
Topology	Transformerless	Transformerless	Transformerless	Transformerless	Transformerless	Transformerless
Certifications & Standards						
Grid Regulation	UL1741 SA, California Rule 21, HECO Rule 14, IEEE 1547, IEEE 1547.1					
Safety Regulation	UL 1741, CSA 22.2 No. 107-01, UL 1998, UL1699B					
EMC	FCC part15 CLASS B					

*1: Inverter will not work when PV input voltage ≥585V.

SDT G2 Series

4-15kW | 2 MPPTs | Three Phase

The GoodWe SDT Series is one of the best options available on the residential & commercial segments thanks to its technical strengths that make it one of the most efficient in the market. For enhanced safety, this inverter is able to incorporate AFCI. Its high efficiency (98.3%) and its enhanced oversizing & overloading capabilities represent an outstanding improvement in the industry. Moreover, its plug-in AC connector make operation & maintenance easier.



Up to 98.3% Max. Efficiency

150% DC input oversizing

110% AC output overloading

Arc-fault circuit interrupter

Easy for installation and O&M

SDT G2 Series

Technical Data	GW4K-DT	GW5K-DT	GW6K-DT	GW8K-DT	GW10KT-DT	GW12KT-DT	GW15KT-DT
PV String Input Data							
Max. DC Input Power (W)	6000	7500	9000	12000	15000	18000	22500
Max. DC Input Voltage (V)	1000	1000	1000	1000	1000	1000	1000
MPPT Operating Voltage Range (V)	180~850	180~850	180~850	180~850	180~850	180~850	180~850
Start-up Voltage (V)	160	160	160	160	160	160	160
Nominal DC Input Voltage (V)	620	620	620	620	620	620	620
Max. Input Current per MPPT (A)	12.5 / 12.5	12.5 / 12.5	12.5 / 12.5	12.5 / 12.5	12.5 / 12.5	12.5 / 25	12.5 / 25
Max. Short Circuit Current per MPPT (A)	15.6 / 15.6	15.6 / 15.6	15.6 / 15.6	15.6 / 15.6	15.6 / 15.6	15.6 / 31.2	15.6 / 31.2
Number of MPPTs	2	2	2	2	2	2	2
Number of Strings per MPPT	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 2	1 / 2
AC Output Data							
Nominal Output Power (W)	4000	5000	6000	8000	10000	12000	15000
Nominal Output Apparent Power(VA)	4000	5000	6000	8000	10000	12000	15000
Max. Output Apparent Power (VA)	4400* ¹	5500* ¹	6600* ¹	8800* ¹	11000* ¹	14000* ¹	16500* ¹
Nominal Output Voltage (V)	400, 3L / N / PE						
Output Voltage Range (V)	180~270	180~270	180~270	180~270	180~270	180~270	180~270
Nominal AC Grid Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60
AC Grid Frequency Range (Hz)	45~55 / 55~65	45~55 / 55~65	45~55 / 55~65	45~55 / 55~65	45~55 / 55~65	45~55 / 55~65	45~55 / 55~65
Max. Output Current (A)	6.4	8	9.6	12.8	16	20.3	24
Nominal Output Current (A)	5.8	7.2	8.7	11.6	14.5	17.3	21.7
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)						
Max. Total Harmonic Distortion	<3%	<3%	<3%	<3%	<3%	<3%	<3%
Efficiency							
Max. Efficiency	98.2%	98.2%	98.2%	98.2%	98.3%	98.3%	98.3%
European Efficiency	>97.6%	>97.6%	>97.6%	>97.6%	>97.7%	>97.7%	>97.7%
Protection							
Anti-Islanding Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
DC Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
DC Insulation Resistor Detection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
DC Surge Protection	Type III						
AC Surge Protection	Type III						
Residual Current Monitoring Unit	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
AC Over Current Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
AC Short Circuit Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
AC Over Voltage Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
DC Arc Fault Circuit Interrupter	Optional	Optional	Optional	Optional	Optional	Optional	Optional
General Data							
Operating Temperature Range (°C)	-30~60	-30~60	-30~60	-30~60	-30~60	-30~60	-30~60
Relative Humidity	0~100%	0~100%	0~100%	0~100%	0~100%	0~100%	0~100%
Operating Altitude (m)	≤4000	≤4000	≤4000	≤4000	≤4000	≤4000	≤4000
Cooling Method	Natural Convection			Smart Fan Cooling			
Display	LCD, LED / WiFi+App						
Communication	WiFi / LAN / RS485						
Communication Protocol	SunSpec Modbus						
Weight (Kg)	15	15	15	16	16	18	18
Size (Width × Height × Depth mm)	354 × 433 × 147	354 × 433 × 147	354 × 433 × 147	354 × 433 × 155	354 × 433 × 155	354 × 433 × 155	354 × 433 × 155
Ingress Protection Rating	IP65	IP65	IP65	IP65	IP65	IP65	IP65
Night Power Consumption (W)	<1	<1	<1	<1	<1	<1	<1
DC Connector	MC4 (2.5~4mm²)						
Topology	Transformerless						

*1: For Belgium Max. Output Apparent Power (VA): GW4K-DT is 4000; GW5K-DT is 5000; GW6K-DT is 6000; GW8K-DT is 8000; GW10KT-DT is 10000; GW12KT-DT is 12000; GW15KT-DT is 15000.
*: Please visit GoodWe website for the latest certificates.

SDT G2 Series

17-25kW | 2 MPPTs | Three Phase

The GoodWe 17-25kW SDT series inverter is especially designed for three-phase residential and small commercial projects. With its compact design, the SDT inverter is 45% smaller than the first generation. The inverter is also light and easy to install. The maximum efficiency of this inverter is as high as 98.4%. With an advanced ventilation system, the inverter is able to dissipate heat efficiently. In addition, it can be customised with an integrated LCD scree.



Compatible with bifacial modules



150% DC input oversizing



110% AC output overloading



Max. Efficiency 98.4%



Compact and light weight

SDT G2 Series

Technical Data	GW17KT-DT	GW20KT-DT	GW25KT-DT
PV String Input Data			
Max. DC Input Power (Wp)	25500	30000	37500
Max. DC Input Voltage (V)	1100	1100	1100
MPPT Operating Voltage Range (V)	200~950	200~950	200~950
Starting Voltage (V)	180	180	180
Nominal DC Input Voltage (V)	620	620	620
Max. Input Current per MPPT (A)	25 / 25	25 / 25	37.5 / 25
Max. Short Circuit Current per MPPT (A)	31.2 / 31.2	31.2 / 31.2	46.8 / 31.2
Number of MPPTs	2	2	2
Number of Strings per MPPT	2 / 2	2 / 2	3 / 2
AC Output Data			
Nominal Output Power (W)	17000	20000	25000
Nominal Output Apparent Power (VA)	17000	20000	25000
Max. Output Apparent Power (VA)	19000*1	22000*1	27500*1
Nominal Output Voltage (V)	400, 3L / N / PE		
Output Voltage Range (V)	180~270	180~270	180~270
Nominal AC Grid Frequency (Hz)	50 / 60	50 / 60	50 / 60
AC Grid Frequency Range (Hz)	45~55 / 55~65	45~55 / 55~65	45~55 / 55~65
Max. Output Current (A)	28.8	31.9	40.8
Nominal Output Current (A)	24.5	28.9	36.1
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)		
Max. Total Harmonic Distortion	<3%	<3%	<3%
Efficiency			
Max. Efficiency	98.4%	98.4%	98.4%
European Efficiency	>97.7%	>97.7%	>97.7%
Protection			
Anti-Islanding Protection	Integrated	Integrated	Integrated
DC Reverse Polarity Protection	Integrated	Integrated	Integrated
DC Insulation Resistor Detection	Integrated	Integrated	Integrated
DC Surge Arrester	Type III (Type II Optional)		
AC Surge Arrester	Type III		
Residual Current Monitoring Unit	Integrated	Integrated	Integrated
AC Over Current Protection	Integrated	Integrated	Integrated
AC Short Protection	Integrated	Integrated	Integrated
AC Over Voltage Protection	Integrated	Integrated	Integrated
DC Arc Fault Circuit Interrupter	Optional	Optional	Optional
General Data			
Operating Temperature Range (°C)	-30~60	-30~60	-30~60
Relative Humidity	0~100%	0~100%	0~100%
Operating Altitude (m)	≤4000	≤4000	≤4000
Cooling Method	Smart Fan Cooling	Smart Fan Cooling	Smart Fan Cooling
Display	LCD, LED / Wi-Fi+APP	LED+LCD / Wi-Fi+APP	LED+LCD / Wi-Fi+APP
Communication	WiFi / LAN / RS485		
Communication Protocol	SunSpec Modbus		
Weight (Kg)	25	25	25
Size (Width × Height × Depth mm)	415 × 511 × 175	415 × 511 × 175	415 × 511 × 175
Ingress Protection Rating	IP65	IP65	IP65
Night Power Consumption (W)	<1	<1	<1
DC Connector	MC4 (2.5~4mm²)		
Topology	Transformerless		

*1: For Belgium Max. Output Apparent Power (VA): GW17KT-DT is 17000; GW20KT-DT is 20000; GW25KT-DT is 25000.
*: Please visit GoodWe website for the latest certificates.

Color Options: White (EMEA), Red (None-EMEA)

SMT Series

25-36kW | 3 MPPTs | Three Phase

The new three MPP-Tracker inverters of the GoodWe SMT Series are ideal for commercial rooftop installations. The SMT product series achieves a higher maximum efficiency of 98.8% and features unique design highlights: solid capacitor, fuse free and optional AFCI function. These three new features ensure a longer life-span and a higher safety level of operation allowing for an improved user experience. With its weight of just 40 kg and compact design, the inverters of the SMT series are easy to handle. With a maximum DC input voltage of 1100V, wider MPPT range, and a start-up voltage of 1100V, the SMT series guarantees an earlier generation of power and a longer working time in order to maximize long-term returns and profitability in safe operating conditions.



98.8% Max. Efficiency



130% DC input oversizing



110% AC output overloading



Full-load running at 50°C



String level monitoring



Arc-fault circuit interrupter

SMT Series

Technical Data	GW25K-MT	GW30K-MT	GW36K-MT
PV String Input Data			
Max. DC Input Power (Wp)	32500	39000	42900
Max. DC Input Voltage (V)	1100	1100	1100
MPPT Range (V)	200~950	200~950	200~950
Start-up Voltage (V)	180	180	180
Nominal DC Input Voltage (V)	600	600	600
Max. Input Current (A)	25 / 25 / 25	25 / 25 / 25	25 / 25 / 25
Max. Short Current (A)	31.3 / 31.3 / 31.3	31.3 / 31.3 / 31.3	31.3 / 31.3 / 31.3
Number of MPPTs	3	3	3
Number of Strings per MPPT	2 / 2 / 2	2 / 2 / 2	2 / 2 / 2
AC Output Data			
Nominal Output Power (W)	25000	30000	36000*1
Max. Output Power (W)	27500*2	33000*2	36000*2
Max. Output Apparent Power (VA)	27500*3	33000*3	36000*3
Nominal Output Voltage (V)	400, 3L / N / PE or 3L / PE		
Nominal Output Frequency (Hz)	50/60	50/60	50/60
Max. Output Current (A)	40	48	53.3
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)		
Output THDi (@Nominal Output)	<3%	<3%	<3%
Efficiency			
Max. Efficiency	98.7%	98.8%	98.8%
European Efficiency	>98.4%	>98.5%	>98.5%
Protection			
Anti-islanding Protection	Integrated	Integrated	Integrated
Input Reverse Polarity Protection	Integrated	Integrated	Integrated
PV String Current Monitoring	Integrated	Integrated	Integrated
Anti-PID Function for Module	Optional	Optional	Optional
Insulation Resistor Detection	Integrated	Integrated	Integrated
DC Surge Protection	Type III (Type II optional)		
AC Surge Protection	Type III (Type II optional)		
Residual Current Monitoring Unit	Integrated	Integrated	Integrated
Output Over Current Protection	Integrated	Integrated	Integrated
Output Short Protection	Integrated	Integrated	Integrated
Output Over Voltage Protection	Integrated	Integrated	Integrated
AFCI	Optional	Optional	Optional
Terminal Temperature Detection	Optional	Optional	Optional
General Data			
Operating Temperature Range (°C)	-30~60	-30~60	-30~60
Relative Humidity	0~100%	0~100%	0~100%
Operating Altitude (m)	≤3000	≤3000	≤3000
Cooling Method	Fan Cooling	Fan Cooling	Fan Cooling
User Interface	LCD & LED or APP & LED		
Communication	RS485 / WiFi / GPRS / PLC		
Weight (Kg)	40	40	40
Size (Width × Height × Depth mm)	480 × 590 × 200	480 × 590 × 200	480 × 590 × 200
Protection Degree	IP65	IP65	IP65
Night Self Consumption (W)	<1	<1	<1
Topology	Transformerless		

*1: 33kW for Italy,36kW for other countries.

*2: For Belgium Max. Output Power (W): GW25K-MT is 25000; GW30K-MT is 30000; GW36K-MT is 36000.

*3: For Belgium Max. Output Apparent Power (VA): GW25K-MT is 25000; GW30K-MT is 30000; GW36K-MT is 36000.

*: Please visit GoodWe website for the latest certificates.

MT Series

50-80kW | 4 MPPTs | Three Phase

The second generation of GoodWe MT series inverter is suited for medium and large scale commercial rooftops and ground-mounted solar PV systems where maximum versatility and profitability are important. With its compact design and power boost function, the Goodwe MT series of the new generation can provide a 150% continuous maximum AC output power overload, offering a faster return on investment. The start-up voltage is 200V, much lower than other products, which makes the inverter start up earlier, therefore generating more power over time.



