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YOUR TRUSTWORTHY SOLAR INVERTER AND STORAGE ODM PARTNER



COMPANY MILESTONES

Parent Company

APD **A Leader in Power Electronics and Renewable Energy Technology**

For over two decades, APD Group has been cultivating its business in the power industry, upholding core values of R&D innovation and expanding its business horizon with the goal of becoming a leader in power electronics and renewable energy.

APD has two business groups: Power Systems and Renewable Energy, focusing on power supply and PV inverter products respectively.

Subsidiary

Senergy **A Leading ODM Service Supplier of PV Inverters and Energy Storage Solutions**

Shenzhen Senergy Technology Co., Ltd., a wholly-owned subsidiary of Asian Power Devices Inc. (APD), is a leading high-tech solar energy company, specializing in ODM service for PV grid-tied and hybrid inverters. Empowered by the parent company's 35 years of expertise in electronic power industry, Senergy has garnered 20 years of dedicated experience in inverter R&D and manufacturing. Its products find a wide range of applications across residential, industrial & commercial, large-scale ground stations and energy storage power stations worldwide. With an expanded manufacturing capacity reaching 10GW, Senergy is equipped with enhanced R&D and manufacturing capabilities, ensuring the delivery of cutting-edge inverter products and solutions to meet the dynamic needs of the evolving energy landscape.

2023

- Continuous investment: Bao'an R&D Center tripled in size
- PrimeVOLT shipments ranked first in Taiwan for 3 consecutive years

2022

- U.S. model product launched
- New Pingshan factory established with 10GW manufacturing capacity

2021

Manufacturing capacity expanded to 3GW in Shenzhen and Taipei

2020

- Energy storage system launched
- 1GW inverters delivered annually

2017

- Obtained CMMI 2 Product Engineering Management Certification
- Certified as China's "National High-Tech Enterprise"

2016

New generation of grid-tied PV inverters launched

2015

- Senergy Technology founded
- Certified as CQC type A enterprise

2011

2nd plant (DK) established in Shenzhen

2010

Renewable Energy Business set up

1997

1st plant (YM) established in Shenzhen

1994

APD Group founded in Taipei



OUR COMPETITIVE ADVANTAGES



R&D

- Pioneers and experts of Chinese string inverter technology
- Dual research centers in Taipei and Shenzhen
- Integrated Product Development (IPD) process
- DFMEA & PFMEA-guaranteed product reliability



Quality Control

- Comprehensive QC and GP systems throughout product development and production processes
- Certified by reputable international organizations



Manufacturing

- Dual manufacturing bases in Taipei and Shenzhen
- Full industry process ranging from PCBA manufacturing to burn-in tests
- Highly-automated production equipment and flexible production line

