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Good Quality, Good Value, Good Service, GoodWe!

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Smart Photovoltaic Inverter Series

JIANGSU GOODWE POWER SUPPLY TECHNOLOGY CO.,LTD.

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GOODWE COMPANY PROFILE

GoodWe (Jiangsu) Power Supply Technology Co., Ltd. is a leading technology company based in Suzhou, China. The company specialises in manufacturing of solar PV inverters and other electronic components for the generation and storage of renewable energy. World renowned electronics giant JXT Group is the largest investor and we are also funded in part by the Chinese government. JXT Group is one of the largest Chinese manufacturers for electronic connectors and a major supplier to Apple and Samsung for their mobile devices.

Technological innovation is GoodWe's main core competence. With 100 R&D staff in-house, it offers a comprehensive portfolio of products for residential and commercial systems, ensuring that performance and quality go hand-in-hand across the entire range. We have already developed and produced eight series of solar products (NS, DNS, SDT, DT, MT, HF, ES, BP) ranging from 1.0 to 80kW. In 2014, the GoodWe R&D centre was appointed as Jiangsu's Renewable Energy Engineering Technology Research Center of On-Grid Inverters. Also, our Smart Energy Management System (SEMS) has been developed to enable utility companies and network operators to meet diverse energy management demands from customers.

Since GoodWe's foundation in 2010, our company mission has been to continuously bring quality products and excellent customer care, as well as good value for money, to our global customers. The GoodWe solar inverter models of GW4000-SS and GW17K-DT have both achieved "Double A" in PHOTON tests. This has led to GoodWe's single-phase inverters ranking Top 3 and our three-phase inverters ranking Top 5 in the world.

GoodWe has set up an integrated service system for pre-sale, in-sale and after-sale and has established service centres worldwide. The company has developed a concept of "workshops" which aim to offer global support to all customers including project consulting, technical training, onsite support and after-sales service.

In just a few years, GoodWe's solar inverters and components have become synonymous with technological innovation, build quality and unparalleled customer service and are highly spoken of by our customers worldwide.

Core Features

Highly insist on product quality

- Each component comes from industry-leading suppliers
- Each product passes ATS test strictly
- Each product has a report with 10 key performance indexes

Smart design and precise workmanship

- Global internet monitoring system
- 30% lighter compared with similar products

World-class product performance

- 1-5kW products conversion efficiency up to 97.8%
- 9-25kW products conversion efficiency up to 98.2%
- All products' MPPT efficiency up to 99.5%
- Products' THDi less than 1% (SS)

High safety and reliability

- Up to 13 safety measurements
- IP65 anti-dust and water-proof applied
- DC switch
- World-wide certificates (VDE0126-1-1, VDE-AR-N 4105, CE, SAA, G83/2, G59/3, EN50438, CGC, CQC, MEA, PEA...)



江苏固德威电源科技股份有限公司
JIANGSU GOODWE POWER SUPPLY TECHNOLOGY CO., LTD.



NS Series (Single-MPPT, Single-Phase) 1.0kW~3.0kW

GoodWe NS series inverter adopts cutting-edge technology in photovoltaic fields, designed under modern industrial concept. Inheriting all the excellent traits from GoodWe SS and DS series, the NS series is much smarter in size and weight. It makes the series convenient for transport and suitable for different installation environments. Comprehensive MPPT technology, software and hardware technology is guaranteed to maximize the life-span of these inverters.

- Up to 10 safety measurements

■ DC switch

■ IP65 dust-proof and water-proof

■ 45°C full-load output
- Lower start-up voltage at 80V

■ Wide range of MPPT voltage

■ Wireless monitoring and communication

■ Fanless low-noise design
- 30% lighter than similar products

■ 20% Volume optimization

■ Perfect for 3-panel system

Technical Data	GW1000-NS	GW1500-NS	GW2000-NS	GW2500-NS	GW3000-NS
DC Input Data					
Max. allowed PV Power [W]	1300	1950	2600	3250	3900
Nominal DC Power [W]	1200	1800	2300	2700	3200
Max. DC voltage [V]	500	500	500	500	500
MPPT voltage range [V]	80~450	80~450	80~450	80~450	80~450
Starting voltage [V]	80	80	80	80	80
Max. DC current [A]	10	10	10	18	18
No. of DC connectors	1	1	1	1	1
No. of MPPTs	1	1	1	1	1
DC connector	MC4/ Phoenix/ Amphenol			MC4/ Phoenix/ Amphenol	
AC Output Data					
Norminal AC power [W]	1000	1500	2000	2500	3000
Max. AC power [W]	1000	1500	2000	2500	3000
Max. AC current [A]	5	7.5	10	12.5	13.5
Norminal AC output	50/60Hz; 230Vac			50/60Hz; 230Vac	
AC output range	45~55Hz/55~65Hz; 180~270Vac			45~55Hz/55~65Hz; 180~270Vac	
THDi	<3%			<3%	
Power factor	0.8 leading~0.8 lagging			0.8 leading~0.8 lagging	
Grid connection	Single phase	Single phase	Single phase	Single phase	Single phase
Efficiency					
Max. efficiency	96.5%	97.0%	97.0%	97.5%	97.5%
Euro efficiency	>96.0%	>96.0%	>96.0%	>97.0%	>97.0%
MPPT adaptation efficiency	99.9%	99.9%	99.9%	99.9%	99.9%
Protection					
Residual current monitoring unit	Integrated			Integrated	
Anti-islanding protection	Integrated			Integrated	
DC switch	Integrated (optional)			Integrated (optional)	
AC over current protection	Integrated			Integrated	
Insulation monitoring	Integrated			Integrated	
Certifications & Standards					
Grid regulation	G83/2, VDE0126-1-1, AS4777.2&3, EN50438, ERDF-NOI-RES_13E;			G83/2, VDE0126-1-1, AS4777.2&3, EN50438, ERDF-NOI-RES_13E;	
Safety	According to IEC62109-1&-2, AS3100			According to IEC62109-1&-2, AS3100	
EMC	EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN 61000-3-2, EN 61000-3-3			EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN 61000-3-2, EN 61000-3-3	
General Data					
Dimensions (WxHxD) [mm]	344*274.5*128			344*274.5*128	
Weight [kg]	7.5			8.5	
Mounting	Wall bracket			Wall bracket	
Ambient temperature range	-25~60°C (> 45°C derating)			-25~60°C (> 45°C derating)	
Relative humidity	0~95%			0~95%	
Max. operating altitude	4000m(> 3000m derating)			4000m(> 3000m derating)	
Protection degree	IP65			IP65	
Topology	Transformerless			Transformerless	
Night power consumption [W]	<1			<1	
Cooling	Natural convection			Natural convection	
Noise emision [dB]	<25			<25	
Display	LCD			LCD	
Communication	Wi-Fi; RS485 or Ethernet			Wi-Fi; RS485 or Ethernet	
Standard warranty [years]	5/10/15/20/25 (optional)			5/10/15/20/25 (optional)	

Color Options



DNS Series (Dual-MPPT, Single-Phase)

GoodWe DNS series inverter adopts cutting-edge technology in photovoltaic fields, designed under modern industrial concept. Inheriting all the excellent traits from GoodWe SS and DS series, the DNS series is much smarter in size and weight. Excellent cooling design, comprehensive software and hardware technology is guaranteed to maximize the life-span of these inverters.