Up to 150% DC input oversizing



Up to 115% AC output overloading



Up to 99% Max. Efficiency



String level monitoring



Full-load running at 50°C



Power line communication

MT Series

Technical Data	GW50KN-MT	GW60KN-MT	GW50KBF-MT	GW60KBF-MT	GW70KMV-MT	GW70KHV-MT	GW80KHV-MT	GW75K-MT	GW80K-MT	GW75KBF-MT	GW80KBF-MT
DC Input Data											
Max. PV Power (W)	65000	80000	65000	80000	95000	91000	120000	112500	120000	97500	104000
Max. DC Input Voltage (V)	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
MPPT Range (V)	200~1000	200~1000	200~1000	200~1000	200~1000	200~1000	200~1000	200~1000	200~1000	200~1000	200~1000
Starting Voltage (V)	200	200	200	200	200	200	200	200	200	200	200
Min. Feed-in Voltage (V)	210	210	210	210	/	210	210	210	210	210	210
Nominal DC Input Voltage (V)	620	620	620	620	720	750	800	600	620	750	800
Max. Input Current per MPPT (A)	33 / 33 / 22 / 22	33	30	44	39	33	44	44	44	44	39
Max. Short Circuit Current per MPPT (A)	41.5 / 41.5 / 27.5 / 27.5	41.5	37.5	55	55	41.5	55	55	55	55	54.8
Number of MPPTs	4	4	4	4	4	4	4	4	4	4	4
Number of Strings per MPPT	3 / 3 / 2 / 2	3	2	3	3	3	3	4 (Standard) 3 (Optional, Support bifacial module)	3	3	3
AC Output Data											
Nominal Output Power (W)	50000	60000	50000	60000	70000	70000	80000	75000	80000	75000	80000
Max. AC Active Power (cosφ=1)	55000; 57500 @415Vac*1	66000; 69000 @415Vac*1	55000; 57500 @415Vac*1	66000; 69000 @415Vac*1	77000	77000*1	88000*1	75000	88000*1	82500*1	88000*1
Max. Output Apparent Power (VA)	55000; 57500 @415Vac*2	66000; 69000 @415Vac*2	55000; 57500 @415Vac*2	66000; 69000 @415Vac*2	77000	77000*2	88000*2	75000	88000*2	82500*2	88000*2
Nominal Output Voltage (V)	400, default 3L+N+PE, 3L+PE optional in settings				480, 3L / PE	500, 3L / PE	540, 3L / PE	400, default 3L+N+PE, 3L+PE optional in settings		500, 3L / PE	540, 3L / PE
Nominal Output Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60
Max. Output Current (A)	80	96	80	96	92.6	89	94.1	133	133	95.3	94.1
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)										
Output THDi (@Nominal Output)	<3%	<3%	<3%	<3%	<3%	<3%	<3%	<3%	<3%	<3%	<3%
Efficiency											
Max. Efficiency	98.7%	98.8%	98.8%	98.8%	99.0%	99.0%	99.0%	98.8%	98.8%	99.0%	99.0%
European Efficiency	98.3%	98.5%	98.3%	98.3%	98.4%	98.4%	98.4%	98.3%	98.3%	98.4%	98.4%
Protection											
PV String Current Monitoring	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Anti-Islanding Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Input Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Insulation monitoring	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
DC fuse	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Anti-PID Function for Module	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
DC Surge Arrester	Integrated (Type II)										
AC Surge Arrester	Integrated (Type II)										
Residual Current Monitoring Unit	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
AC Over Current Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
AC Short Circuit Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
AC Over Voltage Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Humidity Monitoring	-	-	-	-	-	NA	NA	Integrated	Integrated	NA	NA
General Data											
Ambient Temperature Range (°C)	-30~60	-30~60	-30~60	-30~60	-30~60	-30~60	-30~60	-30~60	-30~60	-30~60	-30~60
Relative Humidity	0~100%	0~100%	0~100%	0~100%	0~100%	0~100%	0~100%	0~100%	0~100%	0~100%	0~100%
Operating Altitude (m)	≤4000	≤4000	≤4000	≤4000	≤4000	≤4000	≤4000	≤4000	≤4000	≤4000	≤4000
Cooling	Fan Cooling										
Display	LCD or WiFi+APP			LED, WiFi+APP			LCD or WiFi+APP	LED, WiFi+APP			
Communication	RS485 or WiFi or PLC				RS485 or WiFi	RS485 or WiFi or PLC		RS485 & WiFi, PLC (Optional)		RS485 or WiFi or PLC	
Weight (Kg)	59	64	60	65	65	60	65	70	70	65	65
Dimension (Width × Height × Depth mm)	586 × 788 × 264			586 × 788 × 267			586 × 788 × 264		586 × 788 × 267		
Protection Degree	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP65
Night Self Consumption (W)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Topology	Transformerless										

*1: For Belgium Max. Output Power (W): GW50KN-MT is 50000; GW60KN-MT is 60000; GW50KBF-MT is 50000; GW60KBF-MT is 60000; GW70KHV-MT is 70000; GW80KHV-MT is 80000; GW80K-MT is 80000; GW75KBF-MT is 75000; GW80KBF-MT is 80000.
*2: For Belgium Max. Output Apparent Power (VA): GW50KN-MT is 50000; GW60KN-MT is 60000; GW50KBF-MT is 50000; GW60KBF-MT is 60000; GW70KHV-MT is 70000; GW80KHV-MT is 80000; GW80K-MT is 80000; GW75KBF-MT is 75000; GW80KBF-MT is 80000.
*: Please visit GoodWe website for the latest certificates.

HT Series | 1100Vdc

73-136kW | up to 12 MPPTs Three Phase

The new HT 1100Vdc Series (73-136 kW) is GoodWe's new string inverter for C&I and small utility projects. The HT series offers up to 12 MPPTs, and is compatible with bifacial modules, with a higher threshold of DC current (Max. 15A per string). It includes PLC communication and internal humidity detection. The HT series seamlessly incorporates different sets of technical strengths designed to achieve higher savings in the installation, enhance productivity and diversify available monitoring options, taking safety to the maximum possible level in accordance with the strictest industry standards. This inverter comes with an optional AC switch for reduced overall costs and reduced installation time. Configuration can be easily done via Bluetooth, and diagnosis and firmware upgrading can be operated remotely. This outstanding set of features was conceived to ensure the lowest levelized cost of electricity (LCOE).



Compatible with Bifacial Module



Power line communication



I-V curve diagnosis



Easy and quick configuration via bluetooth



Internal humidity monitoring

HT Series

Technical Data	GW73KLV-HT	GW75K-HT	GW80K-HT	GW100K-HT	GW110K-HT	GW120K-HT	GW136K-HTH
Input							
Max. DC Input Power (kW)	112.5	112.5	120	150	165	180	205
Max. DC Input Voltage (V)	800	1100	1100	1100	1100	1100	1100
MPPT Operating Voltage Range (V)	180~650	180~1000	180~1000	180~1000	180~1000	180~1000	180~1000
Start-up Voltage (V)	200	200	200	200	200	200	200
MPPT Range for Full Load	200~650	500~850	500~850	500~850	500~850	500~850	500~850
Nominal Input Voltage (V)	370	600	600	600	600	600	750
Max. Backfeed Current to The Array (A)	0	0	0	0	0	0	0
Max. Input Current per MPPT (A)	30	30	30	30	30	30	30
Max. Short Circuit Current per MPPT (A)	45	45	45	45	45	45	45
Number of MPPTs	12	10	10	10	12	12	12
Number of Strings per MPPT	2	2	2	2	2	2	2
Output							
Nominal Output Power (kW)	73	75	80	100*1	110	120	136
Max. AC Active Power (kW)	73@220V; 69@208V; 75@230V	75	88	110	121	132	150
Rated Apparent Power (KVA)	73	75	80	100*1	110	120	136
Max. AC Apparent Power (kVA)	75	75	88	110	121	132	150
Nominal Output Voltage (V)	220V, 3L / N / PE or 3L / PE	380V / 400V, 3L / N / PE or 3L / PE			400V, 3L / N / PE or 3L / PE		500V, 3L / PE
Nominal AC Grid Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60
Max. Output Current (A)	192	125.3	134	167	175.5	191.3	173.2
Max. Output Fault Current (peak and duration) (A)	364@5µs	364@5µs	364@5µs	364@5µs	364@5µs	364@5µs	364@5µs
Inrush Current (peak and duration) (A)	120@1µs	120@1µs	120@1µs	120@1µs	120@1µs	120@1µs	120@1µs
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)						
Max. Total Harmonic Distortion	<3%	<3%	<3%	<3%	<3%	<3%	<3%
Efficiency							
Max. Efficiency	98.4%	98.6%	98.6%	98.6%	98.6%	98.6%	99.0%
European Efficiency	98.1%	98.3%	98.3%	98.3%	98.3%	98.3%	98.5%
Protection							
PV String Current Monitoring	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Internal Humidity Detection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
DC Insulation Resistance Detection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Residual Current Monitoring Unit	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
DC Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
DC Surge Arrester	Type II (Type I optional)						
AC Surge Arrester	Type II (Type I optional)						
AC Overcurrent Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
AC Short Circuit Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
AC Overvoltage Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
DC Arc Fault Circuit Interrupter	Optional	Optional	Optional	Optional	Optional	Optional	Optional
PID Recovery	Optional	Optional	Optional	Optional	Optional	Optional	Optional
General Data							
Operating Temperature Range (°C)	-30 ~ 60						
Relative Humidity	0~100%						
Max. Operating Altitude (m)	5000 (>4000 derating)						
Cooling Method	Smart Fan Cooling						
Display	LED, LCD (Optional), Bluetooth+APP						
Communication	RS485 / PLC / WiFi						
Weight (Kg)	98.5	93.5	93.5	93.5	98.5	98.5	98.5
Size (Width × Height × Depth mm)	1008 × 678 × 343						
DC Connector	MC4 (Max. 6 mm²)						
AC Connector	OT / DT terminal (Max. 300 mm²)						
Ingress Protection Rating	IP66						
Night Self Consumption (W)	<2						
Overvoltage Category	PVII / ACIII						
Protective class	I						
Noise Emission (dB)	<70						
Topology	Transformerless						

*1: For Australia Nominal Output Power and Rated Apparent Power: 99.99KW / 99.99KVA.
*: Please visit GoodWe website for the latest certificates.

HT Series | 1500Vdc

225-250kW | 12 MPPTs Three Phase

The new HT 1500V Series (225/250kW) is GoodWe's ultimate high-power inverter for ground mounted utility projects with an extensive list of features designed to reduce system and O&M costs. This inverter boasts 12 MPPTs, PLC communication and is compatible with bifacial modules. The HT-1500V Series features string level monitoring and incorporated I-V curve diagnosis for intelligent detection of voltage and current issues. It features internal humidity detection and optional PID repair function. It can realize 24-hour monitoring and O&M during nighttime. The configuration of the HT 1500V can be easily done via Bluetooth and firmware diagnosis and upgrading can be done remotely. These outstanding sets of features were conceived to ensure the lowest levelized cost of energy (LCOE).



Compatible with Bifacial Module



Power line communication



I-V curve diagnosis



Easy and quick configuration via bluetooth



Internal humidity monitoring

HT Series

Technical Data	GW225K-HT	GW250K-HT
PV String Input Data		
Max. Input Power (kW)	360	360
Max. Input Voltage (V)	1500	1500
MPPT Operating Voltage Range (V)	500~1500	500~1500
Start-up Voltage (V)	550	550
Nominal Input Voltage (V)	1160	1160
Max. Input Current per MPPT (A)	30	30
Max. Short Circuit Current per MPPT (A)	50	50
Number of MPPTs	12	12
Number of Strings per MPPT	2	2
AC Output Data		
Nominal Output Power (kW)	225	250
Max. AC Active Power (kW)	247.5	250
Max. AC Apparent Power (kVA)	247.5	250
Nominal Output Voltage (V)	800, 3L / PE	800, 3L / PE
Nominal AC Grid Frequency (Hz)	50 / 60	50 / 60
Max. Output Current (A)	178.7	180.5
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)	
Max. Total Harmonic Distortion	<3%	<3%
Efficiency		
Max. Efficiency	99.0%	99.0%
European Efficiency	98.8%	98.8%
Protection		
PV String Current Monitoring	Integrated	Integrated
Internal Humidity Detection	Integrated	Integrated
DC Insulation Resistance Detection	Integrated	Integrated
Residual Current Monitoring	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated
DC Reverse Polarity Protection	Integrated	Integrated
DC Surge Arrester	Integrated (Type II)	Integrated (Type II)
AC Surge Arrester	Integrated (Type II)	Integrated (Type II)
AC Overcurrent Protection	Integrated	Integrated
AC Short Circuit Protection	Integrated	Integrated
AC Overvoltage Protection	Integrated	Integrated
DC Arc Fault Circuit Interrupter	Optional	Optional
PID Recovery	Optional	Optional
General Data		
Operating Temperature Range (°C)	-30 ~ 60	-30 ~ 60
Relative Humidity	0~100%	0~100%
Max. Operating Altitude (m)	5000 (>4000 derating)	5000 (>4000 derating)
Cooling Method	Smart Fan Cooling	Smart Fan Cooling
Display	LED (LCD optional), Bluetooth+APP	LED (LCD optional), Bluetooth+APP
Communication	RS485 & PLC	RS485 & PLC
Weight (Kg)	111	111
Dimensions (W × H × D mm)	1091 × 678 × 341	1091 × 678 × 341
DC Connector	MC4-Evo2	MC4-Evo2
AC Connector	OT / DT terminal (Max. 300 mm²)	OT / DT terminal (Max. 300 mm²)
Ingress Protection Rating	IP66	IP66
Overvoltage Category	PV II / AC III	PV II / AC III
Protective class	I	I
Topology	Transformerless	Transformerless

*: Please visit GoodWe website for the latest certificates.

EM Series

3-5kW | Single Phase LV Hybrid Inverter

The GoodWe EM series bi-directional energy storage inverter can be used for on-grid PV systems, with the ability to control the flow of energy intelligently. During the day, the PV array generates electricity which can be provided either to the loads, fed into the grid or charge the battery, depending on the economics and set-up. The stored electricity can be released when the loads require it during the night. Additionally, the power grid can also charge the storage devices via the inverter. An all-round intelligent system for maximum energy flexibility.



Smart battery management function



50A charge & discharge capacity



Export control (Zero export)



IP65 dustproof and waterproof



8 ms UPS-level Switching



Fanless design, long lifespan

EM Series

Technical Data	GW3048-EM	GW3648-EM	GW5048-EM
Battery Input Data			
Battery Type	Li-Ion	Li-Ion	Li-Ion
Nominal Battery Voltage (V)	48	48	48
Max. Charging Voltage (V)	≤60 (Configurable)	≤60 (Configurable)	≤60 (Configurable)
Max. Charging Current (A)*1	50	50	50
Max. Discharging Current (A)*1	50	50	50
Battery Capacity (Ah)*2	50~2000	50~2000	50~2000
Charging Strategy for Li-Ion Battery	Self-adaption to BMS	Self-adaption to BMS	Self-adaption to BMS
PV String Input Data			
Max. DC Input Power (W)	3900	4600	6500
Max. DC Input Voltage (V)*3	550	550	550
MPPT Range (V)	100~500	100~500	100~500
Start-up Voltage (V)	125	125	125
Min. Feed-in Voltage (V)*4	150	150	150
MPPT Range for Full Load (V)	280~500	170~500	170~500
Nominal DC Input Voltage (V)	360	360	360
Max. Input Current (A)	11	11 / 11	11 / 11
Max. Short Current (A)	13.8	13.8 / 13.8	13.8 / 13.8
Number of MPPTs	1	2	2
Number of Strings per MPPT	1	1	1
AC Output Data (On-grid)			
Nominal Power Output to Utility Grid (W)*10	3000	3680	5000*5
Max. Apparent Power Output to Utility Grid (VA)*6*11	3000	3680	5000
Max. Apparent Power from Utility Grid (VA)	5300	5300	5300
Nominal Output Voltage (V)	230	230	230
Nominal Output Frequency (Hz)	50 / 60	50 / 60	50 / 60
Max. AC Current Output to Utility Grid (A)	13.6	16	22.8*7
Max. AC Current From Utility Grid (A)	23.6	23.6	23.6
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)		
Output THDi (@Nominal Output)	<3%	<3%	<3%
AC Output Data (Back-up)			
Max. Output Apparent Power (VA)	2300	2300	2300
Peak Output Apparent Power (VA)*8	3500,10sec	3500,10sec	3500,10sec
Automatic Switch Time (ms)	10	10	10
Nominal Output Voltage (V)	230 (±2%)	230 (±2%)	230 (±2%)
Nominal Output Frequency (Hz)	50 / 60 (±0.2%)	50 / 60 (±0.2%)	50 / 60 (±0.2%)
Max. Output Current (A)	10	10	10
Output THDv (@Linear Load)	<3%	<3%	<3%
Efficiency			
Max. Efficiency	97.6%	97.6%	97.6%
Max. Battery to Load Efficiency	94.5%	94.5%	94.5%
European Efficiency	97.0%	97.0%	97.0%
Protection			
Anti-Islanding Protection	Integrated	Integrated	Integrated
PV String Input Reverse Polarity Protection	Integrated	Integrated	Integrated
Insulation Resistor Detection	Integrated	Integrated	Integrated
Residual Current Monitoring Unit	Integrated	Integrated	Integrated
Output Over Current Protection	Integrated	Integrated	Integrated
Output Short Protection	Integrated	Integrated	Integrated
Output Over Voltage Protection	Integrated	Integrated	Integrated
General Data			
Operating Temperature Range (°C)	-25~60	-25~60	-25~60
Relative Humidity	0~95%	0~95%	0~95%
Operating Altitude (m)	4000	4000	4000
Cooling	Natural Convection	Natural Convection	Natural Convection
Noise (dB)	<25	<25	<25
User Interface	LED & APP	LED & APP	LED & APP
Communication with BMS*9	RS485; CAN	RS485; CAN	RS485; CAN
Communication with Meter	RS485	RS485	RS485
Communication with Portal	Wi-Fi	Wi-Fi	Wi-Fi
Weight (Kg)	16	17	17
Size (Width × Height × Depth mm)	347 × 432 × 175	347 × 432 × 175	347 × 432 × 175
Mounting	Wall Bracket	Wall Bracket	Wall Bracket
Protection Degree	IP65	IP65	IP65
Standby Self-Consumption (W)	<13	<13	<13
Topology	Battery Isolation	Battery Isolation	Battery Isolation

*1: The actual charge and discharge current also depends on the battery.
*2: Under off-grid mode, then battery capacity should be more than 100Ah.
*3: Maximum operating DC voltage is 530V.
*4: When there is no battery connected, inverter starts feeding in only if string voltage is higher than 200V.
*5: 4600 for VDE0126-1-1&VDE-AR-N4105 & CEI 0-21(GW5048-EM).
*6: For CEI 0-21 GW3048-EM is 3300W, GW3648-EM is 4050W, GW5048-EM is 5100W;
for VDE-AR-N4105 GW5048-EM is 4600.