10GW
Manufacturing Capacity

110+
Patents

3
Factories (Shenzhen & Taipei)

3
R&D Centers



YOUR TRUSTWORTHY ODM PARTNER



35 Years of ODM Expertise in Power Electronic Products



Rapid Customization Management System



Flexible and Diverse ODM Cooperation Process



Customized Product Design and Accessories

QUALITY CONTROL IN MANUFACTURING PROCESS

01 3D Solder Paste Thickness Testing



03 2nd Optical Detection for PCBA



05 Conformal Coating



07 Automatic Burn-In



09 Tightness Test



02 1st Auto-Optical Detection for SMD



04 Functional Circuit Test



06 Hi-Pot Testing & ATE Testing before Burn-In



08 ATE Test after BI



SHIPMENT

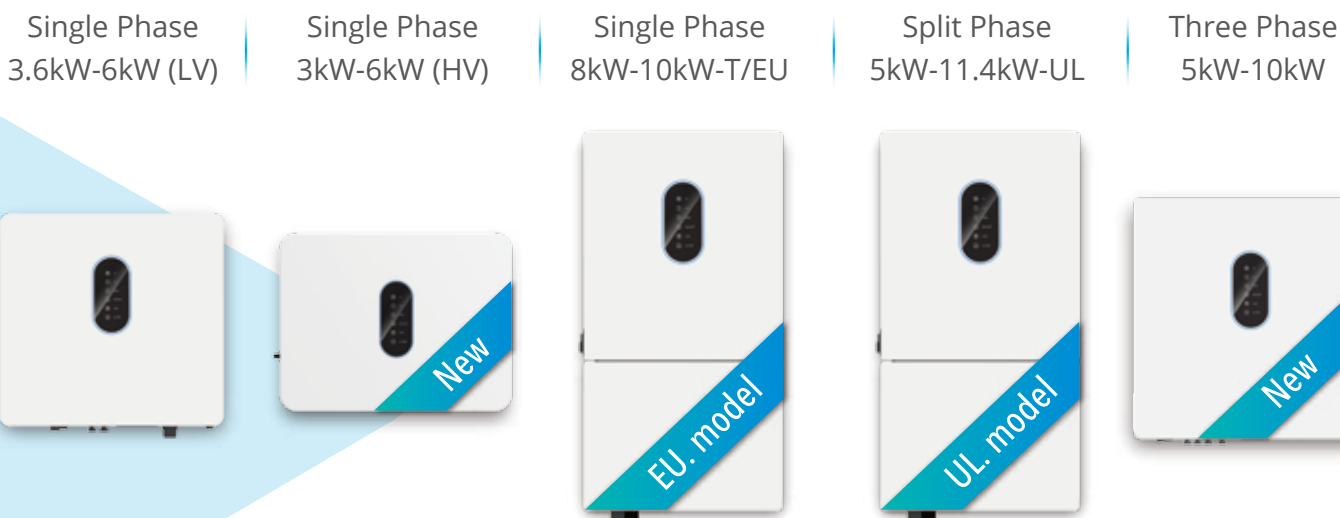
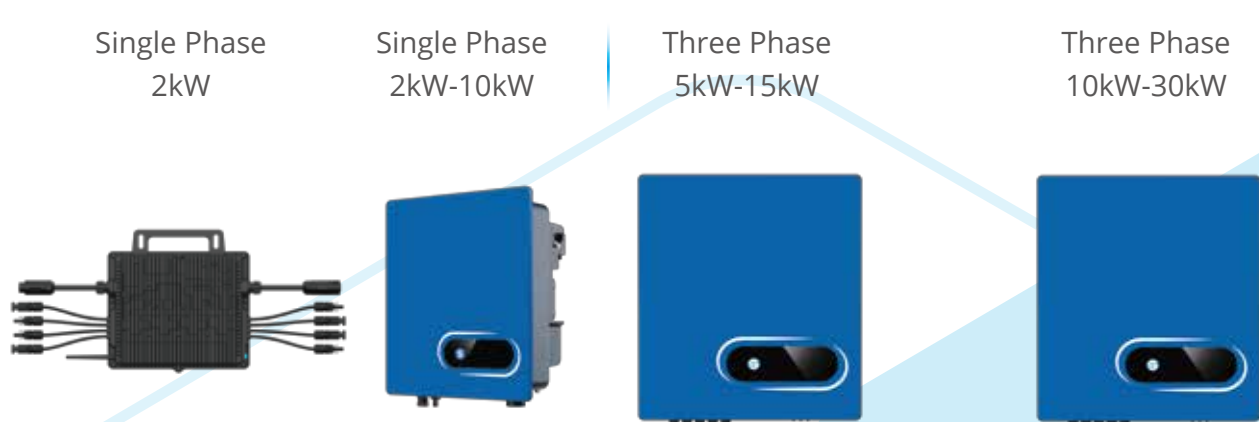
PRODUCT LINE PLATFORM

Microinverter
Residential Use

Grid-Tied Inverter
Residential Use

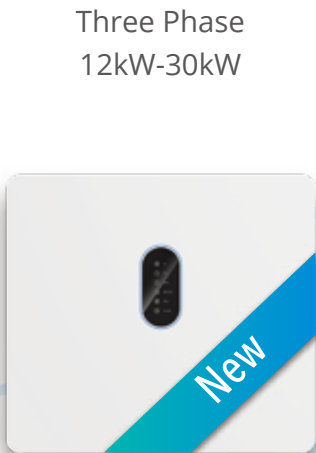
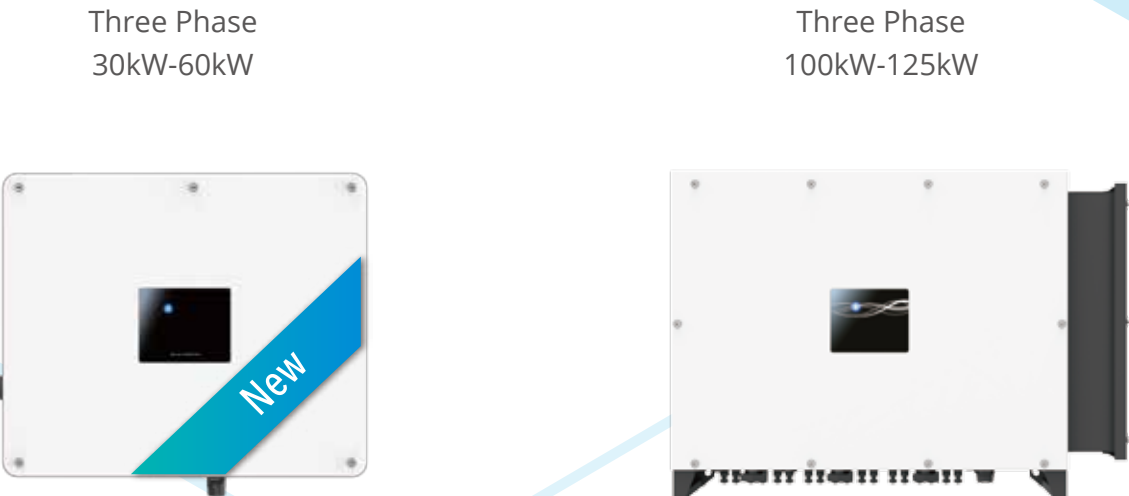
Grid-Tied Inverter
Small-Medium C&I Use