- Up to 10 safety measurements

■ DC switch

■ IP65 dust-proof and water-proof

■ 45°C full-load output
- Built-in anti-reverse function

■ 30% lighter than similar products

■ 20% Volume optimization

■ Wide range of MPPT voltage
- Multiple monitoring and communication

■ Fanless low-noise design

Technical Data	GW3000D-NS	GW3600D-NS	GW4200D-NS	GW5KD-NS	GW5000D-NS
DC Input Data					
Max. allowed PV Power [W]	3900	4680	5460	6500	6500
Nominal DC Power [W]	3300	3960	4600	5500	5500
Max. DC voltage [V]	580	580	580	580	580
MPPT voltage range [V]	80~550	80~550	80~550	80~550	80~550
Starting voltage [V]	120	120	120	120	120
Max. DC current [A]	11/11	11/11	11/11	11/11	11/11
No. of DC connectors	2	2	2	2	2
No. of MPPTs	2 (can parallel)		2 (can parallel)		
DC connector	MC4/ Phoenix/ Amphenol		MC4/ Phoenix/ Amphenol		
AC Output Data					
Normal AC power [W]	3000	3680	4200	4600	5000*
Max. AC power [W]	3000	3680	4200	4950	5000*
Max. AC current [A]	13.6	16	19	21.7	22.8**
Normal AC output	50/60Hz; 230Vac		50/60Hz; 230Vac		
AC output range	45~55Hz/55~65Hz; 180~270Vac		45~55Hz/55~65Hz; 180~270Vac		
THDi	<3%		<3%		
Power factor	0.8 leading~0.8 lagging		0.8 leading~0.8 lagging		
Grid connection	Single phase		Single phase		
Efficiency					
Max. efficiency	97.8%	97.8%	97.8%	97.8%	97.8%
Euro efficiency	>97.5%	>97.5%	>97.5%	>97.5%	>97.5%
MPPT adaptation efficiency	99.9%	99.9%	99.9%	99.9%	99.9%
Protection					
Residual current monitoring unit	Integrated		Integrated		
Anti-islanding protection	Integrated		Integrated		
DC switch	Integrated (optional)		Integrated (optional)		
AC over current protection	Integrated		Integrated		
Insulation monitoring	Integrated		Integrated		
Certifications & Standards					
Grid regulation	VDE-AR-N 4105, AS4777.2&3, RD1699, IEC62109-2/1, VDE0126-1-1+A1, EN50438 G83/G59		VDE-AR-N 4105, AS4777.2&3, RD1699, IEC62109-2/1, VDE0126-1-1+A1, EN50438 G83/G59		
Safety	IEC62109-1&-2, AS3100				
EMC	IEC/EN 61000-6-1,IEC/EN 61000-6-2,IEC/EN 61000-6-3,IEC/EN 61000-6-4,IEC/EN 61000-3-11, IEC/EN 61000-3-12				
General Data					
Dimensions (WxHxD) [mm]	347*432*145		347*432*145		
Weight [kg]	14		14		
Mounting	Wall bracket		Wall bracket		
Ambient temperature range	-25~60°C (>45°C derating)		-25~60°C (>45°C derating)		
Relative humidity	0~95%		0~95%		
Max. operating altitude	4000m(> 3000m derating)		4000m(> 3000m derating)		
Protection degree	IP65		IP65		
Topology	Transformerless		Transformerless		
Night power consumption [W]	<1		<1		
Cooling	Natural convection		Natural convection		
Noise emission [dB]	<25		<25		
Display	LCD		LCD		
Communication	Wi-Fi; RS485 or Ethernet		Wi-Fi; RS485 or Ethernet		
Standard warranty [years]	5/10/15/20/25 (optional)		5/10/15/20/25 (optional)		

*4600 VDE-AR-N4105; 4950 fro Australian; 5000 for other country

**22.8 for other country; 21.7 fro Australian

Color Options



Smart DT Series (Dual-MPPT, Three-Phase)

GoodWe smart DT series inverter is typically designed for the home solar systems, covering 4kW/5kW/6kW.By adopting cutting-edge technology of photovoltaic field, it provides three phase AC output, making home system connection well balanced , safer and more convenient. The integrated two MPPTs allow two-array inputs from different roof orientations. And the combination of both RS485 and Wi-Fi communication makes the system well interactive and extremely easy to monitor.

- Maximum Efficiency up to 98.3%

■ European Efficiency up to 98.0%

■ MPPT Efficiency up to 99.9%
- DC switch

■ IP65 dust-proof and water-proof

■ 45°C full-load output
- Super large 5-inch LCD

■ Lighter than similar products

■ Multiple monitoring and communication

Technical Data	GW4000-DT	GW5000-DT	GW6000-DT	GW8000-DT	GW9000-DT	GW10KN-DT
DC Input Data						
Max. allowed PV Power [W]	5200	6500	7800	9600	10800	12000
Nominal DC Power [W]	4200	5200	6200	8300	9400	10500
Max. DC voltage [V]	1000	1000	1000	1000	1000	1000
MPPT voltage range [V]	200~800	200~800	200~800	200~850	200~850	200~850
Starting voltage [V]	180	180	180	180	180	180
Max. DC current [A]	11/11	11/11	11/11	11/11	11/11	11/11
No. of DC connectors	2	2	2	2	2	2
No. of MPPTs	2 (can parallel)			2 (can parallel)		
DC connector	MC4/ Phoenix/ Amphenol			MC4/ Phoenix/ Amphenol		
AC Output Data						
Normal AC power [W]	4000	5000	6000	8000	9000	10000
Max. AC power [W]	4000	5000	6000	8000	9000	10000
Max. AC current [A]	7	8.5	10	12.1	13.6	15.2
Normal AC output	50/60Hz; 400Vac			50/60Hz; 400Vac		
AC output range	45~55Hz/55~65Hz; 310~480Vac			45~55Hz/55~65Hz; 310~480Vac		
THDi	<1.5%			<2%		
Power factor	0.8 leading~0.8 lagging			0.80leading...0.80lagging		
Grid connection	3W/N/PE			3W/N/PE		
Efficiency						
Max. efficiency	98%	98%	98%	98.3%	98.3%	98.3%
Euro efficiency	>97.5%	>97.5%	>97.5%	>98.0%	>98.0%	>98.0%
MPPT adaptation efficiency	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
Protection						
Residual current monitoring unit	Integrated			Integrated		
Anti-islanding protection	Integrated			Integrated		
DC switch	Integrated (optional)			Integrated(optional)		
AC over current protection	Integrated			Integrated		
Insulation monitoring	Integrated			Integrated		
Certifications & Standards						
Grid regulation	VDE-AR-N 4105, AS4777.2, ERDF-NOI-RES_13E;VDE0126-1-1, EN50438 ,G83/2					
Safety	IEC62109-1&-2					
EMC	EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN 61000-3-2, EN 61000-3-3					
General Data						
Dimensions (WxHxD) [mm]	516*474*192			516*474*192		
Weight [kg]	24			24		
Mounting	Wall bracket			Wall bracket		
Ambient temperature range	-25~60°C (>45°C derating)			-25~60°C (>45°C derating)		
Relative humidity	0~95%			0~95%		
Max. operating altitude	4000m(> 3000m derating)			4000m(> 3000m derating)		
Protection degree	IP65			IP65		
Topology	Transformerless			Transformerless		
Night power consumption [W]	<1			<1		
Cooling	Natural convection			Natural convection		
Noise emission [dB]	<30			<30		
Display	5.0" LCD			5.0" LCD		
Communication	Wi-Fi; RS485 or Ethernet			Wi-Fi; RS485 or Ethernet		
Standard warranty [years]	5/10/15/20/25 (optional)			5/10/15/20/25 (optional)		



Smart DT Series (Australia)

GoodWe smart DT series inverter is typically designed for the home solar systems, covering 4KW/5KW/6KW. By adopting cutting-edge technology of photovoltaic field, it provides three phase AC output, making home system connection well balanced, safer and more convenient. The integrated two MPPTs allow two-array inputs from different roof orientations. And the combination of both RS485 and Wi-Fi communication makes the system well interactive and extremely easy to monitor.