*7: 21.7A for AS4777.2.
*8: Can be reached only if PV and battery power are enough.
*9: CAN communication is configured by default. If 485 communication is used, please replace the corresponding communication line.
*10: For Belgium Nominal Power Output to Utility Grid (W): GW3648-EM is 3600.
*11: For Belgium Max. Apparent Power Output to Utility Grid (VA): GW3648-EM is 3600.
*: Please visit GoodWe website for the latest certificates.

ES Series

3.6-5kW I Single Phase Hybrid Inverter

The GoodWe ES series bi-directional energy storage inverter can be used for both on-grid and off-grid PV systems, with the ability to control the flow of energy intelligently. During the day, the PV array generates electricity which can be provided either to the loads, fed into the grid or charge the battery, depending on the economics and set-up. The electricity stored can be released when the loads require it during the night, including inductive loads such as air conditioners or refrigerators. Additionally, the power grid can also charge storage devices via the inverter. An all-round intelligent system for maximum energy flexibility.



Charge controller and inverter integrated



Maximum charge and discharge up to 100A



Export control (Zero export)



IP65 dustproof and waterproof



8 ms UPS-level Switching



Fanless design, long lifespan

ES Series

Technical Data	GW3648D-ES	GW5048D-ES
Battery Input Data		
Battery Type	Li-Ion	Li-Ion
Nominal Battery Voltage (V)	48	48
Max. Charging Voltage (V)	≤60 (Configurable)	≤60 (Configurable)
Max. Charging Current (A)* ¹	75	100
Max. Discharging Current (A)* ¹	75	100
Battery Capacity (Ah)* ²	50~2000	50~2000
Charging Strategy for Li-Ion Battery	Self-adaption to BMS	Self-adaption to BMS
PV String Input Data		
Max. DC Input Power (W)	4600	6500
Max. DC Input Voltage (V)	580	580
MPPT Range (V)	125~550	125~550
Start-up Voltage (V)	125	125
Min. Feed-in Voltage (V)* ³	150	150
MPPT Range for Full Load (V)	170~500	215~500
Nominal DC Input Voltage (V)	360	360
Max. Input Current (A)	11 / 11	11 / 11
Max. Short Current (A)	13.8 / 13.8	13.8 / 13.8
Number of MPPTs	2	2
Number of Strings per MPPT	1	1
AC Output Data (On-grid)		
Nominal Apparent Power Output to Utility Grid (VA)* ⁸	3680	4600
Max. Apparent Power Output to Utility Grid (VA)* ^{4,9}	3680	5100
Max. Apparent Power from Utility Grid (VA)	7360	9200
Nominal Output Voltage (V)	230	230
Nominal Output Frequency (Hz)	50 / 60	50 / 60
Max. AC Current Output to Utility Grid (A)	16	24.5* ⁵
Max. AC Current from Utility Grid (A)	32	40
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)	
Output THDi (@Nominal Output)	<3%	<3%
AC Output Data (Back-up)		
Max. Output Apparent Power (VA)	3680	4600
Peak Output Apparent Power (VA)* ⁶	5520, 10sec	6900, 10sec
Max. Output Current (A)	16	20
Nominal Output Voltage (V)	230 (±2%)	230 (±2%)
Nominal Output Frequency (Hz)	50/60 (±0.2%)	50/60 (±0.2%)
Output THDv (@Linear Load)	<3%	<3%
Efficiency		
Max. Efficiency	97.6%	97.6%
Max. Battery to Load Efficiency	94.0%	94.0%
European Efficiency	97.0%	97.0%
Protection		
Anti-Islanding Protection	Integrated	Integrated
PV String Input Reverse Polarity Protection	Integrated	Integrated
Insulation Resistor Detection	Integrated	Integrated
Residual Current Monitoring Unit	Integrated	Integrated
Output Over Current Protection	Integrated	Integrated
Output Short Protection	Integrated	Integrated
Output Over Voltage Protection	Integrated	Integrated
General Data		
Operating Temperature Range (°C)	-25~60	-25~60
Relative Humidity	0~95%	0~95%
Operating Altitude (m)	≤4000	≤4000
Cooling	Natural Convection	Natural Convection
Noise (dB)	<25	<25
User Interface	LED & APP	LED & APP
Communication with BMS* ⁷	RS485; CAN	RS485; CAN
Communication with Meter	RS485	RS485
Communication with Portal	Wi-Fi	Wi-Fi
Weight (Kg)	28	30
Size (Width × Height × Depth mm)	516 × 440 × 184	516 × 440 × 184
Mounting	Wall Bracket	Wall Bracket
Protection Degree	IP65	IP65
Standby Self-Consumption (W)	<13	<13
Topology	Battery Isolation	Battery Isolation

*¹: The actual charge and discharge current also depends on the battery.

*²: Under off-grid mode, then battery capacity should be more than 100Ah.

*³: When there is no battery connected, inverter starts feeding in only if string voltage is higher than 200V.

*⁴: 4600 for VDE 0126-1-1 & VDE-AR-N4105, 4950 for AS4777.2(GW5048D-ES), 4050 for CEI 0-21 (GW3648D-ES).

*⁵: 21.7A for AS4777.2.

*⁶: Can be reached only if PV and battery power are enough.

*⁷: CAN communication is configured by default. If 485 communication is used, please replace the corresponding communication line.

*⁸: For Belgium Nominal Apparent Power Output to Utility Grid (VA): GW3648D-ES is 3600.

*⁹: For Belgium Max. Output Apparent Power (VA): GW3648D-ES is 3600.

*: Please visit GoodWe website for the latest certificates.

A-ES Series

(Americas Only) 5-9.6kW | Split-phase Hybrid Inverter | HV Battery | up to 4 MPPTs

The GoodWe A-ES is a split-phase hybrid inverter designed to increase self-consumption of your generated solar energy. Our A-ES is compatible with high voltage (80-495V) batteries with a power capacity ranging from 5kW to 9.6kW. With up to 4 MPPTs, the A-ES inverter seamlessly adapts to complex residential rooftops. Equipped with rapid battery charge functionality and perfectly capable of powering large loads in back-up mode (up to 9.6kW).



Seamless UPS Switch Function



4 MPPTs & 150% DC Input Oversizing



AFCI & Rapid Shutdown



Smart Meter Integrated

A-ES Series

Technical Data	GW5000A-ES	GW6000A-ES	GW7000A-ES	GW7600A-ES	GW8600A-ES	GW9600A-ES
Battery Input Data						
Battery Type	Li-Ion	Li-Ion	Li-Ion	Li-Ion	Li-Ion	Li-Ion
Battery Voltage Range (V)*1	80~495	80~495	80~495	80~495	80~495	80~495
Max. Charging Current (A)	50	50	50	50	50	50
Max. Discharging Current (A)	50	50	50	50	50	50
Charging Method for Li-Ion Battery	Self-adaption to BMS					
PV String Input Data						
Max. DC Input Power (W)	7500	9000	10500	11400	12900	15000
Max. DC Input Voltage (V)*2	600	600	600	600	600	600
MPPT Range (V)*3	80~550	80~550	80~550	80~550	80~550	80~550
Start-up Voltage (V)	95	95	95	95	95	95
MPPT Range for Full Load (V)	300~500	360~500	210~500	230~500	260~500	300~500
Nominal DC Input Voltage (V)	380	380	380	380	380	380
Max. Input Current (A)	12.5 / 12.5	12.5 / 12.5	12.5 / 12.5 / 12.5 / 12.5	12.5 / 12.5 / 12.5 / 12.5	12.5 / 12.5 / 12.5 / 12.5	12.5 / 12.5 / 12.5 / 12.5
Max. Short Current (A)	15.2 / 15.2	15.2 / 15.2	15.2 / 15.2 / 15.2 / 15.2	15.2 / 15.2 / 15.2 / 15.2	15.2 / 15.2 / 15.2 / 15.2	15.2 / 15.2 / 15.2 / 15.2
Number of MPPTs	2	2	4	4	4	4
Number of Strings per MPPT	1 / 1	1 / 1	1 / 1 / 1 / 1	1 / 1 / 1 / 1	1 / 1 / 1 / 1	1 / 1 / 1 / 1
AC Output Data (On-grid)						
Output Voltage Range (Vac)	211 to 264 @240	211 to 264 @240	211 to 264 @240	211 to 264 @240	211 to 264 @240	211 to 264 @240
Nominal Output Frequency (Hz)	60	60	60	60	60	60
Max. Apparent Power Output to Grid (VA)	5000	6000	7000	7600	8600	9600
Max. Apparent Power from Grid (VA)	6000	7200	8400	9120	9600	9600
Max. AC Current Output to Grid (A)	20.8	25	29.2	31.7	35.8	40
Max. AC Current From Grid (A)	25	30	35	38	40	40
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)					
Output THDi (@Nominal Output)	<3%	<3%	<3%	<3%	<3%	<3%
AC Output Data (Back-up)						
Nominal Output Voltage L1-L2/L-N (Vac)	240 / 120	240 / 120	240 / 120	240 / 120	240 / 120	240 / 120
Nominal Output Frequency (Hz)	60	60	60	60	60	60
Output THDv (@Linear Load)	<3%	<3%	<3%	<3%	<3%	<3%
Max. Output Apparent Power@240V (VA)	5000	6000	7000	7600	8600	9600
Peak Output Apparent Power@240V (VA)**4	6000, 60sec	7200, 60sec	8400, 60sec	9120, 60sec	10320, 60sec	11520, 60sec
Max. Continuous Output Current @240V (A)	20.8	25	29.2	31.7	35.8	40
Efficiency						
PV Max. Efficiency	97.6%	97.6%	97.6%	97.6%	97.6%	97.6%
PV CEC Efficiency	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%
Battery Charged By PV Max. Efficiency	98.1%	98.1%	98.1%	98.1%	98.1%	98.1%
Battery Charge/discharge to AC Max. Efficiency	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%
Protection						
PV Arc Fault Detection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
PV String Input Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Insulation Resistor Detection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Residual Current Monitoring Unit	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Output Over Current Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Back-up Output Short Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Output Over Voltage Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Battery Input Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
General Data						
Operating Temperature Range	-31°F~-140°F (-35°C~60°C)					
Relative Humidity	0~95%	0~95%	0~95%	0~95%	0~95%	0~95%
Operating Altitude	≤13123ft (4000m)	≤13123ft (4000m)	≤13123ft (4000m)	≤13123ft (4000m)	≤13123ft (4000m)	≤13123ft (4000m)
Cooling	Intelligent Fan	Intelligent Fan	Intelligent Fan	Intelligent Fan	Intelligent Fan	Intelligent Fan
Noise (dB)	<45	<45	<45	<45	<45	<45
User Interface	LED & APP (WiFi, Bluetooth)					
Communication with BMS	RS485; CAN	RS485; CAN	RS485; CAN	RS485; CAN	RS485; CAN	RS485; CAN
Communication with Meter	RS485	RS485	RS485	RS485	RS485	RS485
Communication with EMS	RS485 (Insulated)	RS485 (Insulated)	RS485 (Insulated)	RS485 (Insulated)	RS485 (Insulated)	RS485 (Insulated)
Communication with Portal	Wi-Fi; LAN, 4G (Optional)					
Communication with RSD	SUNSPEC	SUNSPEC	SUNSPEC	SUNSPEC	SUNSPEC	SUNSPEC
Weight	62.8lb (28.5Kg)	62.8lb (28.5Kg)	70.5lb (32Kg)	70.5lb (32Kg)	70.5lb (32Kg)	70.5lb (32Kg)
Size (Width × Height × Depth)	16.3in × 31.1in × 6.9in (415mm × 791mm × 175mm)					
Mounting	Wall Bracket	Wall Bracket	Wall Bracket	Wall Bracket	Wall Bracket	Wall Bracket
Protection Degree	NEMA Type 4X	NEMA Type 4X	NEMA Type 4X	NEMA Type 4X	NEMA Type 4X	NEMA Type 4X
Standby Self-Consumption (W)*5	<20	<20	<20	<20	<20	<20
Topology	Transformerless	Transformerless	Transformerless	Transformerless	Transformerless	Transformerless

*1: Battery discharge/charge power limited by voltage.
*2: Inverter will shut off when PV input voltage ≥585V.
*3: When there is no battery connected, inverter starts feeding in only if string voltage is higher than 200V.
*4: Can be reached only if PV and battery power is high enough.
*5: No Back-up Output.
*: Please visit GoodWe website for the latest certificates.

ESA Series

5kW / 10.8kWh I Single Phase LV Home Storage Solution (Inverter + Battery)

GoodWe ESA Series is an all-in-one solar and storage solution which integrates the inverter, battery charger, UPS and battery enclosure into a pre-wired modular system for easier and faster installation. The compact, elegantly designed and robust unit is IP65 rated so it can be mounted either inside or outside withstanding all weather conditions. Reduction of installation time of up to 50%.

 Integrated isolators

 Pre-wired

 Inbuilt 4.6kVA UPS

 5kW AC Output

 10.8kWh battery capacity

 100A battery current



ESA Series

Technical Data	GW5048-ESA
Battery Module Data	
Battery Type	Li-Ion
Battery Module Nominal Capacity (KWh)	5.4
Battery Module Weight (Kg)	49
Size (Width × Height × Depth mm)	400 × 484.2 × 226.2
Cycle Life (25°C)	>3500
Maximum Number of Battery Connections	2
Maximum Total Battery Capacity (KWh)	10.8
Battery Enclosure Data	
Weight (Kg)	37
Size (Width × Height × Depth mm)	516 × 1205 × 280
Mounting	Wall Bracket
Protection Degree	IP54
Inverter Data	
Battery Input Data	
Nominal Battery Voltage (V)	48
Battery Voltage Range (V)	40~60
Maximum Charging Power (W)	4600
Maximum Discharging Power (W)	4600
Maximum Charging Current (A)	90
Maximum Discharging Current (A)	100
Battery Charging Method	Self-adaption to BMS
Battery Disconnect	Integrated 2 pole DC breaker 125A DC per pole
PV String Input Data	
Max. DC Input Power (W)	6500
Max. DC Input Voltage (V)	580
MPPT Range (V)	125~550
Start-up Voltage (V)	125
Min. Feed-in Voltage (V)*1	150
MPPT Range for Full Load (V)	215~500
Nominal DC Input Voltage (V)	360
Max. Input Current (A)	11 / 11
Max. Short Current (A)	13.8 / 13.8
Number of MPPTs	2
Number of Strings per MPPT	1
Solar Array Switch	Integrated

Technical Data	GW5048-ESA	Technical Data	GW5048-ESA
AC Output Data (On-grid)		Protection	
Max. Apparent Power Output to Utility Grid (VA)*2	4600 / 5100	Anti-islanding Protection	Integrated
Max. Apparent Power from Utility Grid (VA)	9200	PV String Input Reverse Polarity Protection	Integrated
Nominal Output Voltage (V)	230	Insulation Resistor Detection	Integrated
Nominal Output Frequency (Hz)	50 / 60	Residual Current Monitoring Unit	Integrated
Max. AC Current Output to Utility Grid (A)	22.8	Output Over Current Protection	Integrated
Max. AC Current From Utility Grid (A)	40	Output Short Protection	Integrated
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)	Output Over Voltage Protection	Integrated
Output THDi (@Nominal Output)	<3%	General Data	
Grid disconnect	Integrated 2 pole 40A MCB	Operating Temperature Range (°C)	-25~60
AC Output Data (Back-up)		Relative Humidity	0~95%
Nominal Output Apparent Power (VA)	4600	Operating Altitude (m)	3000
Nominal Output Current (A)	20	Cooling	Nature Convection
Peak Output Apparent Power (VA)*3	6900 (10 seconds maximum)	Noise (dB)	<25
Nominal Output Voltage (V)	230 (±2%)	User Interface	LED & APP
Nominal Output Frequency (Hz)	50/60 (±0.2%)	Communicaiton with BMS	CAN
Output THDv (@Linear Load)	<3%	Communicaiton with Meter	RS485
Back-up Loads AC Disconnect	Integrated 2 pole 25A MCB	Communicaiton with Portal	Wi-Fi
Manual Back-up Load AC Bypass Switch	Integrated	Weight (Kg)	44
Efficiency		Size (Width × Height × Depth mm)	516 × 832 × 290
Max. Efficiency	97.6%	Mounting	Wall Bracket
European Averaged Efficiency	97.0%	Protection Degree	IP65
Max. Battery to Load Efficiency	94.0%	Standby Self-Consumption (W)	<13
		Topology	Battery Isolation

*1: When there is no battery connected, inverter starts feeding in only if string voltage is higher than 200V.