Energy Storage Inverter
Residential Use



Grid-Tied Inverter
Medium-Large C&I Use

Energy Storage Inverter
Residential Use & Small-Medium C&I Use



SINGLE PHASE & MULTIPLE MPPT

SE 2KMI-Q14

Application: Residential Use



FEATURES

- High efficiency for various environment
- Safety & no risk of high voltage
- Real-time Smart Module-level monitoring
- High quality & long lifetime
- Complies with IP67 protection
- Easy installation
- Flexible for system expansion
- Small size & lightweight
- Match with high power PV modules
- Convenient Wifi inside
- Fanless design & zero noise

ModelSE 2KMI-Q14	
Input (PV)	
Module Compatibility	54-cell/108 half-cell, 60-cell/120 half-cell, 66-cell/132 half-cell and 72-cell/144 half-cell
Commonly Used Module Pairings	200W~670W+
Input Channels	4
No. of MPPTs	4
MPPT Voltage Range	28V~55V
Operating Range	16V~60V
Max Input DC Voltage	60V
Max Input DC Current	15A
Maximum Input Short Circuit Current	4*19.9A
Output (Grid)	
Peak Output Power	2200VA
Nominal Output Power	2000VA
Rated Voltage	208V/220V/230V/240V
Rated Voltage Range	176V~276V
Rated Frequency	50Hz/60Hz
Rated Frequency Range	45~55Hz/55~65Hz
THDV	5%
Power Factor Setting	1
Single/Three Phase	Single Phase
Efficiency	
Peak Efficiency	97.0%
MPPT Efficiency	99.5%
CEC Weighted Efficiency	96.0%
General	
Ambient Temperature Range	-40°C to +65°C
Cooling	Natural Convection
Humidity	0~100%
IP Rating	IP67
Night-Time Power Consumption	30mW
Dimensions (W*H*D)	303mm*259mm*50mm
Weight	5.7Kg
HMI & COM	
Communication	WiFi inside
Compliance	
Safety	ORDINANCE No. 140 2022
Warranty	12 Years Standard, 25 Years Optional

Note: · Frequency and voltage range follow related grid-connection regulations

SINGLE PHASE & SINGLE MPPT

SE 2/3/3.6KTL-S1/G2P

Application: Residential Use



SUPERIOR PERFORMANCE

- Maximum efficiency of 97.8%
- Large string current, compatible with large PV modules
- Wide voltage range, compatible with various power grids



HIGH RELIABILITY

- IP65 protection level for outdoor installation
- Optional: DC/AC Type II SPD
- Optional: AFCI function



INTELLIGENT MAINTENANCE

- Power consumption monitoring
- Remote configuration and upgrade
- Quick commissioning via mobile app