- Maximum Efficiency up to 96.8%
- European Efficiency up to 96.7%
- MPPT Efficiency up to 99.9%
- IP65 dust-proof and water-proof
- 45°C full-load output
- Lighter than similar products
- Multiple monitoring and communication

Technical Data	GW4000L-DT	GW5000L-DT	GW6000L-DT
DC Input Data			
Max. allowed PV Power [W]	5200	6500	7800
Nominal DC Power [W]	4200	5200	6200
Max. DC voltage [V]	600	600	600
MPPT voltage range [V]	200~550	200~550	200~550
Starting voltage [V]	180	180	180
Max. DC current [A]	11/11	11/11	11/11
No. of DC connectors	2	2	2
No. of MPPTs	2 (can parallel)	2 (can parallel)	2 (can parallel)
DC connector	MC4/ Phoenix/ Amphenol	MC4/ Phoenix/ Amphenol	MC4/ Phoenix/ Amphenol
AC Output Data			
Normal AC power [W]	4000	5000	6000
Max. AC power [W]	4000	5000	6000
Max. AC current [A]	7	8.5	10
Normal AC output	50/60Hz; 400Vac	50/60Hz; 400Vac	50/60Hz; 400Vac
AC output range	45~55Hz/55~65Hz; 310~480Vac	45~55Hz/55~65Hz; 310~480Vac	45~55Hz/55~65Hz; 310~480Vac
THDi	<1.5%	<1.5%	<1.5%
Power factor	0.8 leading~0.8 lagging	0.8 leading~0.8 lagging	0.8 leading~0.8 lagging
Grid connection	3W/N/PE	3W/N/PE	3W/N/PE
Efficiency			
Max. efficiency	96.8%	96.8%	96.8%
Euro efficiency	>95.5%	>95.5%	>95.5%
MPPT adaptation efficiency	99.9%	99.9%	99.9%
Protection			
Residual current monitoring unit	Integrated	Integrated	Integrated
Anti-islanding protection	Integrated	Integrated	Integrated
DC switch	Integrated (optional)	Integrated (optional)	Integrated (optional)
AC over current protection	Integrated	Integrated	Integrated
Insulation monitoring	Integrated	Integrated	Integrated
Certifications&Standards			
Grid regulation	AS4777.2/3, G83/2, EN50438	AS4777.2/3, G83/2, EN50438	AS4777.2/3, G83/2, EN50438
Safety	IEC62109-1&-2, AS3100	IEC62109-1&-2, AS3100	IEC62109-1&-2, AS3100
EMC	EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN 61000-3-2, EN 61000-3-3		
General Data			
Dimensions (WxHxD) [mm]	516*474*192	516*474*192	516*474*192
Weight [kg]	24	24	24
Mounting	Wall bracket	Wall bracket	Wall bracket
Ambient temperature range	-25~60°C (>45°C derating)	-25~60°C (>45°C derating)	-25~60°C (>45°C derating)
Relative humidity	0~95%	0~95%	0~95%
Max. operating altitude	4000m(> 3000m derating)	4000m(> 3000m derating)	4000m(> 3000m derating)
Protection degree	IP65	IP65	IP65
Topology	Transformerless	Transformerless	Transformerless
Night power consumption [W]	<1	<1	<1
Cooling	Natural convection	Natural convection	Natural convection
Noise emission [dB]	<30	<30	<30
Display	5.0" LCD	5.0" LCD	5.0" LCD
Communication	Wi-Fi; RS485 or Ethernet	Wi-Fi; RS485 or Ethernet	Wi-Fi; RS485 or Ethernet
Standard warranty [years]	5/10/15/20/25 (optional)	5/10/15/20/25 (optional)	5/10/15/20/25 (optional)

LVDT Series (South America)

South American countries share different grid voltage ranges to the rest of the world. They mainly cover three types of ratings: 208V/220V/240V. GoodWe LVDT series inverter with low voltage power output is specifically designed for the South American PV market. This series features advanced software of algorithm control and hardware optimization. The models (GW12KLV-DT & GW15KLV-DT) are designed and manufactured to ensure high efficiency, high quality and high reliability.

- Maximum Efficiency up to 98.4%

■ European Efficiency up to 98.1%

■ MPPT Efficiency up to 99.9%
- IP65 dust-proof and water-proof

■ 45°C full-load output
- Wide range of MPPT voltage

■ Wide range of output voltage

■ Multiple monitoring and communication

Technical Data

Technical Data		GW12KLV-DT	GW15KLV-DT
DC Input Data			
Max. allowed PV Power [W]		15600	19500
Nominal DC Power [W]		12300	15400
Max. DC voltage [V]		800	800
MPPT voltage range [V]		260~650	260~650
Starting voltage [V]		250	250
Max. DC current [A]		22/22	27/27
No. of DC connectors		4	6
No. of MPPTs		2	2
DC connector		MC4/ Phoenix/ Amphenol	MC4/ Phoenix/ Amphenol
AC Output Data			
Norminal Apparant power [VA]	208Vac System	11300	14200
	220Vac System	12000	15000
	240Vac System	13000	16000
Max. Apparant power [VA]	208/220/240Vac System	13000	16000
Max. AC current [A]		31.5	39.5
Norminal AC output		50/60Hz; 208/220/240Vac	50/60Hz; 208/220/240Vac
AC output range		45~55Hz/55~65Hz; 150~300Vac	45~55Hz/55~65Hz; 150~300Vac
THDi		<3%	<3%
Power factor		0.80leading...0.80lagging	0.80leading...0.80lagging
Grid connection		3W/N/PE	3W/N/PE
Efficiency			
Max. efficiency		98.4%	98.4%
Euro efficiency		>98.1%	>98.1%
MPPT adaptation efficiency		99.9%	99.9%
Protection			
Residual current monitoring unit		Integrated	Integrated
Anti-islanding protection		Integrated	Integrated
DC switch		Integrated (optional)	Integrated (optional)
DC SPD		Integrated	Integrated
AC over current protection		Integrated	Integrated
Insulation monitoring		Integrated	Integrated
Certifications&Standards			
Grid regulation		IEEE 1547	IEEE 1547
Safety		IEC62109-1&-2	IEC62109-1&-2
EMC		EN 61000-6-1,EN 61000-6-2,EN 61000-6-3,EN 61000-6-4, EN 61000-3-11, EN 61000-3-12	
General Data			
Dimensions (WxHxD) [mm]		516*650*203mm	516*650*203mm
Weight [kg]		40	40
Mounting		Wall bracket	Wall bracket
Ambient temperature range		-25~60°C (>45°C derating)	-25~60°C (>45°C derating)
Relative humidity		0~95%	0~95%
Max. operating altitude		4000m (>3000m derating)	4000m (>3000m derating)
Protection degree		IP65	IP65
Topology		Transformerless	Transformerless
Night power consumption [W]		<1	<1
Cooling		Fan cooling	Fan cooling
Noise emission [dB]		<45	<45
Display		5.0" LCD	5.0" LCD
Communication		Wi-Fi; RS485 or Ethernet	Wi-Fi; RS485 or Ethernet
Standard warranty [years]		5/10/15/20/25(optional)	5/10/15/20/25(optional)



GOLDEN PIN金點
DESIGN AWARD 设计獎



DT Series (Dual-MPPT, Three-Phase)

GoodWe DT series inverter adopts cutting-edge technology in photovoltaic fields. Higher conversion efficiency and lower energy losses are guaranteed to maximize customer satisfaction. With its reliable power grid support management and high protective class, the DT series is compatible with different types of branded solar panels and is also ideal for commercial rooftop systems. This safe and reliable series is the first choice for residential, commercial installations and power plants.