*2: 4600VA for VDE-AR-N4105, 5100VA for other country.

*3: Can be reached only if PV and battery power is enough.

*: Please visit GoodWe website for the latest certificates.

EH Series

3.6-6kW I Single Phase HV Hybrid Inverter

The GoodWe EH Series is a single-phase, on-grid inverter that includes a “Battery Ready” option for users who might wish to eventually acquire a full energy storage solution. By simply purchasing an activation code, the EH can easily be upgraded to a complete ESS solution. The EH is compatible with high voltage batteries (85-450V) and can automatically switch to back-up mode in less than 0.01s (UPS level), ensuring that critical loads experience no interruption. With a power deviation lower than 20W, this inverter is designed to maximize self-consumption. In addition, the fact that it takes less than 9 seconds to switch from grid to PV to supply power for heavy loads helps users to avoid expensive intakes from the grid. The communication cables come pre-wired, reducing installation time significantly. The Plug & Play AC connector also makes operation and maintenance much more convenient.



Large loads on back-up



UPS level automatic switch in <10ms



Wide battery voltage range 85~450V



Maximize self-consumption



Pre-wired communication cables

EH Series

Technical Data	GW3600-EH	GW5000-EH	GW6000-EH
Battery Input Data			
Battery Type	Li-Ion	Li-Ion	Li-Ion
Battery Voltage Range(V)	85~460	85~460	85~460
Start-up Voltage (V)	90	90	90
Max. Charging/Discharging Current (A)	25 / 25	25 / 25	25 / 25
Max. Charging/Discharging Power (W)	3600	5000	6000
Battery Ready Optional Function	YES	YES	YES
PV String Input Data			
Max. DC Input Power (W)	4800	6650	8000
Max. DC Input Voltage (V)	580	580	580
MPPT Range (V)	100~550	100~550	100~550
Start-up Voltage (V)	90	90	90
Min. Feed-in Voltage (V) ^{*5}	100	100	100
MPPT Range for Full Load (V)	150~550	210~550	250~550
Nominal DC Input Voltage (V)	380	380	380
Max. Input Current (A)	12.5 / 12.5	12.5 / 12.5	12.5 / 12.5
Max. Short Current (A)	15.2 / 15.2	15.2 / 15.2	15.2 / 15.2
Number of MPPTs	2	2	2
Number of Strings per MPPT	1	1	1
AC Output/Input Data (On-grid)			
Nominal Apparent Power Output to Utility Grid (VA) ^{*2}	3600	5000	6000
Max. Apparent Power Output to Utility Grid(VA) ^{*2}	3600 / 3960 ^{*1}	5000 / 5500 ^{*1}	6000 / 6600 ^{*1}
Nominal Apparent Power from Utility Grid (VA)	7200	10000	12000
Max. Apparent Power from Utility Grid (VA)	7200 (Charging 3.6kw, back-up output 3.6kw)	10000 (Charging 5kw, back-up output 5kw)	12000 (Charging 6kw, back-up output 6kw)
Nominal Output Voltage (V)	230 / 220 ^{*6}	230 / 220 ^{*6}	230 / 220 ^{*6}
Nominal Output Frequency (Hz)	50 / 60	50 / 60	50 / 60
Max. AC Current Output to Utility Grid (A)	16 / 18 ^{*1}	21.7 / 24 ^{*1}	26.1 / 28.7 ^{*1} / 27.3 ^{*7}
Max. AC Current From Utility Grid (A)	32	43.4	52.2
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)		
Output THDi (@Nominal Output)	<3%	<3%	<3%
Back-up Output Data (Back-up)			
Back-up Nominal Apparent Power (VA)	3600	5000	6000
Max. Output Apparent Power (VA)	3600	5000	6000
Peak Output Apparent Power (VA)	4320, 60sec	6000, 60sec	7200, 60sec
Max. Output Current (A)	15.7	21.7	26.1
Nominal Output Voltage (V)	230 (±2%)	230 (±2%)	230 (±2%)
Automatic Switch Time (ms)	<10	<10	<10
Nominal Output Frequency (Hz)	50/60 (±0.2%)	50/60 (±0.2%)	50/60 (±0.2%)
Output THDv (@Linear Load)	<3%	<3%	<3%
Efficiency			
PV Max. Efficiency	97.6%	97.6%	97.6%
PV Europe Efficiency	97.0%	97.0%	97.0%
PV Max. MPPT Efficiency	99.9%	99.9%	99.9%
Battery Charged by PV Max. Efficiency	98.0%	98.0%	98.0%
Battery Charge/Discharge from/to AC Max. Efficiency	96.6%	96.6%	96.6%
Protection			
Anti-Islanding Protection	Integrated	Integrated	Integrated
Battery Input Reverse Polarity Protection	Integrated	Integrated	Integrated
Insulation Resistor Detection	Integrated	Integrated	Integrated
Residual Current Monitoring Unit	Integrated	Integrated	Integrated
Output Over Current Protection	Integrated	Integrated	Integrated
Grid Output Short Protection	Integrated	Integrated	Integrated
Output Over Voltage Protection	Integrated	Integrated	Integrated
General Data			
Operating Temperature Range (°C)	-35~60	-35~60	-35~60
Relative Humidity	0~95%	0~95%	0~95%
Operating Altitude (m)	4000	4000	4000
Cooling	Natural Convection	Natural Convection	Natural Convection
Noise (dB)	<35	<35	<35
User Interface	LED & APP	LED & APP	LED & APP
Communication with BMS ^{*3}	RS485; CAN	RS485; CAN	RS485; CAN
Communication with Meter	RS485	RS485	RS485
Communication with Portal	Wi-Fi / Ethernet (Optional)	Wi-Fi / Ethernet (Optional)	Wi-Fi / Ethernet (Optional)
Weight (Kg)	17	17	17
Size (Width × Height × Depth mm)	354 × 433 × 147	354 × 433 × 147	354 × 433 × 147
Mounting	Wall Bracket	Wall Bracket	Wall Bracket
Protection Degree	IP65	IP65	IP65
Standby Self-Consumption (W) ^{*4}	<10	<10	<10
Topology	Battery Non-Isolation	Battery Non-Isolation	Battery Non-Isolation

^{*1}: For CEI 0-21.

^{*2}: The grid feed in power for VDE-AR-N 4105 and NRS097-2-1 is limited 4600VA.

^{*3}: CAN communication is configured by default. If 485 communication is used, please replace the corresponding communication line.

^{*4}: No back-up output.

^{*5}: When there is no battery connected, inverter starts feeding in only if string voltage is higher than 200V.

^{*6}: For Brazil, the voltage is 220V.

^{*7}: For Brazil, the current is 27.3A.

^{*}: Please visit GoodWe website for the latest certificates.

ET Series

5-10kW | Three Phase HV Hybrid Inverter

The GoodWe ET series is a three-phase high voltage energy storage inverter that enables enhanced energy independence and maximizes self-consumption through an export limit feature and time of use shifts for reduced electricity bills. Covering a power range of 5kW to 10kW, the ET series allows up to 110% overloading to maximize power output and features Uninterruptible Power Supply (UPS) to inductive loads such as air conditioners or refrigerators. With an automatic switchover time of less than 10 milliseconds, the inverter can provide grid-tied savings when the grid is up and off-grid independence and security when it is down or compromised.



98.2% Maximum System Efficiency



8 ms UPS-level Switching



100% Unbalanced Load



Battery Voltage 180-600V

ET Series

Technical Data	GW5K-ET	GW6.5K-ET	GW8K-ET	GW10K-ET
Battery Input Data				
Battery Type	Li-Ion	Li-Ion	Li-Ion	Li-Ion
Battery Voltage Range (V)	180~600	180~600	180~600	180~600
Max. Charging Current (A)	25	25	25	25
Max. Discharging Current (A)	25	25	25	25
Charging Strategy for Li-Ion Battery	Self-adaption to BMS	Self-adaption to BMS	Self-adaption to BMS	Self-adaption to BMS
PV String Input Data				
Max. DC Input Power (W)	6500	8450	9600	13000
Max. DC Input Voltage (V)* ¹	1000	1000	1000	1000
MPPT Range (V)* ²	200~850	200~850	200~850	200~850
Start-up Voltage (V)	180	180	180	180
Min. Feed-in Voltage (V)	210	210	210	210
MPPT Range for Full Load (V)* ³	240~850	310~850	380~850	460~850
Nominal DC Input Voltage (V)* ⁴	620	620	620	620
Max. Input Current (A)	12.5 / 12.5	12.5 / 12.5	12.5 / 12.5	12.5 / 12.5
Max. Short Current (A)	15.2 / 15.2	15.2 / 15.2	15.2 / 15.2	15.2 / 15.2
Number of MPPTs	2	2	2	2
Number of Strings per MPPT	1 / 1	1 / 1	1 / 1	1 / 1
AC Output Data (On-grid)				
Nominal Apparent Power Output to Utility Grid (VA)	5000	6500	8000	10000
Max. Apparent Power Output to Utility Grid (VA)* ^{5,9}	5500	7150	8800	11000
Max. Apparent Power from Utility Grid (VA)	10000	13000	15000	15000
Nominal Output Voltage (V)	400 / 380, 3L / N / PE	400 / 380, 3L / N / PE	400 / 380, 3L / N / PE	400 / 380, 3L / N / PE
Nominal Output Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60
Max. AC Current Output to Utility Grid (A)	8.5	10.8	13.5	16.5
Max. AC Current from Utility Grid (A)	15.2	19.7	22.7	22.7
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)			
Output THDi (@Nominal Output)	<3%	<3%	<3%	<3%
AC Output Data (Back-up; Optional)				
Max. Output Apparent Power (VA)	5000	6500	8000	10000
Peak Output Apparent Power (VA)* ⁶	10000, 60sec	13000, 60sec	16000, 60sec	16500, 60sec
Max. Output Current (A)	8.5	10.8	13.5	16.5
Nominal Output Voltage (V)	400/380	400/380	400/380	400/380
Nominal Output Frequency (Hz)	50/60	50/60	50/60	50/60
Output THDv (@Linear Load)	<3%	<3%	<3%	<3%
Efficiency				
Max. Efficiency	98.0%	98.0%	98.2%	98.2%
Max. Battery to Load Efficiency	97.5%	97.5%	97.5%	97.5%
European Efficiency	97.2%	97.2%	97.5%	97.5%
Protection				
Anti-Islanding Protection	Integrated	Integrated	Integrated	Integrated
PV String Input Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated
Insulation Resistor Detection	Integrated	Integrated	Integrated	Integrated
Residual Current Monitoring Unit	Integrated	Integrated	Integrated	Integrated
Output Over Current Protection	Integrated	Integrated	Integrated	Integrated
Output Short Protection	Integrated	Integrated	Integrated	Integrated
Battery Input Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated
Output Over Voltage Protection	Integrated	Integrated	Integrated	Integrated
General Data				
Operating Temperature Range (°C)	-35~60	-35~60	-35~60	-35~60
Relative Humidity	0~95%	0~95%	0~95%	0~95%
Operating Altitude (m)	≤4000	≤4000	≤4000	≤4000
Cooling	Natural Convection	Natural Convection	Natural Convection	Natural Convection
Noise (dB)	<30	<30	<30	<30
User Interface	LED & APP	LED & APP	LED & APP	LED & APP
Communication with BMS* ⁷	RS485; CAN	RS485; CAN	RS485; CAN	RS485; CAN
Communication with Meter	RS485	RS485	RS485	RS485
Communication with EMS	RS485 (Insulated)	RS485 (Insulated)	RS485 (Insulated)	RS485 (Insulated)
Communication with Portal	Wi-Fi	Wi-Fi	Wi-Fi	Wi-Fi
Weight (Kg)	24	24	24	24
Size (Width × Height × Depth mm)	415 × 516 × 180	415 × 516 × 180	415 × 516 × 180	415 × 516 × 180
Mounting	Wall Bracket	Wall Bracket	Wall Bracket	Wall Bracket
Protection Degree	IP66	IP66	IP66	IP66
Standby Self-Consumption (W)* ⁸	<15	<15	<15	<15
Topology	Battery Non-Isolation	Battery Non-Isolation	Battery Non-Isolation	Battery Non-Isolation

*¹: For 1000V system, Maximum operating voltage is 950V.
For AustraliaL safety, there will be a warning if PV voltage > 600V.
*²: For AustraliaL safety, MPPT range is 200~550V.
*³: For AustraliaL safety, MPPT voltage upper limit is 550V.
*⁴: For AustraliaL safety, nominal DC input voltage is 450V.
*⁵: According to the local grid regulation.

*⁶: Can be reached only if PV and battery power is enough.
*⁷: CAN communication is configured by default. If 485 communication is used, please replace the corresponding communication line.
*⁸: No Back-up Output.
*⁹: For Belgium Max. Output Apparent Power (VA): GW5K-ET is 5000; GW6.5K-ET is 6500; GW8K-ET is 8000; GW10K-ET is 10000.
*: Please visit GoodWe website for the latest certificates.

BH Series

3-6kW | Single Phase | AC Retrofit High Voltage Battery

The GoodWe BH Series inverter is a single-phase, AC-coupled retrofit inverter compatible with a wide range of high voltage batteries from 85 to 450V. It is designed to maximize self-consumption with UPS-level switching backup function. The pre-wired communication cables and AC connector's 'Plug & Play' simplify installation, operation and maintenance.