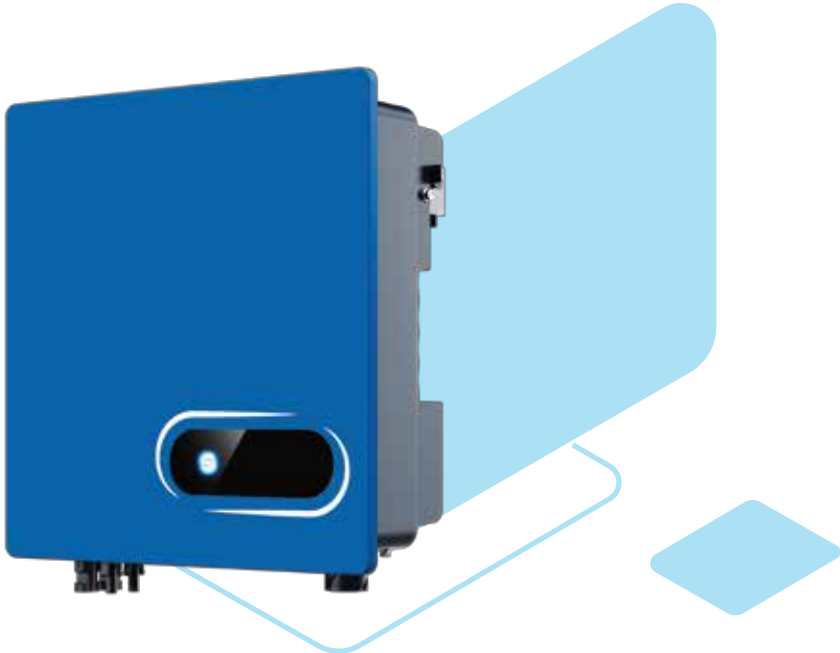
Model	SE 2KTL-S1/G2P		SE 3KTL-S1/G2P	SE 3K6TL-S1/G2P
Efficiency				
Max. Efficiency			97.8%	
European Efficiency	96.5%		96.8%	96.8%
Input (PV)				
Max. Input Voltage			500V	
Max. PV Configuration (STC)			150%	
Rated Input Voltage			360V	
Max. Input Current			15A	
Max.Short Circuit Current			20A	
Start Input Voltage			70V	
MPPT Operating Voltage Range			50V-490V	
Max. Number of PV Strings			1	
No. of MPPTs			1	
Output (Grid)				
Rated AC Active Power	2,000W		3,000W	3,600W
Max. AC Apparent Power	2,200VA		3,300VA	3,600VA
Max. AC Output Current	10A		15A	16A
Rated AC Voltage	220V/230V, L+N+PE			
AC Voltage Range①	160V-300V (Adjustable)			
Rated Grid Frequency	50Hz / 60Hz			
Grid Frequency Range②	45Hz-55Hz / 55Hz-65Hz (Adjustable)			
THDI	<3% (Rated Power)			
DC Current Injection	<0.5%In			
Power Factor	>0.99 Rated Power (Adjustable 0.8 LD - 0.8 LG)			
Protection				
DC Switch	Yes			
Anti-Islanding Protection	Yes			
AC Overcurrent Protection	Yes			
AC Short Circuit Protection	Yes			
DC Reverse Protection	Yes			
Surge Arrester	DC Type III (Type II optional) / AC Type III (Type II optional)			
Insulation Detection	Yes			
Leakage Current Protection	Yes			
General				
Topology	Transformerless			
IP Rating	IP65			
Night Self Consumption	<1W (Standard)			
Cooling	Natural Cooling			
Operating Temperature Range	-25 C -60 C			
Relative Humidity Range	0-100%			
Max. Operating Altitude	4000m			
Dimensions (W*H*D)	320mm*344mm*137mm			
Weight	6.5Kg			
HMI & COM				
Display	Wireless & APP+LED, LCD (Optional)			
Communication	Optional: WiFi / GPRS / RS485 / LAN			
Certification				
Safety	IEC62109-1, IEC62109-2			
Grid Code	DE-AR-N 4105, EN 50549-1, CEI 0-21, UNE 206001/206002-1, IEC 61727/62116, ORDINANCE n°140 2022, IEEE 1547, UL 1741, AS 4777, VDE 0126-1			
Warranty	5 Years			

Remarks: · ①②The range of output voltage and frequency may vary depending on different grid codes.
· Specifications are subject to change without advanced notice.

SINGLE PHASE & DUAL MPPT

SE 4/5/6KTL-D1/G2P

Application: Residential Use



SUPERIOR PERFORMANCE

- Maximum efficiency of 98.2%
- Large string current, compatible with large PV modules
- Wide voltage range, compatible with various power grids



HIGH RELIABILITY

- IP65 protection level for outdoor installation
- Optional: DC/AC Type II SPD
- Optional: AFCI function



INTELLIGENT MAINTENANCE

- Power consumption monitoring
- Remote configuration and upgrade
- Quick commissioning via mobile app