- Maximum Efficiency up to 98.4%

■ European Efficiency up to 98.1%

■ MPPT Efficiency up to 99.9%
- DC switch

■ IP65 dust-proof and water-proof rating

■ 45°C full-load output
- Super large 5-inch LCD

■ 30% lighter than similar products

■ Multiple monitoring and communication

Technical Data

Technical Data	GW15K-DT	GW17K-DT	GW20K-DT	GW25K-DT
DC Input Data				
Max. allowed PV Power [W]	19500	22100	26000	32500
Nominal DC Power [W]	15400	17500	20500	25800
Max. DC voltage [V]	1000	1000	1000	1000
MPPT voltage range [V]	260~850	260~850	260~850	260~850
Starting voltage [V]	250	250	250	250
Max. DC current [A]	22/22	22/22	22/22	27/27
No. of DC connectors	4	4	4	6
No. of MPPTs	2 (can parallel)	2 (can parallel)	2 (can parallel)	2 (can parallel)
DC connector	MC4/ Phoenix/ Amphenol			
AC Output Data				
Normal AC power [W]	15000	17000	20000	25000
Max. AC power [W]	15000	17000	20000	25000
Max. AC current [A]	25	25	30	37
Normal AC output	50/60Hz; 400Vac			
AC output range	45~55Hz/55~65Hz; 310~480Vac			
THDi	<1.5%			
Power factor	0.8 leading~0.8 lagging			
Grid connection	3W/N/PE			
Efficiency				
Max. efficiency	98.2%	98.2%	98.4%	98.4%
Euro efficiency	>97.7%	>97.7%	>98.1%	>98.1%
MPPT adaptation efficiency	99.9%	99.9%	99.9%	99.9%
Protection				
Residual current monitoring unit	Integrated			
Anti-islanding protection	Integrated			
DC switch	Integrated (optional)			
AC over current protection	Integrated			
Insulation monitoring	Integrated			
Certifications & Standards				
Grid regulation	VDE-AR-N4105, AS4777.2/3, IEC61727, VDE0126-1-1, EN50438, NRS097-2-1, G59/3, ERDF-NOI-RES_13E;		AS4777.2/3, En50438, VDE-AR-N 4105, VDE0126-1-1, MEA&PEA, G59/3, NRS097-2-1, IEC61727, ERDF-NOI-RES_13E	VDE-AR-N 4105, IEC61727, VDE0126-1-1, EN50438, G59/3;
Safety	IEC62109-1&-2, AS3100			IEC62109-1&-2
EMC	EN 61000-6-1,EN 61000-6-2,EN 61000-6-3,EN 61000-6-4, EN 61000-3-11, EN 61000-3-12			
General Data				
Dimensions (WxHxD) [mm]	516*650*203			
Weight [kg]	39			40
Mounting	Wall bracket			
Ambient temperature range	-25~60℃ (>45℃ derating)			
Relative humidity	0~95%			
Max. operating altitude	4000m(> 3000m derating)			
Protection degree	IP65			
Topology	Transformerless			
Night power consumption [W]	<1			
Cooling	Fan cooling			
Noise emission [dB]	<45			
Display	5.0" LCD			
Communication	Wi-Fi; RS485 or Ethernet			
Standard warranty [years]	5/10/15/20/25 (optional)			



MT Series (Four-MPPT, Three-Phase)

GoodWe MT series inverter is ideal for large and medium-sized distribution projects, especially for large-scaled commercial roofs and farm plants. The range boasts advanced topology and innovative control technology to achieve a maximum efficiency of 98.8%, aiming at maximising long-term returns and profitability for the system owner.

- Maximum Efficiency up to 98.8%

■ European Efficiency up to 98.5%

■ MPPT Efficiency up to 99.9%
- Combiner box integration function

■ Four MPP trackers

■ Real-time monitoring on up to 13 strings of panels

■ Ultra-multifunctional LED display screen
- Multiple monitoring and communication functions (Wi-Fi/RS485/Ethernet)

■ DC & AC lightning protection (Type II)

■ IP65 water-proof and dust-proof rating (IP68 protection level for the fans)

Technical Data	GW50K-MT		GW60K-MT		GW65KHV-MT		GW75KHV-MT	
DC Input Data								
Max. allowed PV Power [W]	65000		72000		75000		80000	
Nominal DC Power [W]	51500		62000		67000		77000	
Max. DC voltage [V]	1000		1000		1000		1000	
MPPT voltage range [V]	260~850		260~850		260~850		260~850	
Starting voltage [V]	250		250		250		250	
Max. DC current [A]	28 / 28 / 19 / 19		28 / 28 / 28 / 28		28 / 28 / 28 / 28		28 / 28 / 28 / 36	
No. of DC connectors	10		12		12		13	
No. of MPPTs	4		4		4		4	
DC connector	MC4/ Phoenix/ Amphenol				MC4/ Phoenix/ Amphenol			
AC Output Data								
Normal AC power [W]	50000		60000		65000		75000	
Max. AC power [W]	55000		64000		66480		75000	
Max. AC current [A]	80		90		80		90	
Normal AC output	50/60Hz; 400Vac				50/60Hz; 480Vac			
AC output range	45~55Hz/55~65Hz; 310~480Vac				45~55Hz/55~65Hz; 422~528Vac			
THDi	<3%				<3%			
Power factor	0.80 leading...0.80 lagging				0.80 leading...0.80 lagging			
Grid connection	3W/N/PE				3W/PE			
Efficiency								
Max. efficiency	98.7%		98.8%		98.8%		98.8%	
Euro efficiency	98.3%		98.5%		98.5%		98.5%	
MPPT adaptation efficiency	99.9%		99.9%		99.9%		99.9%	
Protection								
Residual current monitoring unit	Integrated				Integrated			
Anti-islanding protection	Integrated				Integrated			
PV array string fault monitoring	Integrated				Integrated			
DC fuse	Integrated				Integrated			
DC switch	Integrated (optional)				Integrated (optional)			
DC SPD	Type II				Type II			
AC SPD	Type II				Type II			
SPD fault monitoring	Integrated				Integrated			
AC over current protection	Integrated				Integrated			
Insulation monitoring	Integrated				Integrated			
Certifications & Standards								
Grid regulation	VDE0126-1-1, AS4777.2, G59/3, VDE-AR-N 4105, EN50438, PEA		VDE0126-1-1, EN50438, G59/3, VDE-AR-N 4105, AS4777.2,		VDE0126-1-1, VDE-AR-N 4105, AS4777.2, G59/3, EN50438			
Safety	EN62109-1&-2		EN62109-1&-2		EN62109-1&-2			
EMC	EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4				EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4			
General Data								
Dimensions (WxHxD)	586*915*263mm				586*915*263mm			
Weight (kg)	66kg		67kg		67kg		67kg	
Mounting	Wall bracket				Wall bracket			
Ambient temperature range	-25~60°C				-25~60°C			
Relative humidity	0~95%				0~95%			
Max. operating altitude	4000m				4000m			
Protection degree	IP65				IP65			
Topology	Transformerless				Transformerless			
Cooling	Fan cooling				Fan cooling			
Display	LCD				LCD			
Communication	Wi-Fi; RS485 or Ethernet				Wi-Fi; RS485 or Ethernet			
Standard warranty(years)	5/10/15/20/25(optional)				5/10/15/20/25(optional)			

ES Series

The GoodWe ES series bi-directional energy storage inverter is applicable with both on-grid and off-grid PV systems. It can control the flow of energy intelligently. During daytime, the PV plant generates electricity which can be provided to the loads, fed into the grid or charge the battery. The electricity stored can be released when the loads require it during the night. Additionally, the power grid can also charge the storage devices via the inverter.