Maximize self-consumption



Wide battery voltage range 85~450V



Pre-wired, Plug & Play

Technical Data	GW3K-BH	GW3600-BH	GW5000-BH	GW6000-BH
Battery Input Data				
Battery Type	Li-Ion	Li-Ion	Li-Ion	Li-Ion
Battery Voltage Range (V)	85~400	85~460	85~460	85~460
Start-up Voltage (V)	90	90	90	90
Max. Charging/Discharging Current (A)	32 / 32	25 / 25	25 / 25	25 / 25
AC Output Data/Input Data (On-grid)				
Nominal Power Output to Utility Grid (W)*2	3000	3600	5000	6000
Max. Apparent Power Output to Utility Grid (VA)*2	3000 / 3300*1	3600 / 3960*1	5000 / 5500*1	6000 / 6600*1
Max. Apparent Power from Utility Grid (VA)	6000 (Charging 3kw, back-up output 3kw)	7200 (Charging 3.6kw, back-up output 3.6kw)	10000 (Charging 5kw, back-up output 5kw)	12000 (Charging 6kw, back-up output 6kw)
Nominal Output Voltage (V)	230	230	230	230
Nominal Ouput Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60
Max. AC Current Output to Utility Grid (A)*2	13.1 / 14.3*1	16 / 18*1	21.7 / 24*1	26.1 / 28.7*1
Max. AC Current from Utility Grid (A)	26.2	32	43.4	52.2
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)			
Output THDi (@Nominal Output)	<3%	<3%	<3%	<3%
Output Data (Back-up)				
Max. Output Apparent Power (VA)	3000	3600	5000	6000
Peak Output Apparent Power (VA)	3600, 60sec	4320, 60sec	6000, 60sec	7200, 60sec
Max. Output Current (A)	13.1	15.7	21.7	26.1
Automatic Switch Time (ms)	<10	<10	<10	<10
Nominal Output Voltage (V)	230 (±2%)	230 (±2%)	230 (±2%)	230 (±2%)
Nominal Ouput Frequency (Hz)	50 / 60 (±0.2%)	50 / 60 (±0.2%)	50 / 60 (±0.2%)	50 / 60 (±0.2%)
Output THDv (@Linear Load)	<3%	<3%	<3%	<3%
Efficiency				
Max. Efficiency	96.6%	96.6%	96.6%	96.6%
Protection				
Anti-Islanding Protection	Integrated	Integrated	Integrated	Integrated
Battery Input Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated
Insulation Resistor Detection	Integrated	Integrated	Integrated	Integrated
Residual Current Monitoring Unit	Integrated	Integrated	Integrated	Integrated
Output Over Current Protection	Integrated	Integrated	Integrated	Integrated
Output Short Protection	Integrated	Integrated	Integrated	Integrated
Output Over Voltage Protection	Integrated	Integrated	Integrated	Integrated
General Data				
Operating Temperature Range (°C)	-35~60	-35~60	-35~60	-35~60
Relative Humidity	0~95%	0~95%	0~95%	0~95%
Operating Altitude (m)	4000	4000	4000	4000
Cooling	Natural Convection			
Noise (dB)	<35	<35	<35	<35
User Interface	LED & APP	LED & APP	LED & APP	LED & APP
Communication with BMS	CAN	CAN	CAN	CAN
Communication with Meter	RS485	RS485	RS485	RS485
Communicaiton with Portal	Wi-Fi/Ethernet (Optional)			
Weight (Kg)	15.5	15.5	15.5	15.5
Size (Width × Height × Depth mm)	354 × 433 × 147	354 × 433 × 147	354 × 433 × 147	354 × 433 × 147
Mounting	Wall Bracket	Wall Bracket	Wall Bracket	Wall Bracket
Protection Degree	IP65	IP65	IP65	IP65
Standby Self-Consumption (W)*3	<10	<10	<10	<10
Topology	Battery Non-Isolation			

*1: For CEI 0-21.
*2: The grid feed in power for VDE-AR-N 4105 and NRS097-2-1 is limited 4600VA.
*3: No Back-up Output.
*: Please visit GoodWe website for the latest certificates.

SBP Series

3.6-5kW I Single Phase AC-Coupled LV Retrofit Inverter

The GoodWe SBP series is the world's first AC-coupled battery storage retrofit solution with UPS function for both single-phase and three-phase systems. It can effectively upgrade any existing string inverter system by adding a backup battery. Capable of being grid-interactive, it allows users to store surplus power and sell it back to the grid when demand peaks and the price of electricity is at its highest. With its UPS function with an automatic switchover time of less than 10ms, the GoodWe SBP provides uninterruptible power supply to inductive loads such as air conditioners or refrigerators.



Capable of being grid-interactive



Suitable for both single-phase & three-phase systems



Smart BMS – Max. discharge power up to 5kW



Export control (zero export)



8 ms UPS-level Switching

SBP Series

Technical Data	GW3600S-BP	GW5000S-BP
Battery Input Data		
Battery Type	Li-Ion	Li-Ion
Nominal Battery Voltage (V)	48	48
Max. Charging Voltage (V)	≤60 (Configurable)	≤60 (Configurable)
Max. Charging Current (A)* ¹	75	100
Max. Discharging Current (A)* ¹	75	100
Battery Capacity (Ah)* ²	50~2000	50~2000
Charging Strategy for Li-Ion Battery	Self-adaption to BMS	Self-adaption to BMS
AC Output Data (On-grid)		
Nominal Apparent Power Output to Utility Grid (VA)	3680	5000
Nominal Power Output to Utility Grid (W)	3680	5000* ³
Max. Apparent Power Output to Utility Grid (VA)* ⁴	3680	5000
Nominal Apparent Power from Utility Grid (VA)	3680	5000
Max. Apparent Power from Utility Grid (VA)	7360	9200
Nominal Output Voltage (V)	230	230
Nominal Output Frequency (Hz)	50 / 60	50 / 60
Max. AC Current Output to Utility Grid (A)	16	22.8
Max. AC Current from Utility Grid (A)	32	40
Output Power Factor	~1(Adjustable from 0.8 leading to 0.8 lagging)	
Output THDi (@Nominal Output)	<3%	<3%
AC Output Data (Back-up)		
Back-up Nominal Apparent Power (VA)	3680	5000
Max. Output Apparent Power (VA)* ⁵	3680	5000
Peak Output Apparent Power (VA)* ⁵	4416, 10sec	5500, 10sec
Automatic Switch Time (ms)	<10	<10
Nominal Output Voltage (V)	230 (±2%)	230 (±2%)
Nominal Output Frequency (Hz)	50 / 60 (±0.2%)	50 / 60 (±0.2%)
Max. Output Current (A)	16	22.8
Output THDv (@Linear Load)	<3%	<3%
Efficiency		
Max. Efficiency	95.5%	95.5%
Protection		
Anti-Islanding Protection	Integrated	Integrated
Output Over Current Protection	Integrated	Integrated
Output Short Protection	Integrated	Integrated
Output Over Voltage Protection	Integrated	Integrated
General Data		
Operating Temperature Range (°C)	-25~60	-25~60
Relative Humidity	0~95%	0~95%
Operating Altitude (m)	4000	4000
Cooling	Nature Convection	Nature Convection
Noise (dB)	<25	<25
User Interface	LED & APP	LED & APP
Communication with BMS* ⁶	RS485; CAN	RS485; CAN
Communication with Meter	RS485	RS485
Communication with Portal	Wi-Fi	Wi-Fi
Weight (Kg)	18.5	18.5
Size (Width × Height × Depth mm)	347 × 432 × 190	347 × 432 × 190
Mounting	Wall Bracket	Wall Bracket
Protection Degree	IP65	IP65
Standby Self-Consumption (W)	<15	<15
Topology	Battery Isolation	Battery Isolation

*¹: The actual charge and discharge current also depends on the battery.

*²: Battery capacity could be not less than 100Ah where the back-up function is to be applied.

*³: 4600W for VDE0126-1-1&VDE-AR-N 4105 and CEI 0-21.

*⁴: For CEI 0-21 GW3600S-BP is 4050W, GW5000S-BP is 5100W; for VDE-AR-N4105 GW5000S-BP is 4600W.

*⁵: Can be reached only if battery capacity is enough, otherwise will shut down.

*⁶: CAN communication is configured by default. If 485 communication is used, please replace the corresponding communication line.

*: Please visit GoodWe website for the latest certificates.

A-BP Series

(Americas only)
5-9.6kW | AC-Coupled HV Retrofit Inverter

GoodWe's A-BP series is designed to supplement an existing on-grid PV system and connect with high voltage batteries to seamlessly upgrade to a full storage system. The inverter can boost the PV system without the grid, ensuring the grid-tied inverter stays connected if the grid is compromised. With frequency shifting, the A-BP can regulate the output power of the grid-tied inverter and change the AC frequency to prevent over charging the battery. With an inbuilt smart meter and plug & play AC connectors, the inverter is easy to install. The A-BP can support whole home backup and is compatible with various brands of grid-tied inverters.



Micro-grid applications



Whole Home Backup



Frequency Shifting



Ultra Rapid Charge



Smart Meter Integrated

A-BP Series

Technical Data	GW5000A-BP	GW6000A-BP	GW7000A-BP	GW7600A-BP	GW8600A-BP	GW9600A-BP
Battery Input Data						
Battery Type	Li-Ion	Li-Ion	Li-Ion	Li-Ion	Li-Ion	Li-Ion
Battery Voltage Range (V) *1	80~495	80~495	80~495	80~495	80~495	80~495
Max. Charging Current (A)	50	50	50	50	50	50
Max. Discharging Current (A)	50	50	50	50	50	50
Charging Strategy for Li-Ion Battery	Self-adaption to BMS					
AC Output Data (On-grid)						
Output Voltage Range (Vac)	211 to 264 @240	211 to 264 @240	211 to 264 @240	211 to 264 @240	211 to 264 @240	211 to 264 @240
Nominal Output Frequency (Hz)	60	60	60	60	60	60
Max. Apparent Power Output to Grid (VA)	5000	6000	7000	7600	8600	9600
Max. Apparent Power from Grid (VA)	6000	7200	8400	9120	9600	9600
Max. AC Current Output to Grid (A)	20.8	25	29.2	31.7	35.8	40
Max. AC Current From Grid (A)	25	30	35	38	40	40
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)					
Output THDi (@Nominal Output)	<3%	<3%	<3%	<3%	<3%	<3%
AC Output Data (Back-up)						
Nominal Output Voltage L1-L2/L-N (Vac)	240 / 120	240 / 120	240 / 120	240 / 120	240 / 120	240 / 120
Nominal Output Frequency (Hz)	60	60	60	60	60	60
Output THDv (@Linear Load)	<3%	<3%	<3%	<3%	<3%	<3%
Max. Output Apparent Power@240V (VA)	5000	6000	7000	7600	8600	9600
Peak Output Apparent Power @240V (VA) *2	6000, 60sec	7200, 60sec	8400, 60sec	9120, 60sec	10320, 60sec	11520, 60sec
Max. Continuous Output Current@240V (A)	20.8	25	29.2	31.7	35.8	40
Efficiency						
Battery Charge/discharge to AC Max. Efficiency	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%
CEC Efficiency	96.1%	96.1%	96.1%	96.1%	96.1%	96.1%
Protection						
Anti-islanding Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Insulation Resistor Detection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Residual Current Monitoring Unit	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Output Over Current Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Back-up Output Short Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Output Over Voltage Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Battery Input Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
General Data						
Operating Temperature Range	-31°F~140°F (-35°C~60°C)					
Relative Humidity	0~95%	0~95%	0~95%	0~95%	0~95%	0~95%
Operating Altitude	≤13123ft (4000m)	≤13123ft (4000m)	≤13123ft (4000m)	≤13123ft (4000m)	≤13123ft (4000m)	≤13123ft (4000m)
Cooling	Intelligent Fan	Intelligent Fan	Intelligent Fan	Intelligent Fan	Intelligent Fan	Intelligent Fan
Noise (dB)	<45	<45	<45	<45	<45	<45
User Interface	LED & APP (WiFi, Bluetooth)					
Communication with BMS	RS485; CAN	RS485; CAN	RS485; CAN	RS485; CAN	RS485; CAN	RS485; CAN
Communication with Meter	RS485	RS485	RS485	RS485	RS485	RS485
Communication with EMS	RS485 (Insulated)	RS485 (Insulated)	RS485 (Insulated)	RS485 (Insulated)	RS485 (Insulated)	RS485 (Insulated)
Communicaiton with Portal	Wi-Fi; LAN (Optional)					
Weight	62.8lb (28.5Kg)	62.8lb (28.5Kg)	70.5lb (32Kg)	70.5lb (32Kg)	70.5lb (32Kg)	70.5lb (32Kg)
Size (Width × Height × Depth)	16.3in × 31.1in × 6.9in (415mm × 791mm × 175mm)					
Mounting	Wall Bracket	Wall Bracket	Wall Bracket	Wall Bracket	Wall Bracket	Wall Bracket
Protection Degree	NEMA Type 4X	NEMA Type 4X	NEMA Type 4X	NEMA Type 4X	NEMA Type 4X	NEMA Type 4X
Standby Self Consumption (W) *3	<20	<20	<20	<20	<20	<20
Topology	Transformerless	Transformerless	Transformerless	Transformerless	Transformerless	Transformerless

*1: Battery discharge/charge power limited by voltage. When A-BP is in microgrid application, the maximum battery voltage is 405V.

*2: Can be reached only if battery power is enough

*3: No Back-up Output

*: Please visit GoodWe website for the latest certificates.

BT Series

5-10kW I Three Phase AC-Coupled HV Retrofit Inverter

The BT series is a GoodWe retrofit AC coupled solution, which is able to upgrade existing three-phase PV systems to storage systems of 5kW, 6kW, 8kW & 10kW. This solution is able to modernize any three-phase PV system, providing the ability to store power or operate with the back-up of batteries, ensuring interactivity or grid independence. It is compatible with high voltage Li-Ion batteries ranging from 180 to 600V and is also equipped with UPS function. As part of its set of protections, it incorporates a Battery Input Reverse Polarity Protection.



8 ms UPS-level Switching



110% AC output overloading



High voltage battery (180-600V)



Battery Input Reverse Polarity Protection

BT Series

Technical Data	GW5K-BT	GW6K-BT	GW8K-BT	GW10K-BT
Battery Input Data				
Battery Type	Li-Ion	Li-Ion	Li-Ion	Li-Ion
Battery Voltage Range (V)	180~600	180~600	180~600	180~600
Max. Charging Current (A)	25	25	25	25
Max. Discharging Current (A)	25	25	25	25
Charging Strategy for Li-Ion Battery	Self-adaption to BMS	Self-adaption to BMS	Self-adaption to BMS	Self-adaption to BMS
AC Output Data (On-grid)				
Nominal Apparent Power Output to Utility Grid (VA)	5000	6000	8000	10000
Max. Apparent Power Output to Utility Grid (VA)*1	5500	6600	8800	11000
Max. Apparent Power from Utility Grid (VA)	10000	12000	15000	15000
Nominal Output Voltage (V)	400 / 380, 3L / N / PE	400 / 380, 3L / N / PE	400 / 380, 3L / N / PE	400 / 380, 3L / N / PE
Nominal Ouput Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60
Max. AC Current Output to Utility Grid (A)	8.5	10.5	13.5	16.5
Max. AC Current from Utility Grid (A)	15.2	18.2	22.7	22.7
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)			
Output THDi (@Nominal Output)	<3%	<3%	<3%	<3%
AC Output Data (Back-up)				
Max. Output Apparent Power (VA)	5000	6000	8000	10000
Peak Output Apparent Power (VA)*2	10000, 60sec	12000, 60sec	15000, 60sec	15000, 60sec
Max. Ouput Current (A)	8.5	10.5	13.5	16.5
Nominal Output Voltage (V)	400 / 380	400 / 380	400 / 380	400 / 380
Nominal Ouput Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60
Output THDv (@Linear Load)	<3%	<3%	<3%	<3%
Efficiency				
Max. Battery to Load Efficiency	97.6%	97.6%	97.6%	97.6%
Max. Charge Efficiency	97.6%	97.6%	97.6%	97.6%
Protection				
Anti-Islanding Protection	Integrated	Integrated	Integrated	Integrated
Insulation Resistor Detection	Integrated	Integrated	Integrated	Integrated
Residual Current Monitoring Unit	Integrated	Integrated	Integrated	Integrated
Output Over Current Protection	Integrated	Integrated	Integrated	Integrated
Output Short Protection	Integrated	Integrated	Integrated	Integrated
Battery Input Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated
Output Over Voltage Protection	Integrated	Integrated	Integrated	Integrated
General Data				
Operating Temperature Range (°C)	-35~60	-35~60	-35~60	-35~60
Relative Humidity	0~95%	0~95%	0~95%	0~95%
Operating Altitude (m)	≤4000	≤4000	≤4000	≤4000
Cooling	Nature Convection	Nature Convection	Nature Convection	Nature Convection
Noise (dB)	<30	<30	<30	<30
User Interface	LED & APP	LED & APP	LED & APP	LED & APP
Communication with BMS*3	RS485; CAN	RS485; CAN	RS485; CAN	RS485; CAN
Communication with Meter	RS485	RS485	RS485	RS485
Communication with EMS	RS485 (Insulated)	RS485 (Insulated)	RS485 (Insulated)	RS485 (Insulated)
Communicaiton with Portal	Wi-Fi; LAN	Wi-Fi; LAN	Wi-Fi; LAN	Wi-Fi; LAN
Weight (Kg)	21	21	21	21
Size (Width × Height × Depth mm)	415 × 516 × 180	415 × 516 × 180	415 × 516 × 180	415 × 516 × 180
Mounting	Wall Bracket	Wall Bracket	Wall Bracket	Wall Bracket
Protection Degree	IP66	IP66	IP66	IP66
Standby Self-Consumption (W)*4	<15	<15	<15	<15
Topology	Battery Non-Isolation	Battery Non-Isolation	Battery Non-Isolation	Battery Non-Isolation

*1: According to the local grid regulation.
*2: Can be reached only if battery capacity is enough, otherwise will shut down.
*3: CAN communication is configured by default. If 485 communication is used, please replace the corresponding communication line.
*4: No Back-up Output.
*: Please visit GoodWe website for the latest certificates.