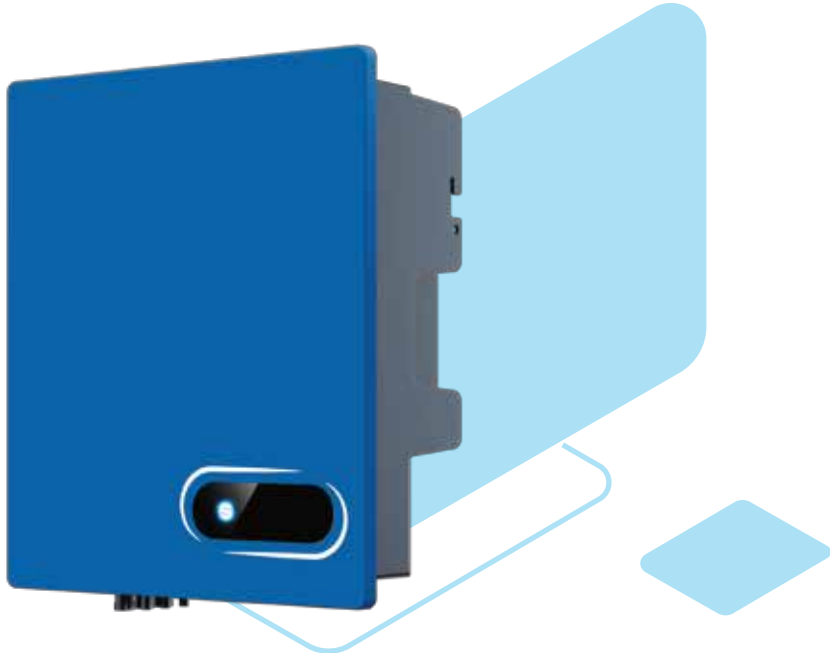
Model	SE 4KTL-D1/G2P		SE 5KTL-D1/G2P	SE 6KTL-D1/G2P
Efficiency				
Max. Efficiency			98.2%	
European Efficiency	97.0%		97.3%	97.4%
Input (PV)				
Max. Input Voltage			550V	
Max. PV Configuration (STC)			150%	
Rated Input Voltage			360V	
Max. Input Current			15A/15A	
Max.Short Circuit Current			20A/20A	
Start Input Voltage			90V	
MPPT Operating Voltage Range			70V-540V	
Max. Number of PV Strings			1/1	
No. of MPPTs			2	
Output (Grid)				
Rated AC Active Power	4,000W		5,000W	6,000W
Max. AC Apparent Power	4,400VA		5,500VA	6,000VA
Max. AC Output Current	20A		25A	27.3A
Rated AC Voltage	220V/230V, L+N+PE			
AC Voltage Range①	160V-300V (Adjustable)			
Rated Grid Frequency	50Hz / 60Hz			
Grid Frequency Range②	45Hz-55Hz / 55Hz-65Hz (Adjustable)			
THDI	<3% (Rated Power)			
DC Current Injection	<0.5%In			
Power Factor	>0.99 Rated power (Adjustable 0.8 LD - 0.8 LG)			
Protection				
DC Switch	Yes			
Anti-Islanding Protection	Yes			
AC Overcurrent Protection	Yes			
AC Short Circuit Protection	Yes			
DC Reverse Protection	Yes			
Surge Arrester	DC Type III(Type II optional) / AC Type III(Type II optional)			
Insulation Detection	Yes			
Leakage Current Protection	Yes			
General				
Topology	Transformerless			
IP Rating	IP65			
Night Self Consumption	< 1W (Standard)			
Cooling	Natural cooling			
Operating Temperature Range	-25 C -60 C			
Relative Humidity Range	0-100%			
Max. Operating Altitude	4000m			
Dimensions (W*H*D)	350mm*347mm*137mm			
Weight	8.5Kg			
HMI & COM				
Display	Wireless & APP+LED, LCD (Optional)			
Communication	Optional: WiFi / GPRS / RS485 / LAN			
Certification				
Safety	IEC62109-1, IEC62109-2			
Grid Code	DE-AR-N 4105, EN 50549-1, CEI 0-21, UNE 206001/206002-1, IEC 61727/62116, ORDINANCE n°140 2022, IEEE 1547, UL 1741, AS 4777, VDE 0126-1			
Warranty	5 Years			

Remarks: · ①②The range of output voltage and frequency may vary depending on different grid codes.
· Specifications are subject to change without advanced notice.