- Innovative solution for Energy Storage

■ Charge controller and inverter integrated

■ Intelligent battery management function

■ Capable of being grid-interactive or grid-independent

■ Compatible with both Lead-acid and Li-Ion battery

■ More security & performance for same costs
- IP65 dust-proof and water-proof rating

■ 45°C full-load output
- Monitoring inverters freely via computers or mobile phones

■ Fanless low-noise design

Technical Data

	GW5048D-ES	GW3648D-ES
Solar		
Max. allowed PV Power [W]	6000	4600
Nominal DC Power [W]	5000	4200
Max. DC voltage [V]	580	580
MPPT voltage range [V]	125~550	125~550
Starting voltage [V]	150	150
Max. DC current [A]	11/11	11/11
No. of DC connectors	2	2
No. of MPPTs	2 (can parallel)	2 (can parallel)
DC connector	MC4/ Phoenix/ Amphenol	MC4/ Phoenix/ Amphenol
Battery		
Battery type	Lead-acid or Li-Ion	Lead-acid or Li-Ion
Norminal Voltage [V]	48	48
Max Discharge power [W]	4600	3600
MAX Charge power [W]	4600, programmable	3600, programmable
Battery capacity [Ah]	≥ 100 (depending requirement)	≥ 100 (depending requirement)
Charging curve	3-stage adaptive with maintenance	3-stage adaptive with maintenance
Charging voltage [V]	60 (configurable)	60 (configurable)
Battery temperature compensation	Included (Li-Ion)	Included (Li-Ion)
Battery voltage sense	Integrated	Integrated
Current shunt	Integrated	Integrated
AC Output Data		
Norminal AC power [W]	4600	3600
Max. AC power [W]	4600/4850/4950/5100*	3600
Peak power (Back-up) [W]	1.5x Pnom, 10sec	1.5x Pnom, 10sec
Max. AC current [A]	20/21**	16
Norminal AC output	50/60Hz; 230Vac	50/60Hz; 230Vac
AC output range	45~55Hz/55~65Hz; 180~270Vac	45~55Hz/55~65Hz; 180~270Vac
AC output (Back-up)	230Vac ±2%, 50Hz(60Hz optional) ±0.2%, THDv<3% (linear load)	
THDi	<1.5%	<1.5%
Power factor	0.8 leading~0.8 lagging	0.8 leading~0.8 lagging
Grid connection	Single phase	Single phase
Efficiency		
Max. efficiency	97.6%	97.6%
Euro efficiency	>97.0%	>97.0%
MPPT adaptation efficiency	99.9%	99.9%
Protection		
Residual current monitoring unit	Integrated	Integrated
Anti-islanding protection	Integrated	Integrated
DC switch (PV)	Integrated (optional)	Integrated (optional)
AC over current protection	Integrated	Integrated
Insulation monitoring	Integrated	Integrated
Certifications&Standards		
Grid regulation	VDE-AR-N4105, VDE 0126-1-1, G83/2, G59/3, AS4777.2/3	
Safety	IEC62109-1&-2, AS3100, IEC62040-1	
EMC	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4, EN61000-3-11, EN61000-3-12	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4, EN61000-3-2, EN61000-3-3
General Data		
Dimensions (WxHxD) [mm]	516*440*184	516*440*184
Weight [kg]	30	28
Mounting	Wall bracket	Wall bracket
Ambient temperature range	-25~60°C (>45°C derating)	-25~60°C (>45°C derating)
Relative humidity	0~95%	0~95%
Max. operating altitude	4000m(> 3000m derating)	4000m(> 3000m derating)
Protection degree	IP65	IP65
Topology	Transformerless	Transformerless
Standby losses [W]	<8	<8
Cooling	Natural convection	Natural convection
Noise emision [dB]	<25	<25
Display	LED light & APP	LED light & APP
Communication	Wi-Fi; RS485 or Ethernet	Wi-Fi; RS485 or Ethernet
Standard warranty [years]	5	5

*4600 for VDE-AR-N4105, 4850 for Thailand, 4950 for Australia, 5100 for other countries

**21 for Thailand, 20 for other countries



EM Series

Inheriting all the excellent traits from the GoodWe ES series bi-directional energy storage inverter, the EM series is much more compact in size and weight, and is compatible with both on-grid and off-grid PV systems. It can control the flow of energy intelligently. During daytime, the PV plant generates electricity which can be provided to the loads, fed into the grid or charge the battery. The electricity stored can be released when the loads require it, for example during the night. Additionally, the grid can also be used to charge the storage devices via the inverter (UPS function).

- Integrated charge controller and inverter

■ Intelligent battery management function

■ Grid–tied or grid–independent operation

■ Compatible with both lead–acid and Li–ion batteries
- IP65 dust-proof and water-proof rating

■ Increased performance and security
- Easy remote monitoring via PCs, tablets and mobiles

■ Fanless low–noise design

Technical Data

	GW3048-EM	GW3648-EM	GW5048-EM
Battery Input Data			
Battery Type	Li-Ion or Lead-acid	Li-Ion or Lead-acid	Li-Ion or Lead-acid
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
Charging Strategy for Lead-acid Battery	3-stage adaptive with maintenance	3-stage adaptive with maintenance	3-stage adaptive with maintenance
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)*4	125	125	125
MPPT Range for Full Load (V)	280~500	170~500	230~500
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
No. of MPP Trackers	1	2	2
No. of Strings per MPP Tracker	1	1	1
AC Output Data (On-grid)			
Nominal Power Output to Utility Grid (W)	3000	3680	5000*5
Max. Apparent Power Output to Utility Grid (VA)	3000	3680	5000*5
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*6
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)*7	3500, 10sec	3500, 10sec	3500, 10sec
Automatic Switch Time (ms)	10	10	10
Nominal Output Voltage (V)	230 (±2%)	230 (±2%)	230 (±2%)
Nominal Ouput 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%
Europe Efficiency	97.0%	97.0%	97.0%
MPPT Efficiency	99.9%	99.9%	99.9%
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	Nature Convection	Nature Convection	Nature Convection
Noise (dB)	<25	<25	<25
User Interface	LED & APP	LED & APP	LED & APP
Communication with BMS	RS485; CAN	RS485; CAN	RS485; CAN
Communication with Meter	RS485	RS485	RS485
Communicaion 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	High Frequency Isolation	High Frequency Isolation	High Frequency Isolation
Certifications & Standards			
Grid Regulation	AS4777.2, G83/G100, CEI 0-21, VDE4105-AR-N, VDE0126-1-1, EN50438		
Safety Regulation	IEC62109-1&2, IEC62040-1		
EMC	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4		

*1: For lead-acid battery, default charge current is 0.15C, which is can be configurable up to 0.5C by APP EManage and cannot exceed 50A.
C means the battery capacity, such as the battery capacity is 100Ah, default charge current 0.15C is 0.15 * 100A = 15A.
For Li-Ion battery, discharge and charge current follows the command of BMS which doesn't exceed 50A.*

*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 VDE4105-AR-N & VDE0126-1-1