BTC Series

50 kW I Three Phase AC-Coupled HV Retrofit Inverter

GoodWe BTC Series is a three-phase, AC retrofit inverter suitable for distributed PV systems and can be connected with high-voltage batteries ranging from 200 to 865V. Its simple and Plug & Play modular design consisting of four sections (DC/DC, DC/AC, STS & EMS modules). It can switch to backup mode in less than 10ms and ensures continuous power supply for critical loads. It does not require perfect balance when operating in backup mode, allowing for each phase to supply power to the loads individually. The active, reactive power and power factor of this inverter is fully adjustable, which makes it suitable for application on micro-grids and ensures grid stability for the whole PV system. It offers 110% continuous AC overloading on the backup side for maximum power output and remote shutdown function for system safety.



Modular design, quick plug & play



100% unbalanced load



Built-in remote shutdown function



8 ms UPS-level switching



110% continuous AC overloading on backup



Adjustable active, reactive power and power factor

BTC Series AC-Coupled Retrofit

Technical Data	GW50K-BTC
Battery Input Data	
Battery Type	Li-Ion
Battery Voltage Range(V)	200~865
Start-up Voltage (V)	250
No. of Battery Input	1
Max Discharge / Charge Current (A)	100
Charging Mode for Battery	Self-adaption to BMS
DC breaker	Integrated
AC Output Data (On-grid mode)	
Nominal Output Power (VA)	50k
Max. Output Power (VA)	52.5k
Max. apparent power from Grid (VA)	100k
Max. Current from Grid (A)	145
Nominal Output Current (A)	72.5
Max. Output Current (A)	76
Nominal Output Voltage (V)	400, 3L / N / PE
Nominal Ouput Frequency (Hz)	50 / 60
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)
Output THDi (@Nominal Output)	<3%
AC breaker	Integrated
AC Output Data (Backup mode)	
Nominal Output Power (VA)	50k
Overload Capability	1.1 times overload continuous; 1.2 times overload is not less than 1 minute
Nominal Output Voltage (V)	400, 3L / N / PE
Nominal Ouput Frequency (Hz)	50 / 60
Nominal Output Current (A)	72.5
Output THDv (@Liner Load)	<3%
Load Unbalance	100% unbalanced load
AC breaker	Integrated
Efficiency	
Max. Discharge Efficiency	97.0%
Max. Charge Efficiency	97.0%
Protection	
Reverse Protection	Integrated
Anti-islanding Protection	Integrated
Insulation Resistor Detection	Integrated
Residual Current Monitoring Unit	Integrated
AC SPD Protection	Integrated
Output Over Current Protection	Integrated
Output Short Protection	Integrated
Output Over Voltage Protection	Integrated
General Data	
Operating Temperature Range (°C)	-30~60
Relative Humidity	0~95%
Operating Altitude (m)	4000
Cooling	Fan Cooling
Noise (dB)	<68
User Interface	LCD&LED
Communication	RS485, LAN
BMS Communication	CAN, RS485
Weight (Kg)	125
Size (Width × Depth × Height mm)	585 × 750 × 1350
Protection Degree	IP20
Isolation Method	Transformerless

SECU-A Series

Low Voltage Battery

GoodWe's SECU-A Series is a low voltage lithium battery, which is made from safe and durable lithium iron phosphate. The battery follows a modular design, making it extendable. As a plug and play device, it can be installed easily and quickly. Thanks to their safe design, the batteries can be connected together in parallel.



Safe & Reliable



Expandable Modular Design



Long Lifespan

SECU-A Series

Technical Data

SECU-A5.4L

Model

Battery Type	LiFePO ₄
System Weight	49Kg
Dimensions (W × D × H)	400 × 226.2 × 484.2mm
Protection	IP20 (indoor)
Warranty	10 years (performance warranty)
Installed Capacity	5.4 kWh
Usable Energy	4.8 kWh
DoD	90%
Nominal Voltage	51.2 V
Operating Voltage Range	48 ~ 57.6 V
Internal Resistance	≤ 20 mΩ

Electrical

Max. Charge Current	50A
Max. Discharge Current	50A
Operating Temperature Range	-10°C ~ 50°C*
Humidity	15% ~ 85%

System Configuration

Module Connection	6 Parallels
Capacity Range	5.4 / 10.8 / 16.2 / 21.6 / 27 / 32.4 kWh
Usable Energy Range	4.8 / 9.6 / 14.4 / 19.2 / 24 / 28.8 kWh
Max. Charge Current	50A (1 Module) / 100A (2~6 Modules)
Max. Discharge Current	50A (1 Module) / 100A (2~6 Modules)
Monitoring Parameters	system voltage, current, cell voltage, cell temperature, PCBA temperature
Communication	CAN
Certification	UN38.3

*: Do not charge batteries when temperature is below 0°C. Batteries start derating when the temperature is above 40°C.



SECU-S Series

(North America Only)
High Voltage Battery

The GoodWe SECU-S Series is specially designed for high-voltage storage systems. This superior battery, unique in its class, comes with an expandable modular design that allows for quick and easy O&M. Thanks to its NEMA 4X/IP65 protection degree, it can be mounted either indoors or outdoors. It is very space-efficient and offers customers increased choices and flexibility (up to eight pieces connected in series). It is made from Lithium iron phosphate, the safest battery cell technology and has a high charging rate, ensuring superb performance and long lifespan.



-  Safe & Reliable
-  Charge Your Battery within ONE HOUR
-  Up to 8 modules in series
-  Flexible Installation

SECU-S Series

Technical Data	SECU-S13	SECU-S15	SECU-S18	SECU-S20
Rated Energy*	12.80 kWh	15.36 kWh	17.92 kWh	20.48 kWh
Usable Energy*	11.52 kWh	13.83 kWh	16.13 kWh	18.43 kWh
Battery Module	SECU-S2.5: 51.2V 50Ah 2.56kWh 37kg			
Number of Modules	5	6	7	8
Cell Type	LFP (LiFePO4)	LFP (LiFePO4)	LFP (LiFePO4)	LFP (LiFePO4)
Cell Configuration	80S1P	96S1P	112S1P	128S1P
Rated Voltage	256 V	307.2 V	358.4 V	409.6 V
Operating Voltage	240~280 V	288~336 V	336~392 V	384~448 V
Weight	200 Kg	237 Kg	274 Kg	311 Kg
Dimensions (W × D × H)	610 × 236 × 1970 mm	610 × 236 × 2270 mm	610 × 236 × 2570 mm	610 × 236 × 2870 mm
Depth of Discharge (DoD)	90%	90%	90%	90%
Max Charge/Discharge Current*	50A (1C)	50A (1C)	50A (1C)	50A (1C)
Rated Power*	12.80 kW	15.36 kW	17.92 kW	20.48 kW
Communication	CAN	CAN	CAN	CAN
Operating Temperature	Charge: 0~50°C/Discharge: -20~50°C			
Humidity	≤90%	≤90%	≤90%	≤90%
Operating Altitude	≤2000 m	≤2000 m	≤2000 m	≤2000 m
Protection Degree	Type 4X* (Outdoor / Indoor)			
Installation Location	Wall-Mounted / Ground-Mounted			
Certification	UL1642, UL1973, FCC, UN38.3			

Rated Energy*: Test conditions, 100% DoD, 0.5C charge & discharge at +25±3°C.
Usable Energy*: Test conditions, 90% DoD, 0.5C charge & discharge at +25±3°C.
Max Charge/Discharge Current*/Rated Power*: Max Charge/Discharge and power derating will occur related to Temperature and SOC.
Type 4X*: Same as NEMA 4X or IP65.

Lynx Home U Series

Low Voltage Battery

GoodWe's Lynx Home U Series is a low voltage lithium battery especially designed for residential applications with superior performance, safe battery technology (LFP) and optimized user experience. The in-built auto recognition function and the plug & play design allow for easy installation.



Module Auto Recognition



Auto Under-voltage Reboot



Remote Diagnosis & Upgrade



IP65 Protection Level

Lynx Home U Series

Technical Data	LX U5.4-L	2*LX U5.4-L	3*LX U5.4-L	4*LX U5.4-L	5*LX U5.4-L	6*LX U5.4-L
Rated Energy (kWh)*	5.4 kWh	10.8 kWh	16.2 kWh	21.6 kWh	27 kWh	32.4 kWh
Usable Energy (kWh)*	4.8 kWh	9.6 kWh	14.4 kWh	19.2 kWh	24 kWh	28.8 kWh
Cell Type	LFP (LiFePO4)	LFP (LiFePO4)	LFP (LiFePO4)	LFP (LiFePO4)	LFP (LiFePO4)	LFP (LiFePO4)
Cell Configuration	16S1P	16S2P	16S3P	16S4P	16S5P	16S6P
Rated Voltage (V)	51.2 V	51.2 V	51.2 V	51.2 V	51.2 V	51.2 V
Operating Voltage Range (V)	48~57.6 V	48~57.6 V	48~57.6 V	48~57.6 V	48~57.6 V	48~57.6 V
Max. Continuous Discharge Current (A)*	50A	100A	100A	100A	100A	100A
Max. Discharge Power (kW)*	2.88 kW	5.76 kW	5.76 kW	5.76 kW	5.76 kW	5.76 kW
Communication	CAN	CAN	CAN	CAN	CAN	CAN
Weight (Kg)	57 Kg	114 Kg	171 Kg	228 Kg	285 Kg	342 Kg
Dimensions (W × D × H) (mm)	505 × 175 × 570 mm (LX U5.4-L)					
Operating Temperature (°C)	Charge: 0<T<50°C / Discharge: -10<T<50°C					
Storage temperature (°C)	-20~40°C (≤ One Month) / 0~35°C (≤ One Year)					
Humidity	≤ 95%	≤ 95%	≤ 95%	≤ 95%	≤ 95%	≤ 95%
Altitude (m)	≤ 2000m	≤ 2000m	≤ 2000m	≤ 2000m	≤ 2000m	≤ 2000m
Protection Degree	IP65 (Outdoor / Indoor)					
Installation Location	Wall-Mounted / Ground-Mounted					
Standard and Certification	Safety	IEC62619, CEC	IEC62619, CEC	IEC62619, CEC	IEC62619, CEC	IEC62619, CEC
	EMC	CE, RCM	CE, RCM	CE, RCM	CE, RCM	CE, RCM
	Transportation	UN38.3	UN38.3	UN38.3	UN38.3	UN38.3

Rated Energy*: Test conditions, Cell Voltage 2.5~3.65V, 0.5C charge & discharge at +25±3 °C.
Usable Energy*: Test conditions, 90% DOD, 0.5C charge & discharge at +25±3 °C.
Max. Continuous Discharge Current*/Power*: Max. Continuous Charge/Discharge and power derating will occur related to Temperature and SOC.

Lynx Home S Series

(North America Excluded)
High Voltage Battery

GoodWe's Lynx Home S Series is a high voltage battery that offers multiple energy storage options through an expandable modular design (3-8 modules combined), which further simplifies installation and O&M with multiple smart functions. The safest battery cell technology (LFP) comes with a high charging rate, ensuring superior performance and supplying robust power for your life.



Charge Your Battery within ONE HOUR



Remote Diagnosis & Upgrade



Auto Under-voltage Reboot



IP65 Protection Level

Lynx Home S Series

Technical Data	LX S7.5-H	LX S10-H	LX S13-H	LX S15-H	LX S18-H	LX S20-H
Rated Energy*	7.68 kWh	10.24 kWh	12.80 kWh	15.36 kWh	17.92 kWh	20.48 kWh
Usable Energy*	6.91 kWh	9.22 kWh	11.52 kWh	13.83 kWh	16.13 kWh	18.43 kWh
Battery Module	LX S2.5-H: 51.2V 50Ah 2.56kWh 37kg					
Number of Modules	3	4	5	6	7	8
Cell Type	LFP (LiFePO4)					
Cell Configuration	48S1P	64S1P	80S1P	96S1P	112S1P	128S1P
Rated Voltage	153.6 V	204.8 V	256 V	307.2 V	358.4 V	409.6 V
Operating Voltage	144~168 V	192~224 V	240~280 V	288~336 V	336~392 V	384~448 V
Weight	126 Kg	163 Kg	200 Kg	237 Kg	274 Kg	311 Kg
Dimensions (W × D × H)	610 × 226 × 1170 mm	610 × 226 × 1445 mm	1220 × 226 × 1170 mm	1220 × 226 × 1170 mm	1220 × 226 × 1445 mm	1220 × 226 × 1445 mm
Depth of Discharge (DOD)	90%	90%	90%	90%	90%	90%
Max Charge/Discharge Current*	50A (1C)	50A (1C)	50A (1C)	50A (1C)	50A (1C)	50A (1C)
Rated Power*	7.68 kW	10.24 kW	12.80 kW	15.36 kW	17.92 kW	20.48 kW
Communication	CAN	CAN	CAN	CAN	CAN	CAN
Operating Temperature	Charge: 0~50°C/Discharge: -20~50°C					
Humidity	≤90%	≤90%	≤90%	≤90%	≤90%	≤90%
Operating Altitude	≤2000m	≤2000m	≤2000m	≤2000m	≤2000m	≤2000m
Protection Degree	IP65 (Outdoor / Indoor)					
Installation Location	Wall-Mounted / Ground-Mounted					
Certification	CE, UN38.3	CE, UN38.3	CE, UN38.3	CE, UN38.3	CE, UN38.3	CE, UN38.3
Warranty	10 Years (Performance Warranty)					

Rated Energy*: Test conditions, 100% DOD, 0.5C charge & discharge at +25±3°C.
Usable Energy*: Test conditions, 90% DOD, 0.5C charge & discharge at +25±3°C.
Max Charge/Discharge Current*/Rated Power*: Max Charge/Discharge and power derating will occur related to Temperature and SOC.

SEC1000 / SEC1000S

The SEC1000 (Smart Energy Controller) is composed of GoodWe's three phase meter and Ezlogger Pro. It can be connected with SEMS to control and manage the performance of inverters in each string. Small box, mighty functions!



SCB2000

The SCB2000 (Solar Communication Box) is integrated with the following component sections: PLC communication board, data collector Ezlogger Pro board, GPRS module (optional), fiber ring network switch (optional) and three-phase/single-phase switch.