SINGLE PHASE & DUAL MPPT

SE 7/8/10KTL-D1P

Application: Residential Use



SUPERIOR PERFORMANCE

- Maximum efficiency of 98.2%
- Large string current, compatible with large PV modules
- Wide voltage range, compatible with various power grids



HIGH RELIABILITY

- IP65 protection level for outdoor installation
- Optional: DC/AC Type II SPD
- Optional: AFCI function



INTELLIGENT MAINTENANCE

- Power consumption monitoring
- Remote configuration and upgrade
- Quick commissioning via mobile app
- Multiple I/O and communication configurations

Model	SE 7KTL-D1P		SE 8KTL-D1P	SE 10KTL-D1P
Efficiency				
Max. Efficiency			98.2%	
European Efficiency			97.5%	
Input (PV)				
Max. Input Voltage			550V	
Max. PV Configuration (STC)			150%	
Rated Input Voltage			360V	
Max. Input Current	20A/20A		20A/30A	
Max.Short Circuit Current	26A/26A		26A/40A	
Start Input Voltage			90V	
MPPT Operating Voltage Range			60V-540V	
Max. Number of PV Strings	1/1		1/2	
No. of MPPTs			2	
Output (Grid)				
Rated AC Active Power	7,000W		8,000W	10,000W
Max. AC Apparent Power	7,700VA		8,800VA	10,000VA
Max. AC Output Current	35A		40A	45.5A
Rated AC Voltage	220V/230V, L+N+PE			
AC Voltage Range①	160V-300V (Adjustable)			
Rated Grid Frequency	50Hz / 60Hz			
Grid Frequency Range②	45Hz-55Hz / 55Hz-65Hz (Adjustable)			
THDI	<3% (Rated Power)			
DC Current Injection	<0.5%In			
Power Factor	>0.99 Rated power (Adjustable 0.8 LD - 0.8 LG)			
Protection				
DC Switch			Yes	
Anti-Islanding Protection			Yes	
AC Overcurrent Protection			Yes	
AC Short Circuit Protection			Yes	
DC Reverse Protection			Yes	
Surge Arrester	DC Type III(Type II optional) / AC Type III(Type II optional)			
Insulation Detection			Yes	
Leakage Current Protection			Yes	
General				
Topology			Transformerless	
IP Rating			IP65	
Night Self Consumption			<1W (Standard)	
Cooling			Natural cooling	
Operating Temperature Range			-25 C -60 C	
Relative Humidity Range			0-100%	
Max. Operating Altitude			4000m	
Dimensions (W*H*D)			400mm*450mm*170mm	
Weight			16Kg	
HMI & COM				
Display			Wireless & APP+LED, LCD (Optional)	
Communication			Optional: WiFi / GPRS / RS485 / LAN	
Certification				
Safety			IEC62109-1, IEC62109-2	
Grid Code	DE-AR-N 4105, EN 50549-1, CEI 0-21, UNE 206001/206002-1, IEC 61727/62116, ORDINANCE n°140 2022, IEEE 1547, UL 1741, AS 4777, VDE 0126-1			
Warranty			5 Years	

Remarks: · ①②The range of output voltage and frequency may vary depending on different grid codes.
· Specifications are subject to change without advanced notice.

THREE PHASE & DUAL MPPT

SE 5/6/8/10/12/15KTL-D3/G2

Application: Residential & Small C&I Use



SUPERIOR PERFORMANCE

- Maximum efficiency of 98.3%
- Large string current, compatible with large PV modules
- Wide voltage range, compatible with various power grids
- Compact for easy installation



HIGH RELIABILITY

- IP66 protection level for outdoor installation
- Optional: DC/AC Type II SPD
- Optional: AFCI function



INTELLIGENT MAINTENANCE

- Power consumption monitoring
- Remote configuration and upgrade
- Quick commissioning via mobile app
- Multiple I/O and communication configurations