*6: 21.7A for Australia and New Zealand

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



SBP Series

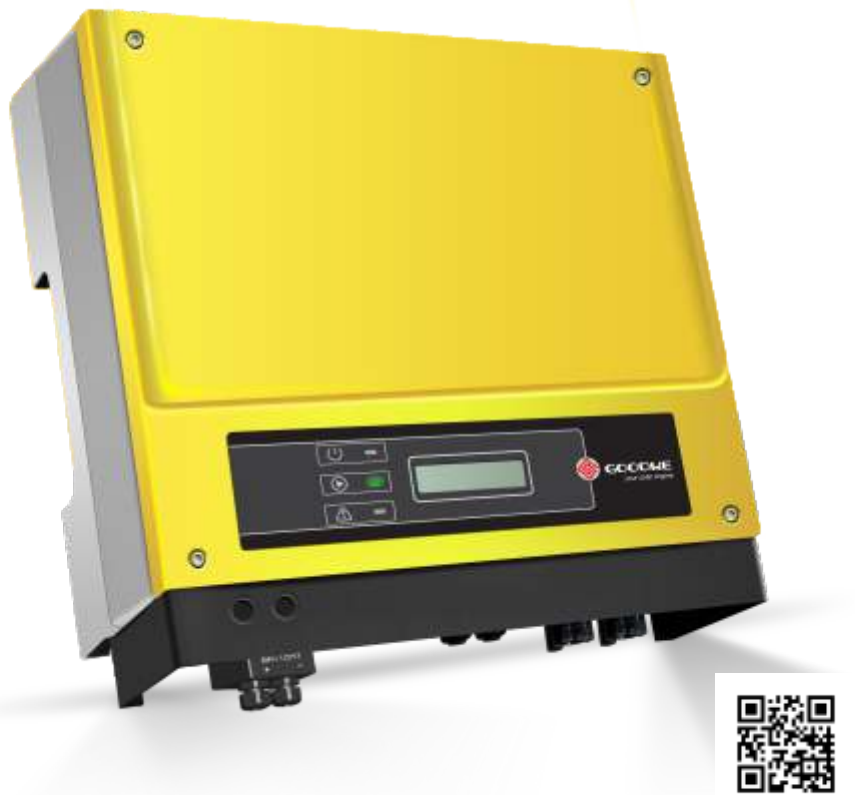
The GoodWe SBP series energy storage inverter is compatible with most single-phase on-grid inverters. During daytime, the PV system generates electricity which will be firstly provided to the loads. Then, the excess energy will charge the battery via the SBP energy storage inverter. The electricity stored can be released when the loads require it (ie during the night) to enable the maximum rate of PV self-sufficiency. During grid failures, the battery will supply essential loads with its automatic back-up function. With UPS capability, the battery can also be charged by the grid to ensure uninterrupted supply in the event of scheduled power cuts.

- Fanless low-noise design
 - IP65 dust-proof and water-proof, suitable for outdoor work
 - Maximum charge and discharge is up to 100A
 - Automatic backup function, automatic switch time less than 10ms
 - Total harmonic voltage distortion below 3% with Inductive load
 - Working ambient temperature range from -25~60°C
- Compatible with lithium cell and lead acid cell, isolated from AC electrical, which is safe and reliable
 - Wireless monitoring and communication, flexible control through APP, which make it easier to view data at any time.
 - EzMeter can be used for detection of single-phase or three-phase inverter

Technical Data

	GW3600S-BP	GW5000S-BP
Battery Input Data		
Battery Type	Li-Ion or Lead-acid	Li-Ion or Lead-acid
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
Charging Strategy for Lead-acid Battery	3-stage adaptive with maintenance	3-stage adaptive with maintenance
AC Output Data (On-grid)		
Nominal Power Output to Utility Grid (W)	3680	5000
Max. Apparent Power Output to Utility Grid (VA)	3680	5000
Max. Apparent Power from Utility Grid (VA)	7360	9200
Nominal Output Voltage (V)	230	230
Nominal Ouput Frequency (Hz)	50/60	50/60
Max. AC Current Output to Utility Grid (A)	16	22.8*3
Max. AC Current From Utility Grid (A)	32	40
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)	~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)*4	3680	5000
Peak Output Apparent Power (VA)*4	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
Communicaiton with BMS	RS485; CAN	RS485; CAN
Communicaiton with Meter	RS485	RS485
Communicaiton 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	High Frequency Isolation	High Frequency Isolation
Certifications & Standards		
Grid Regulation	AS4777.2, G83/G100, CEI0-21	
Safety Regulation	IEC62477, IEC62040	
EMC	EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4	

*1: For lead-acid battery, default charge current is 0.15C, which is can be configurable up to 0.5C by APP EzManage and cannot exceed 75A/100A.
C means the battery capacity, such as the battery capacity is 100Ah, default charge current 0.15C is 0.15 * 100A = 15A.
For Li-Ion battery, discharge and charge current follows the command of BMS which doesn't exceed 100A."
*2: Battery capacity could be not less than 100Ah where the back-up function is to be applied.
*3: 21.7A for AS4777.2
*4: Can be reached only if battery capacity is enough, otherwise will shut down.



BP Series

The GoodWe BP series DC-coupled battery storage retrofit device is compatible with most single-phase on-grid inverters. Ordinary PV stations can be upgraded to PV energy storage systems with the addition of a BP retrofit device. During daytime, the PV system generates electricity which can be firstly provided to the loads. Then the excess energy will charge the battery via the BP retrofit device. During the night, battery discharges via BP retrofit device, then electricity will be provided to the loads via PV inverter. The GoodWe BP series improves self consumption ratio greatly.

- Normal on-grid system equipped with storage function
 - Intelligent battery management function
 - BMS communication integrated
 - Nominal 48V battery, secure and reliable
- Easy access to single-phase on-grid system
 - Higher self-consumption ratio
 - IP65 protection class
- Up to 10 safety measurements
 - Max. Battery Charge efficiency 96%
 - Fanless low-noise design
 - 45°C full-load output

Technical Data

GW2500-BP

PV input

Max. allowed PV Power [W]	6000
Max. allowed PV voltage [V]*	600
Working voltage range [V]	150~450
Max. PV input current [A]	25
No. of PV input & output connectors	1/1
PV connector	MC4/ Phoenix/ Amphenol

Battery

Battery Type	Lead-acid or Li-Ion
Norminal Voltage [V]	48
MAX Charge Voltage [V]	60 (configurable)
MAX Discharge/Charge current [A]*	50/50
MAX Discharge/Charge power [W]	2500/2500
Battery capacity [Ah]	≥50 (configurable)
Charging curve	3-stage adaptive with maintenance

BP output (without PV)

Rated output voltage [V]	360
Output voltage range [V]	250~360
Max output current [A]	10

Protection

Battery over & low voltage protection	Integrated
Over current protection	Integrated
Output current short protection	Integrated

Efficiency

Max. Battery Charge efficiency	96.0%
Max. Battery Discharge efficiency	96.5%

Certifications & standards

Safety/EMC	CE
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General data

Dimensions (WxHxD) [mm]	344*274.5*128
Weight [kg]	8
Mounting	Wall bracket
Ambient temperature range	-25~60°C(>45°C derating)
Relative humidity	0~95%
Max. operating altitude	4000m(>3000m derating)
Protection degree	IP65
Topology	High frequency insulation
Standby losses [W]	<8
Cooling	Nature convection
Noise emission [dB]	<25
Display	LCD & LED light
Communication	Wi-Fi
Standard warranty [years]	5

*:PV input Max. allowed voltage is 600V,But the BP really working voltage range is 100~450V.

**:For lead-acid battery, default charge current is 0.15C, which is can be configurable up to 0.5C by APP EzManage and cannot exceed 50A.
For Li-Ion battery, charge current follows the command of BMS which doesn't exceed 50A. Note: Pylon US2000A default charge rate is 0.5C.
C means the battery capacity, such as the capacity is 50Ah, default charge current 0.5C is 0.5 * 50 = 25A



Smart Energy Management System

SEMS (Smart Energy Management System) is a comprehensive energy management system which integrates all different layers of communication, information and applications. Broadly speaking, SEMS puts every system component in an information environment that is interconnected rather than requiring actual physical connections.