Technical Data	SEC1000 (On-grid)	SEC1000S (Storage)
Input Voltage Range (V)	Phase Voltage: AC 60V~280V	Phase Voltage: AC 60V~280V
	Line Voltage: AC 100V~480V	Line Voltage: AC 100V~480V
AC Input	3L / N / PE or 3L / PE	3L / N / PE or 3L / PE
Input Voltage Frequency	50Hz / 60Hz	50Hz / 60Hz
Input Current Range	5A (Max.)	5A (Max.)
Rated Power Consumption	<10W	<10W
Communication Mode with Inverter	RS485	RS485
Maximum Distance for Controlling Inverter	1000m (Using the mode of shielded twisted pair)	
Maximum Number of Inverters in Controlling	60 pcs	10 pcs
Communication Mode with Terminals	LAN or GPRS	-
Firmware	On-grid FW	Storage FW
Operating Temperature Range (°C)	-25~60	-25~60
Relative Humidity	0~100%, Non-condensing	0~100%, Non-condensing
Level of Protection	IP65	IP65
Size (L × W × H mm)	420 × 320 × 131mm	460 × 350 × 143mm
Weight (Kg)	4Kg	4Kg

*SEC1000 has two models. One is for on-grid, and the other is for storage. The on-grid one is for monitoring, export power control and reactive power compensation, while the storage one (SEC1000S) is for export power control and ET Series inverter parallel control (up to 10 units).

Technical Data	With Optical	Without Optical
Power supply Input Voltage Range (V)	110-240V 50Hz / 60Hz	110-240V 50Hz / 60Hz
Rated Power Consumption	≤18W	≤16W
Communication Mode with Inverter	PLC	PLC
Voltage Range of Input AC Line	342~690V	342~690V
Max Length to Inverter	1000m	1000m
Max Quantity of Inverter Connected	30	30
Communication Mode with Server/Cloud	LAN / SC (can form optical fiber ring network) / GPRS	LAN / GPRS
Max Length to Server/Cloud	LAN: 100m; optical fiber: 20km	LAN: 100m
RS485	It can be connected to third-party devices such as environmental monitors	
Other Interface	USB, SD Card	USB, SD Card
Operating Temperature Range (°C)	-25~60	-25~60
Relative Humidity	0~100%, Non-condensing	0~100%, Non-condensing
Protection Degree	IP65	IP65
Size (Width × Height × Depth mm)	420 × 320 × 150mm	420 × 320 × 150mm
Weight (Kg)	10.5	10

SCB3000

The SCB3000 integrates PLC 2.0 to enhance anti-interference ability, transmission rate & communication distance, and can be adapted to I-V curve diagnosis function, which makes it a perfect match for smart inverters.



Technical Data		SCB3000
Power Supply Input	Voltage Range	AC 100V~240 V
	Frequency Range	50 / 60 Hz
AC Line Input Voltage Range		Max. AC 800 V
Rated Power Consumption		≤18 W
Communication Interface	With Inverter	PLC 2.0 / RS485
	With Server	LAN / Optical Fiber
Max Inverters Connected		PLC: 60 units RS485: 60 units
Max Length Communication Cable		RS485 / PLC: 1000 m LAN: 100 m, Optical Fiber: 20 km
Other Interface		USB, SD
Fiber Parameters	Centre Wavelength	1310 / 1550 nm
	Transmission Distance	20 km
	Interface	SC
	Optical Ports	Port A: 1550 nm (Transmit) 1310 nm (Receive)
		Port B: 1310 nm (Transmit) 1550 nm (Receive)
Mechanical Specifications	Size (Width × Height × Depth)	351 × 460 × 142.2 mm
	Weight	10.5 Kg
	Protection Degree	IP65
	Installation	Wall Mounting Bracket Mounting Pole Mounting Horizontal Mounting
Operating Temperature Range		-30 ~ +60 °C
Storage Temperature		-30 ~ +70 °C
Relative Humidity		0-100 %, Non-condensing
Altitude		<4000 m

GoodWe HomeKit

GoodWe HomeKit is a solution designed to monitor load energy consumption in real time, 24 hours a day. Based on the best principles, the HomeKit is tailored for homeowners' needs and only requires an internet connection. It consists of a smart meter and a Wi-Fi/LAN communication module. An additional advantage of GoodWe HomeKit is that it can be applied to grid-connected systems with inverters of any brand or even systems without PV and it is a key component in keeping load consumption records. With a 60-second update frequency, data is transmitted by Wi-Fi/LAN and stored on the cloud. End users benefit from a better understanding of their electricity consumption and the source from which it is generated. Moreover, if used together with a GoodWe inverter, HomeKit can limit the power exported to the grid.



24/7 Real-time Consumption Monitoring

Work with Inverters of Any Brand

Double CT Design - Super Accurate Measurement

Export Power Control

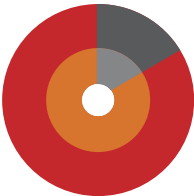
Can be Utilized in Households without PV

24-Hour Real-time Consumption Monitoring

HomeKit offers 24-hour real-time consumption control. With the assistance of the GoodWe monitoring platform SEMS, HomeKit can calculate self-consumption levels per day, month or year, providing a comprehensive overview of load consumption and the general efficiency achieved in the use of solar energy. Furthermore, the power consumption of the HomeKit itself is insignificant, saving on additional electricity costs.

PV Generation: 15.1 kWh

Loads Consumption: 38.7 kWh



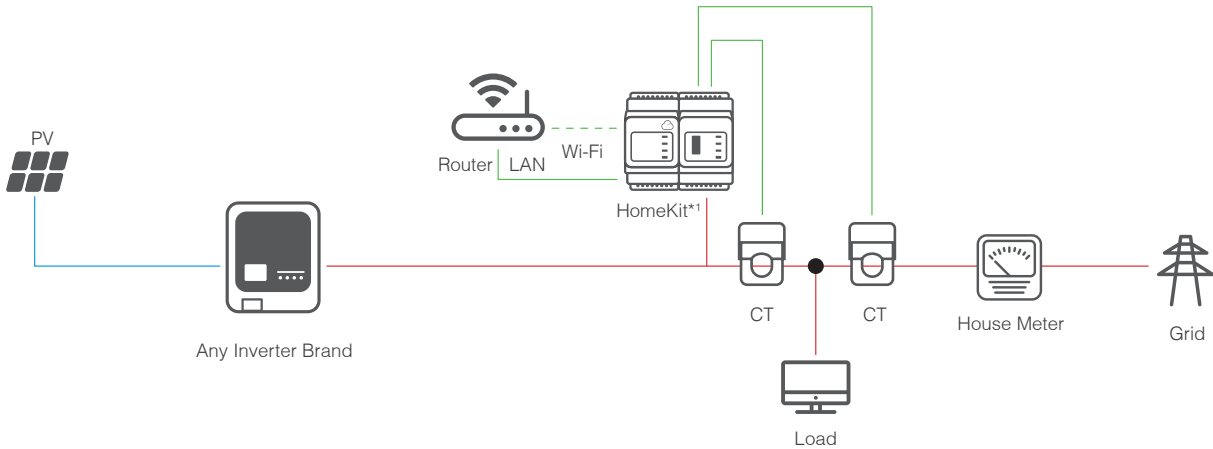
Use of PV for self-consumption (83.4%)
Energy exported to the grid (16.6%)



Use of PV for self-consumption (32.6%)
Energy imported from the grid (67.4%)

Double CT Design - Super Accurate Measurement

GoodWe HomeKit is designed to connect with two CTs (Current Transformer), which can measure the inverter side and the grid side at the same time. to ensure maximum accuracy with less than 1% error rate.



MODEL		HK1000
Application		Household Loads Monitoring
Voltage	Rated Voltage	110V, 230V
	Voltage Range	100Vac~240Vac
	Frequency	50Hz / 60Hz
Current Input	Rated Current	CT in: 120A / 40mA
	Current Range	0.48A~120A
Self-consumption		<5W
Data Detection		Active Power / Reactive Power / Power Factor / Frequency
Energy Calculation		Active / Reactive Power Energy
Precision	Voltage / Current	Class 1
	Active Power	Class 1
	Reactive Power	Class 2
Communication		Wi-Fi or LAN
Interface		3 LED (Power, Energy Consumption, Communication), USB Port, Reset Button
Mechanical Parameters	Size (L × W × H)	36 × 85 × 66.5mm
	Weight	440g
	Protection Class	IP20 (For Indoor Use)
	Installation Method	Mounting Rack
Operating Temperature		-25 ~ +60°C
Operating Humidity		<95%, No Condensation
Altitude		<2000m

4G Module

The GoodWe 4G Module is easy to install with Plug & Play design and can support several operators worldwide, offering customers convenience and reliability, especially in remote areas without access to Wi-Fi.

Wi-Fi Communication Module

Technical Data

Basic Parameter	4G KIT-EC	4G KIT-AU
Power Supply (V)	5	5
Self-Consumption (W)	<4	<4
Operating temperature (°C)	-30~60	-30~60
Operating Humidity	0~100%, Non-condensing	0~100%, Non-condensing
Altitude (m)	≤4000	≤4000
Size (L × W × H) (mm)	96 × 49 × 32	96 × 49 × 32
Protection Class	IP65	IP65

Wireless Parameter

LTE-FDD	B1 / B3 / B7 / B8 / B20 / B28A	B1 / B3 / B5 / B7 / B8 / B28
LTE-TDD	-	B40
WCDMA	B1 / B8	B1 / B2 / B5 / B8
GSM / GPRS	B3 / B8	B3 / B8
Certification	CE	RCM

Transmission Speed

LTE-FDD (Mbps)	150 (DL) / 50 (UL)	150 (DL) / 50 (UL)
LTE-TDD (Mbps)	-	130 (DL) / 30 (UL)
WCDMA (Kbps)	384 (DL) / 384 (UL)	384 (DL) / 384 (UL)
GPRS (Kbps)	107 (DL) / 85.6 (UL)	107 (DL) / 85.6 (UL)

Technical Parameter

Basic Parameter	WI-FI BOX	WI-FI KIT
Input voltage	5V	
Power	2W	
Size (length × width × thickness)	71.5mm × 65mm × 39.5mm	96mm × 46mm × 29mm
Operating temperature range (°C)	-25~60	
Operating humidity	5~95% RH (Non-condensing water)	
Operating altitude	< 4000m	
Water Protection	IP65	

Software Parameter

Conguration	APP / WEB
Operating mode	AP / STA / AP+STA
Wireless standard	802.11 b/g/n
Frequency Range	2.412GHz-2.484GHz
Certification	FCC / CE / RoHS

Features

- Data encrypted to ensure data security
- Supports breakpoint retransmission-automatic disconnection of broken links, reconnection and subsequent transmission to prevent data loss
- Remote upgrade-inverter program update without going on site
- Pre-assembled, tested and shipped, no on-site installation required, stable performance

EzLogger Pro Indoor

The Ezlogger Pro is GoodWe's self-developed monitoring device. In combination with a GoodWe solar inverter, it can easily read and record all key plants' data and constantly transmit the data to the global monitoring web server via internet.

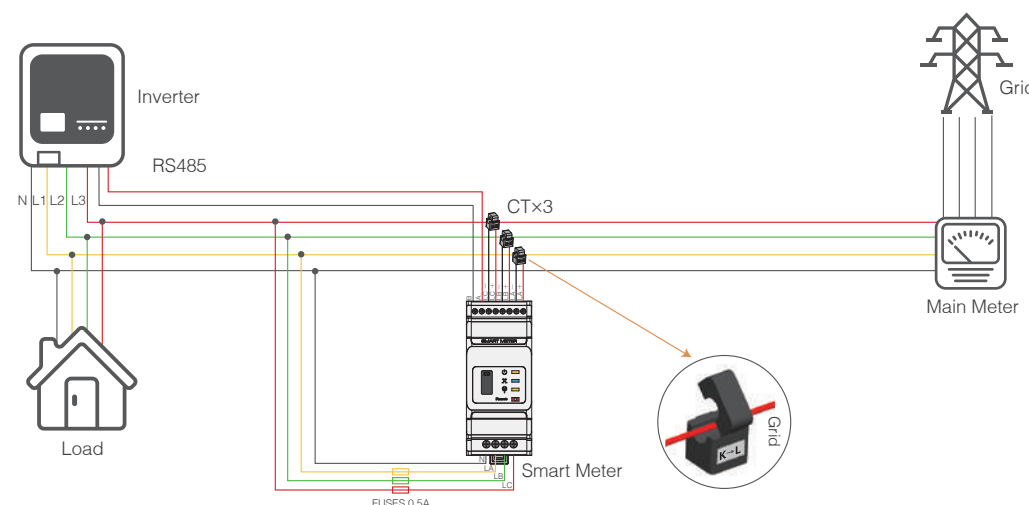


Smart Meter

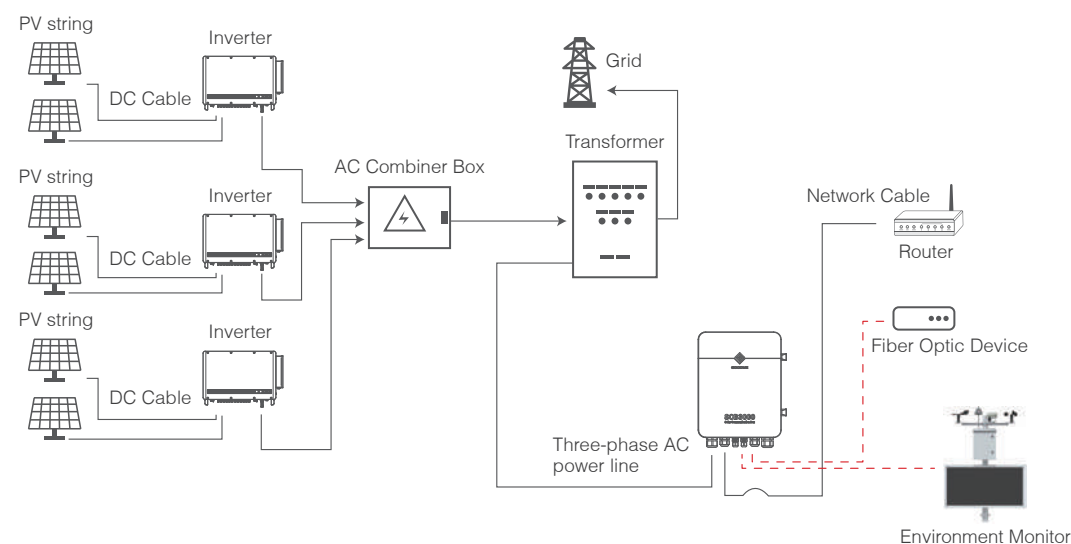
The GoodWe Smart Meter is designed with high precision and small dimensions, convenient operation and installation. It is available for both single-phase and three-phase grid system connections to detect voltage, current, power and energy, to operate with inverters connected to SEMS (Smart Energy Management System) for the purpose energy management.



Anti-Current Reversion Model



Power Line Communication



GoodWe Service Structure

GoodWe's qualified service network team is available at all times to provide local technical support whenever and wherever you need.



Call Center: First Level Support & Troubleshooting

Our professional team provides technical support to customers in troubleshooting and diagnosis of operational issues. Usually a problem can be corrected via remote access so that on-site service is unnecessary.



On-site Support

GoodWe authorized service engineers can perform on-site inspection, testing, debugging, providing repair or replacement if necessary, using the latest techniques to maximize your inverter's performance while minimizing production or process time.



Follow-up & Customer Satisfaction Survey

We value our customers' feedback and believe that good customer service and support is mandatory. For this reason, we actively listen to our customers' experience with our brand and service and carry out regular surveys in order to better meet your needs and expectations.



Global Presence, Local Service

Mexico, United States, Chile, Spain, Germany, Portugal, Brazil, Spain, Argentina, South Africa, Italy, Egypt, United Kingdom, Netherlands, China, Poland, Turkey, Greece, India, Malaysia, Thailand, Vietnam, Japan, Korea, Australia



Smart Energy Management System

GoodWe Smart Energy Management System (SEMS) is a cost-free monitoring platform which offers reliable operation of photovoltaic plants for maximum yields. SEMS allows operators to simultaneously monitor a diverse range of photovoltaic power plants in different locations in real time. Extensive data processing, customized charts, alarm and maintenance functions ensure that operators, operations managers and asset managers can comfortably and efficiently manage the systems, ensuring maximum yields.