Model	SE 5KTL-D3/G2	SE 6KTL-D3/G2	SE 8KTL-D3/G2	SE 10KTL-D3/G2	SE 12KTL-D3/G2	SE 15KTL-D3/G2
Efficiency						
Max. Efficiency	98.2%			98.3%		
European Efficiency	97.8%					
Input (PV)						
Max. Input Voltage	1100V					
Max. PV Configuration (STC)	150%					
Rated Input Voltage	620V					
Max. Input Current	15A/15A			15A/30A		
Max.Short Circuit Current	20A/20A			20A/40A		
Start Input Voltage	180V					
MPPT Operating Voltage Range	160V-1000V					
Max. Number of PV Strings	1/1			1/2		
No. of MPPTs	2					
Output (Grid)						
Rated AC Active Power	5,000W	6,000W	8,000W	10,000W	12,000W	15,000W
Max. AC Apparent Power	5,500VA	6,600VA	8,800VA	11,200VA	13,200VA	16,700VA
Max. AC Output Current	3*8.4A	3*10.1A	3*13.4A	3*17A	3*20.2A	3*25.3A
Rated AC Voltage	380V / 400V / 415V, 3W+N+PE					
AC Voltage Range①	260V-510V (Adjustable)					
Rated Grid Frequency	50Hz / 60Hz					
Grid Frequency Range②	45Hz-55Hz / 55Hz-65Hz (Adjustable)					
THDI	<3%@Rated Power					
DC Current Injection	<0.5%@Rated Current					
Power Factor	> 0.99 Rated power (Adjustable 0.8 LD - 0.8 LG)					
Protection						
DC Switch	Yes					
Anti-Islanding Protection	Yes					
AC Overcurrent Protection	Yes					
AC Short Circuit Protection	Yes					
DC Reverse Protection	Yes					
Surge Arrester	DC Type III(Type II optional) / AC Type III(Type II optional)					
Insulation Detection	Yes					
Leakage Current Protection	Yes					
General						
Topology	Transformerless					
IP Rating	IP66					
Night Self Consumption	< 1W (Standard)					
Cooling	Natural cooling					
Operating Temperature Range	-25 ℃ -60 ℃					
Relative Humidity Range	0-100%					
Max. Operating Altitude	4000m					
Dimensions (W*H*D)	398mm*460mm*190mm					
Weight	16.8Kg			18.7Kg		
HMI & COM						
Display	Wireless & APP +LED, LCD (Optional)					
Communication	RS485, Optional: WiFi / GPRS / LAN					
Certification						
Safety	IEC62109-1, IEC62109-2					
Grid Code	VDE-AR-N 4105, EN 50549-1, CEI 0-21, UNE 206006/206007-1, RD 1699/661&413, IEC 61727/62116, AS4777.2					
Warranty	5 Years					

Remarks: · ①②The range of output voltage and frequency may vary depending on different grid codes.
· Specifications are subject to change without advanced notice.

THREE PHASE & DUAL MPPT

SE 10/15KTL-D3/G2P, SE 17/20/22/25/30KTL-D3/G2

Application: Residential & Small-Medium C&I Use



SUPERIOR PERFORMANCE

- Maximum efficiency of 98.4%
- Large string current, compatible with large PV modules
- Wide voltage range, compatible with various power grids
- Compact for easy installation



HIGH RELIABILITY

- IP66 protection level for outdoor installation
- Optional: DC/AC Type II SPD
- Optional: AFCI function



INTELLIGENT MAINTENANCE

- Power consumption monitoring
- Remote configuration and upgrade
- Quick commissioning via mobile app
- Multiple I/O and communication configurations

Model	SE 10KTL-D3/G2P		SE 15KTL-D3/G2P		SE 17KTL-D3/G2		SE 20KTL-D3/G2		SE 22KTL-D3/G2		SE 25KTL-D3/G2		SE 30KTL-D3/G2	
Efficiency														
Max. Efficiency	98.4%													
European Efficiency	97.8%		98.0%											
Input (PV)														
Max. Input Voltage	1100V													
Max. PV Configuration (STC)	150%													
Rated Input Voltage	620V													
Max. Input Current	15A/30A		30A/30A										30A/40A	
Max.Short Circuit Current	20A/40A		40A/40A										37.5A/50A	
Start Input Voltage	180V													
MPPT Operating Voltage Range	160V-1000V													
Max. Number of PV Strings	1/2		2/2											
No. of MPPTs	2													
Output (Grid)														
Rated AC Active Power	10,000W		15,000W		17,000W		20,000W		22,000W		25,000W		30,000W	
Max. AC Apparent Power	11,000VA		16,500VA		18,700VA		22,000VA		24,200VA		27,500VA		33,000VA	
Max. AC Output Current	3*16.8A		3*25.3A		3*28.6A		3*33.7A		3*37A		3*39.8A		3*50.2A	
Rated AC Voltage	380V / 400V / 415V, 3W+N+PE													
AC Voltage Range①	260V-510V (Adjustable)													
Rated Grid Frequency	50Hz / 60Hz													
Grid Frequency Range②	45Hz-55Hz / 55Hz-65Hz (Adjustable)													
THDI	<3%@Rated Power													
DC Current Injection	<0.5%@Rated Current													
Power Factor	> 0.99 Rated power (Adjustable 0.8 LD - 0.8 LG)													
Protection														
DC Switch	Yes													
Anti-Islanding Protection	Yes													
AC Overcurrent Protection	Yes													
AC Short Circuit Protection	Yes													
DC Reverse Protection	Yes													
Surge Arrester	DC Type III(Type II optional) / AC Type III(Type II optional)													
Insulation Detection	Yes													
Leakage Current Protection	Yes													
General														
Topology	Transformerless													
IP Rating	IP66													
Night Self Consumption	<1W (Standard)													
Cooling	Natural cooling		Fan cooling											
Operating Temperature Range	-25℃-60℃													
Relative Humidity Range	0-100%													
Max. Operating Altitude	4000m													
Dimensions (W*H*D)	398mm*460mm*190mm													
Weight	18.7Kg		20.1Kg						20.3Kg					
HMI & COM														
Display	Wireless & APP +LED, LCD (Optional)													
Communication	RS485, Optional: WiFi / GPRS / LAN													
Certification														
Safety	IEC62109-1, IEC62109-2													
Grid Code	VDE-AR-N 4105, EN 50549-1, CEI 0-21, UNE 206006/206007-1, RD 1699/661&413, IEC 61727/62116, AS4777.2													
Warranty	5 Years													