Why do DNOs need SEMS?

Large installations can affect the stability of traditional energy distribution because of lack of management, dispatch and forecast. The GoodWe system has the functionality to maintain stability in independent situations. Meanwhile, users of large systems have additional requirements about their power generation. They are no longer content to merely monitor how much electricity their system produces or whether it is working optimally on their roof.

How does SEMS V1.0 manage your power?

1. Is already compatible with various batteries to store electricity generated from rooftop solar panels during the day, so that electricity can be used at night during peak-usage times. Users can use a mobile APP to control the flow of the energy and manage the batteries intelligently.
2. Supports remote control, management and updates so that users can get immediate problem solving and the latest operating software. Also, SEMS V1.0 integrates a smart chip in its solar inverter to realize high levels of data transmission encryption. This ensures the system operates effectively and in a safe condition.
3. Is fully compatible with MQTT (Message Queuing Telemetry Transport). MQTT is the important connectivity protocol “Internet of Thing” which supports SEMS to access and control smart homes. Users can manage household appliances, control and monitor their energy usage through SEMS.

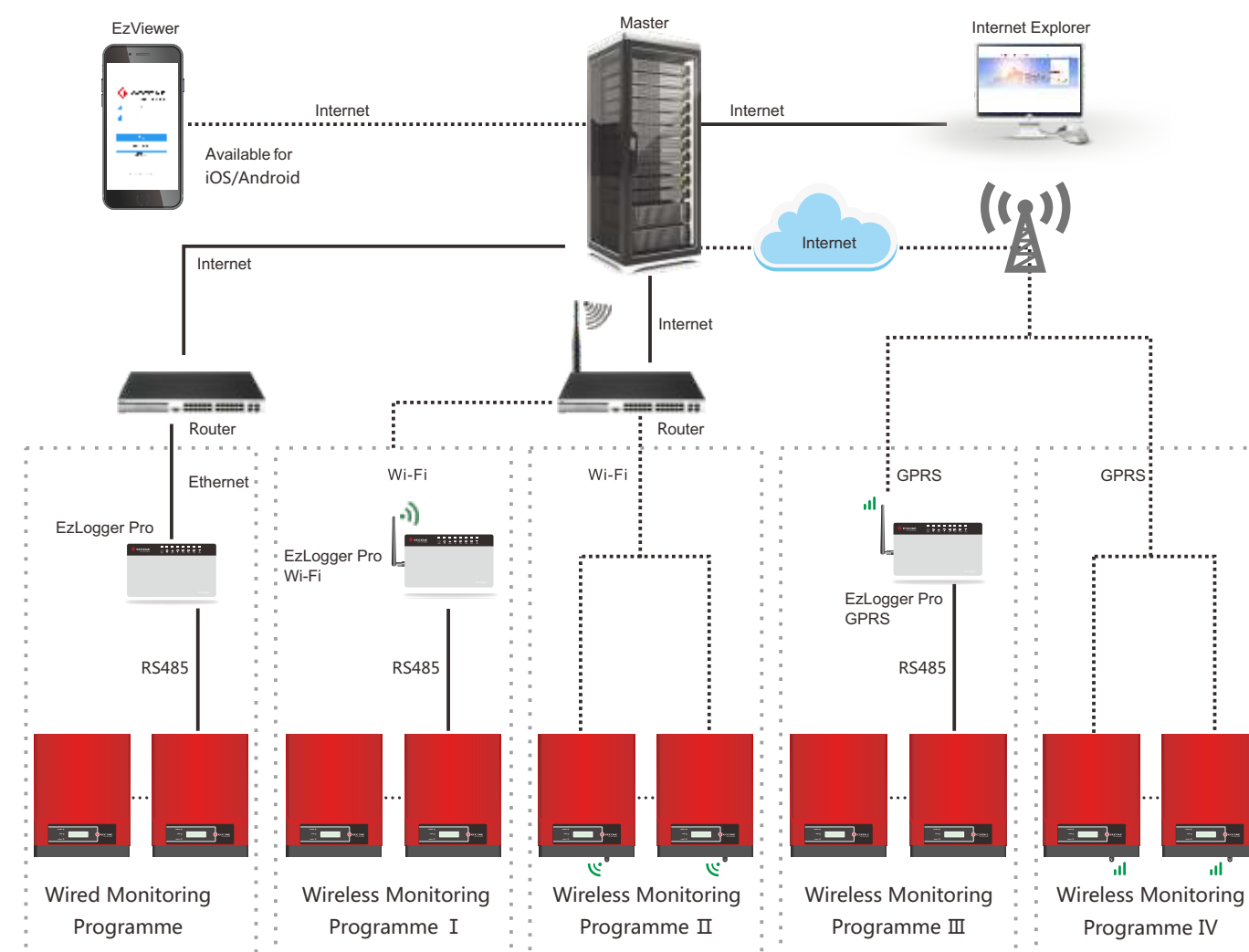
"Global energy is undergoing significant changes; we are in the era of the combination of information technology and energy systems. GoodWe is no longer just a component manufacturer. We are committed to building a Smart Energy Management System to manage the production, usage and scheduling of energy; to realize real-time monitoring, analysis and optimization via its data and cloud computing; to support free trade of distributed energy; to achieve optimal economic benefits and social benefits," said GoodWe's General Manager, Mr. Huang Min.

GoodWe Monitoring System

General Introduction

We can provide our customers with a flexible internet monitoring solution which is suitable for residential, commercial rooftop systems and PV power plants. System monitoring device is user-friendly and reliable. It can archive all-weather data and automatically transmit data to our global PV monitoring web-server via internet. Our customers can login monitoring website or use smart phone Apps to check power plant information.

Monitoring System Diagram



EzLogger Pro

EzLogger is a self-developed monitoring device by GoodWe. In combination with a GoodWe solar inverter, it can easily read and record all key plant data and constantly transmit the data to the GoodWe portal via internet.

- EzLogger: link to the inverter via RS485 and connect with PC via ethernet, and transmit data to GoodWe monitoring software EzExplorer and GoodWe portal.



- EzLogger Wi-Fi: link to the inverter via RS485 and connect with wireless router via Built - in Wi-Fi communication module, and transmit data to GoodWe portal.
- EzLogger GPRS: link to the inverter via RS485 and connect with internet via Built - in GPRS module, and transmit data to GoodWe portal.

EzViewer

EzViewer is a PV system monitoring App developed by GoodWe which can be installed in your smart phone, iOS and Android available, it can link to GoodWe portal via internet in order to track the behavior and yields of PV power plants at any time.



Internet Monitoring Advantages

- Two basic communication choices of inverter: Wired RS485 and Wi-Fi
- Monitor the global PV power plants and automatically implement data acquisition via internet
- Equipped with data collector designed especially for enterprises to ensure data security
- Log-in web-server at any time via Internet Explorer to obtain information of PV power plants
- Support with iOS / Android APPs, rich and visual graphic display

Interface for Internet Monitoring



Five-star Service System of GoodWe



Consulting Service

System design includes the selection of photovoltaic modules and inverters, detailed scheme for system design, and the detection system.