SEMS includes a range of functions and features to ensure reliable operation and to deliver precise information to operators at the push of a button. It is accessible by multiple accounts with different levels of access for owners, installers and EPC companies.

Multilingual Platform



All-in-one Monitoring



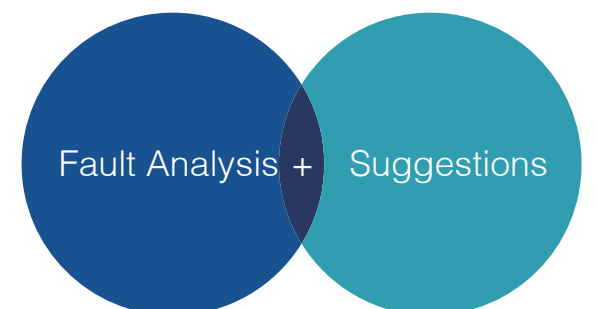
The live and archived data from any PV power plants in a particular account can be called up and graphically displayed.



Dynamic carousel of all the plants under your account



...>...

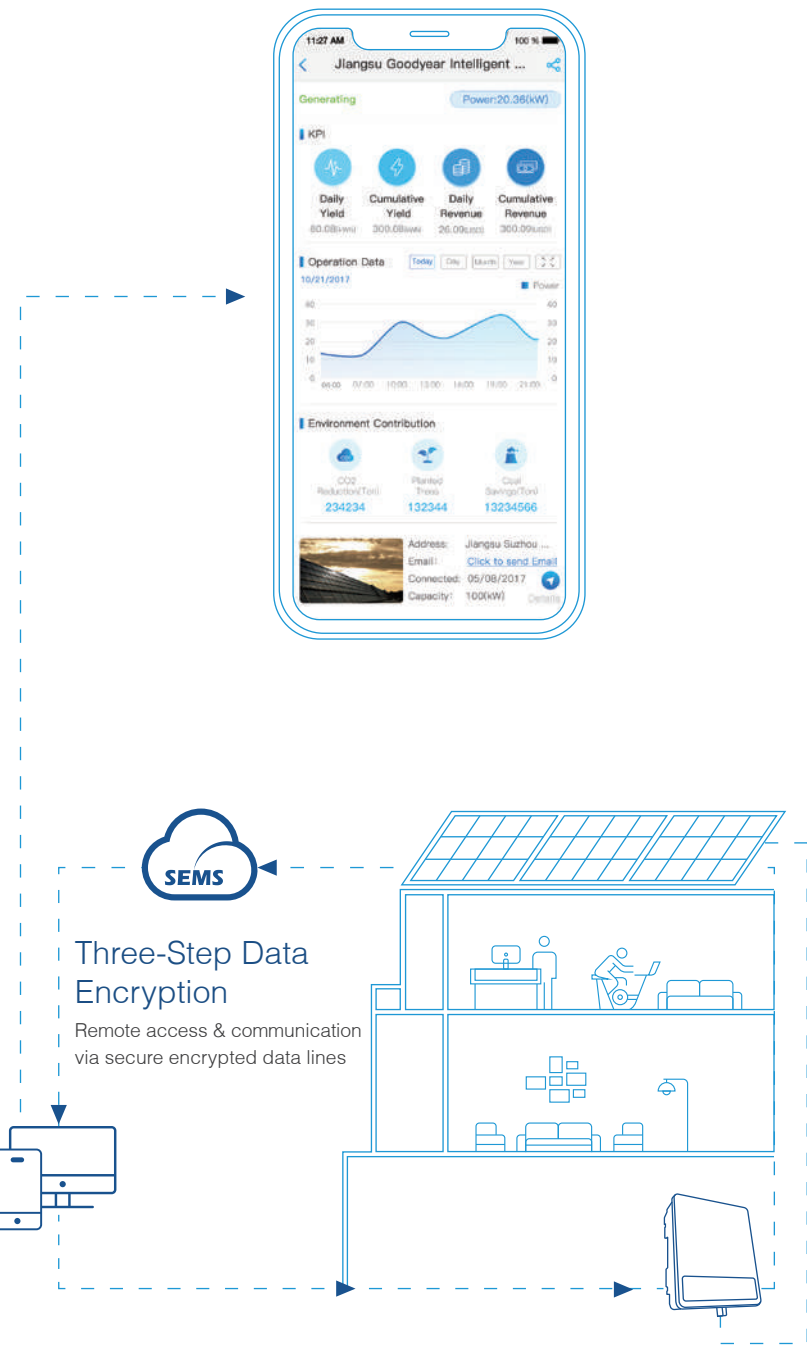


Lower O&M cost:
Full visibility of system performance & remote troubleshooting

Multi-terminal Compatibility And Sharing



Generation Report & Customized Data Analysis



Precise and comprehensive detection & evaluation of plant data

The content and design of reports can be adjusted to suit your individual requirements. A report generator is also available in addition to standard reports.

GoodWe Solar Academy

GoodWe Solar Academy (GSA) is going all out to make the PV solutions more visual, by sharing knowledge of inverters and PV applications, providing trainings and technical support to stakeholders across the globe.



PV system solution

GSA provides PV solutions covering all PV applications including residential, commercial and industrial, energy storage and utility-scale projects. We always take into account features of the local market, actual situation of the project and customers' special requirements for a better solution.



Technical Content

GSA provides content covering all product categories as well as technical perspectives, whether C&I solution or energy storage applications, installation and O&M instructions or load monitoring solutions, compatibility with different grid types or with third-party products.



Local technical support

Thanks to GoodWe's global network, GSA can provide in-country trainings and workshops all around the world. Also, technical consulting and customized courses according to the needs of local clients are available.



Solar Community

GSA serves several purposes, and users have come to expect more from us gradually. That's why we now have the GoodWe Solar Community (community.goodwe.com).

- Training base
It is a digital PV classroom providing free online training and a gathering of the offline workshop.
- Digital library
A digital library collecting technical solutions, industry news, case studies, guidance videos and other forms you might expect.
- PV Forum
It's also a digital forum you can ask for assistance, voice your opinion, and talk with GoodWe.

GoodWe Workshops

Goodwe Solar Academy workshops are designed to help you gain useful knowledge through industry-specific case studies that are integrated with theory and practice. We have traveled to 50 countries and 148 cities over the past 5 years, shared insights with more than 40,000 customers and developers in the PV industry.



Online Trainings

We jointly held 78 online webinar sessions with BYD, JA Solar and other partners in 2020, with a total number of participants exceeding 4900. In March 2021, we held a series of seminars –“GOODWEEK”– to share insights into development situations, forecasts and technology trends from the perspective of different markets. In the space of a week, the six webinar sessions attracted over 5,000 viewers for the live broadcast and more than 11,000 views throughout the event. Also, the events have reached more than 750,000 people on social media, with more than 240,000 video views.



GoodWe Projects Reference



GROUND/UTILITY PROJECTS



COMMERCIAL ROOFTOP



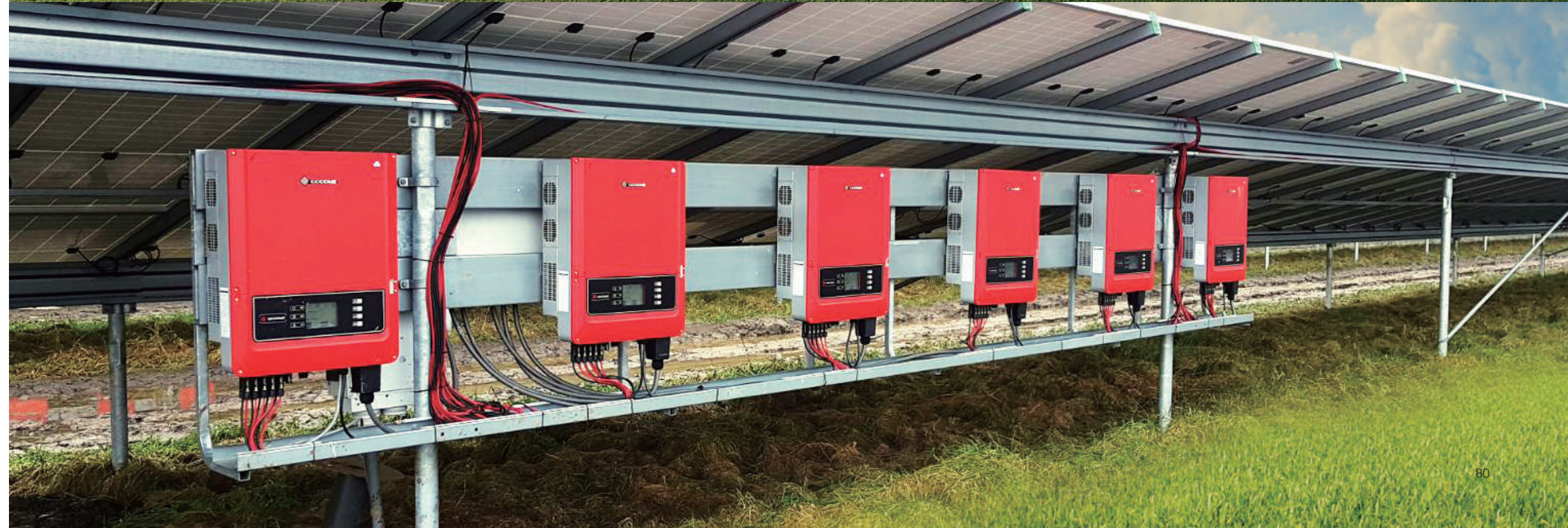
RESIDENTIAL ROOFTOP



ENERGY STORAGE SYSTEM



De Munt Emmeloord
The Netherlands





40 MW | Shandong
China



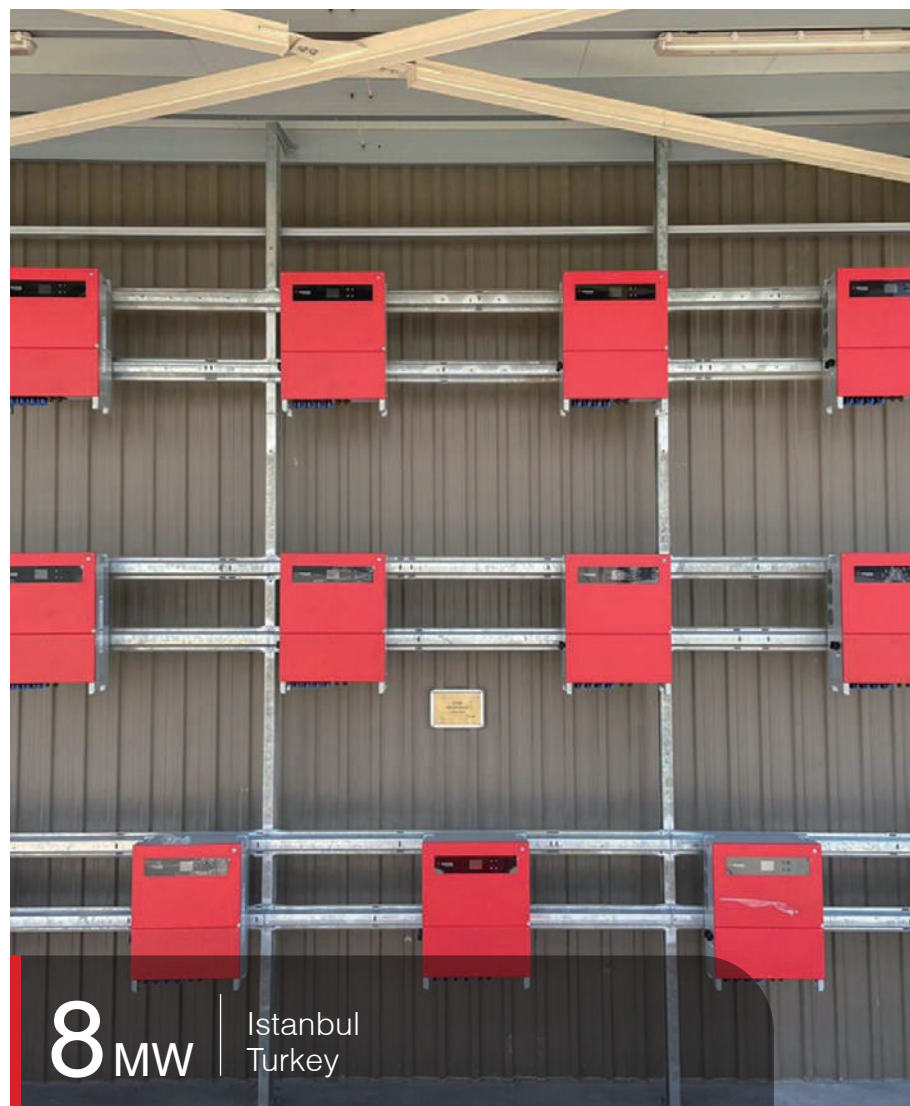
12 MW | Rotterdam
The Netherlands



6 MW | Griene Greide Garyp
The Netherlands



5 MW | Assen Circuit
The Netherlands





2 MW | Amsterdam
The Netherlands



700 kW | Yeosu
South Korea



20 kW | Vineyard
South Africa



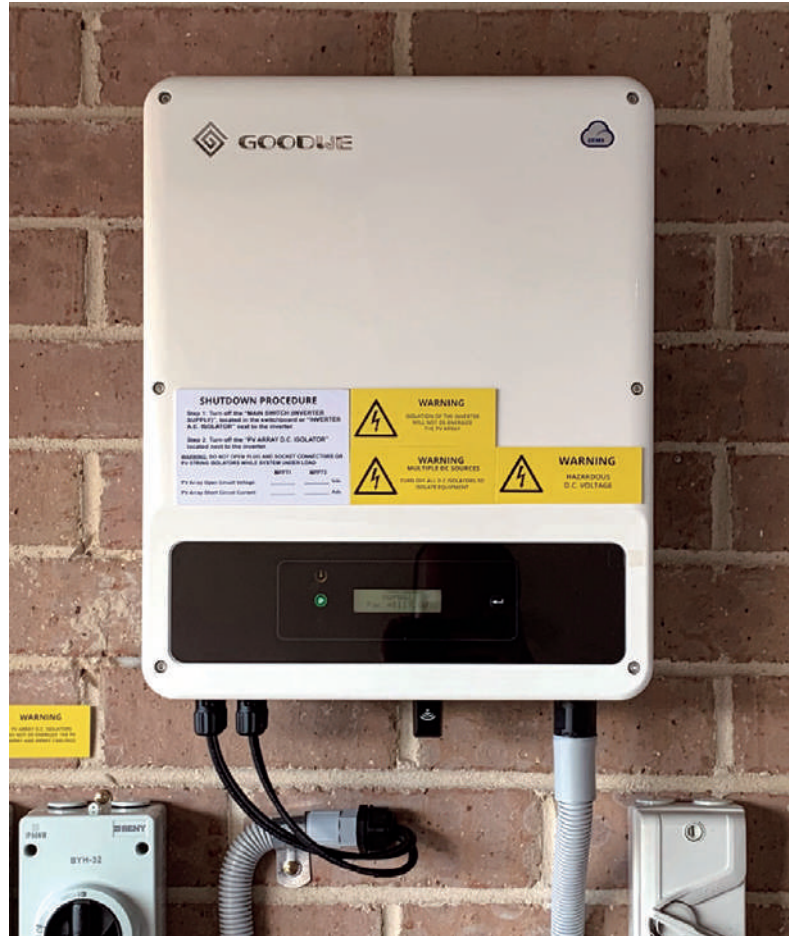
200 kW | Antonio
Switzerland



22.7 kW | Antalya
Turkey



200 kW | Berwickshire
UK



30 kW | Melbourne
Australia



12 kW | Copenhagen
Denmark





5 kW | Leeds UK



5 kW | Cape Town South Africa



5 kW | Berwickshire UK