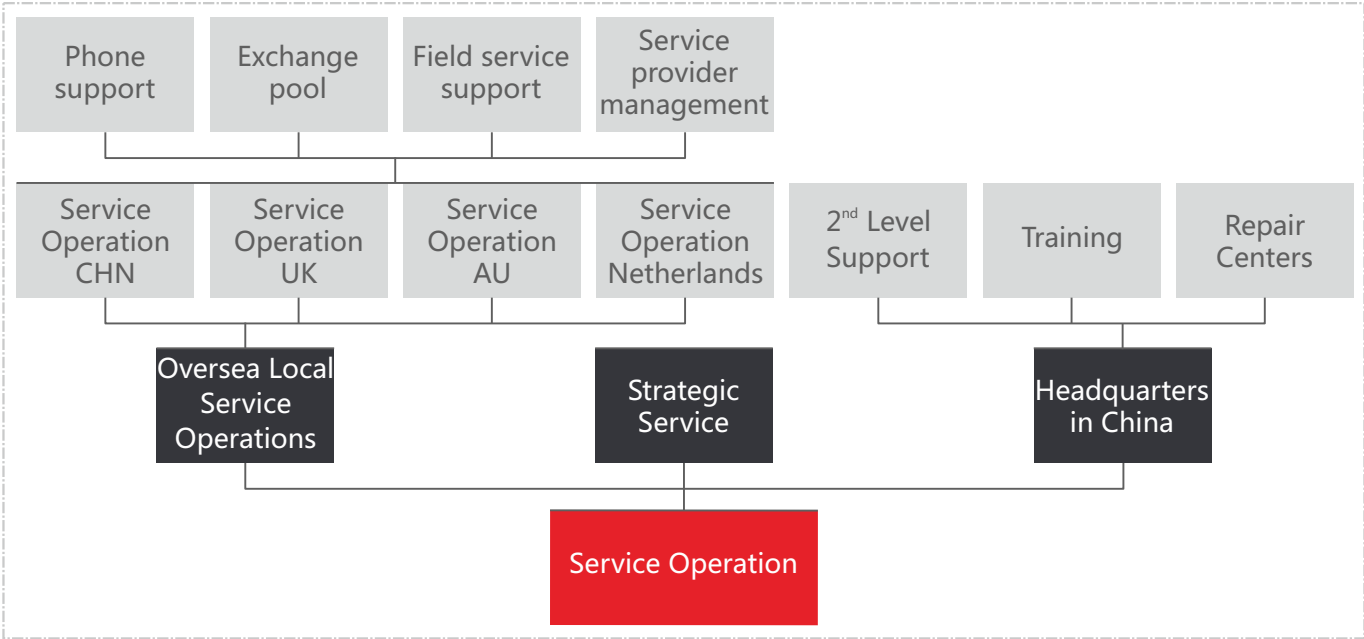
Field Service

GoodWe provides professional and efficient field installation and debugging service to ensure the smooth completion of project until successful generation.

After-sales service

GoodWe Customer-service System provides you with great service including assistance with system design, installation, debugging and troubleshooting.

Service Organnazation

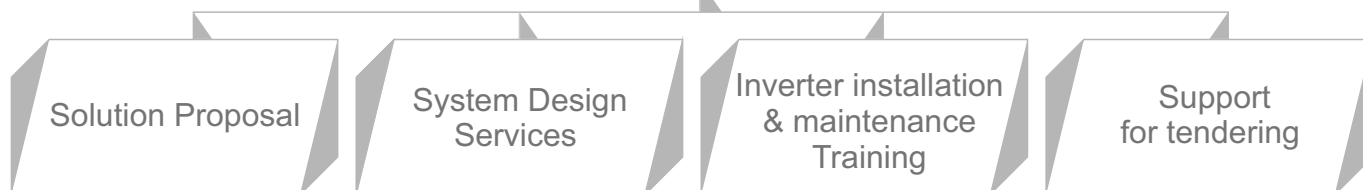


GoodWe provides customized warranty service; in order to better service our dear clients, the warranty period is optional, including 5 years, 10 years, 15 years, 20 years and 25 years. Within the warranty period, GoodWe provides repair or replacement services free of charge. In case of any inverter failure beyond quality warranty period, only cost price will be charged for maintenance or machine replacement. The quality warranty period will be prolonged one year for the components after replacement.

GoodWe is cooperating with DSV (a famous international logistics company) and has set up bonded warehouses, to ensure that delivery on time, which is a good way to make the customer's needs our first priority.

Global Service Hotline: +86 4009-281-333





GoodWe Solar Academy is hosted by Goodwe Power Supply Technology Co., LTD. and co-organized by a number of strategic partners, focusing on solar industry and product application. It provides an open platform for communication and sharing, offering expertise and advanced training for the participants on GoodWe products and PV solution.

GoodWe Solar Academy can also provide custom-made photovoltaic products' application training, routine problem analysis and typical cases at the same time.

Workshop



5MW, the Netherlands



2MW, Korea



200kW, Australia



185kW, PV Carport, South Korea



30kW, Petrol station



100kW, Chinese poverty alleviation



250kW, Shangdong, China



500kW, Shanghai, China



2MW, Zhejiang, China

Residential Projects



20kW, UK



6kW, South Africa



20kW, Germany



6kW, Denmark



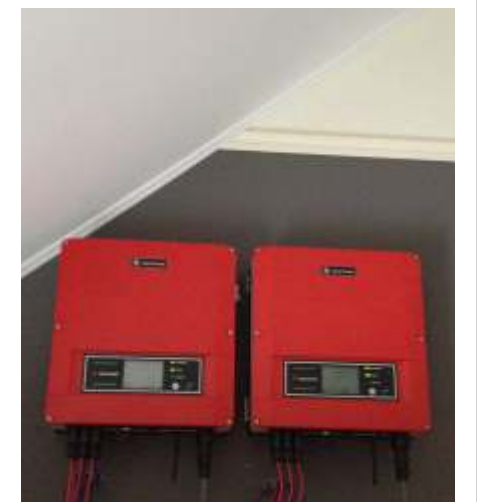
6kW, Denmark



Capel St. Mary (GoodWe Village), UK



4.6kW, South Africa



4kW, Malaysia



8kW, Netherlands



40kW, South Africa

Hybrid Inverter Projects



17kW, Hebei, China



8kW, Denmark



17kW, South Africa



8kW, School of South Africa



15kW, Australia



5kW, Australia



5kW, Sydney



16X15kW, Jiangsu, China



5kW, Czech

CERTIFICATES

Mode	EN50438+ (Irsh)	IEEE1547 (America)	EN50438 (Seden)	Chile	Barbados	CEI0-21 (Italy)	PV502 (Korean)	EN50530	IEC60068 IEC61683 (India)	IEC61727 IEC62116	ERDF-NOI- RES. 13E (France)	PEA (Thailand)	MEA (Thailand)	NRS 097-2-1 (S. Africa)	EN50438+ VDE0126-1-1/A1 (Poland)	GB/T19964 (China)	NB-T32004 (China)	G59/3 (England)	G83/2 (England)	IEC62109-1&-2 AS4777.2 (Australia)	EN62109-1 &-2(Europe)	VDE-AR-N 4105 (Germany)	VDE 0126-1-1 (Europe)
NS Series:																							
GW1000-NS																							
GW1500-NS																							
GW2000-NS																							
GW2500-NS																							
GW3000-NS																							
DNS Series:																							
GW3000D-NS																							
GW3600D-NS																							
GW4200D-NS																							
GW5000D-NS																							
HF Series:																							
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SDT Series:																							
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GW30K-DT																							
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GW15KLV-DT																							
MT Series:																							
GW50K-MT																							
GW60K-MT																							
GW65KHV-MT																							
GW75KHV-MT																							
ES Series:																							
GW3648D-ES																							
GW5048D-ES																							
BP Series:																							
GW2500-BP																							



RD1699

ISO 9001:2008

CEI0-21

PEA