Remarks: · ①②The range of output voltage and frequency may vary depending on different grid codes.
· Specifications are subject to change without advanced notice.

THREE PHASE & MULTIPLE MPPT

SE 30/40KTL-T3/G2, SE 50/60KTL-Q3/G2

Application: Commercial & Industrial Sites



SUPERIOR PERFORMANCE

- Maximum efficiency of 98.6%
- Large string current, compatible with large PV modules
- 30kW with natural cooling design



HIGH RELIABILITY

- IP66 protection level for outdoor installation
- DC/AC Type II SPD
- Optional: AFCL, Night SVG, I/V detection, and integrated PID



INTELLIGENT MAINTENANCE

- Power consumption monitoring
- Remote configuration and upgrade
- Quick commissioning via mobile app
- String level current detection

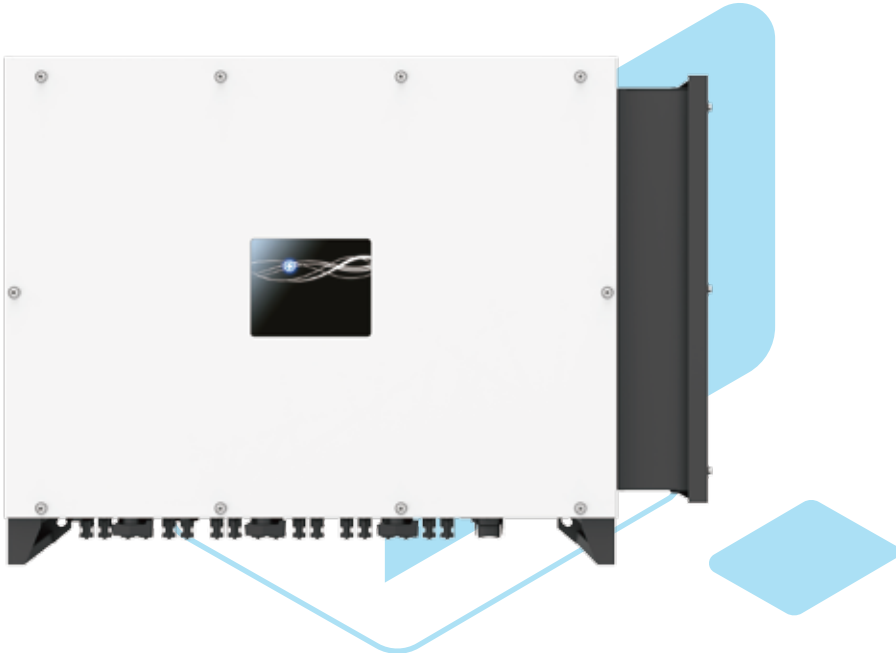
Model	SE 30KTL-T3/G2	SE 40KTL-T3/G2	SE 50KTL-Q3/G2	SE 60KTL-Q3/G2
Efficiency				
Max. Efficiency	98.5%		98.6%	
European Efficiency	98.0%	98.0%	97.9%	98.0%
Input (PV)				
Max. Input Voltage	1100V			
Max. PV Configuration (STC)	150%			
Rated Input Voltage	620V			
Max. Input Current	32A/32A/40A		32A/32A/32A/40A	
Max.Short Circuit Current	45A/45A/50A		45A/45A/45A/50A	
Start Input Voltage	200V			
MPPT Operating Voltage Range	180V-1000V			
Max. Number of PV Strings	2/2/2	2/2/2	2/2/2/2	2/2/2/2
No. of MPPTs	3	3	4	4
Output (Grid)				
Rated AC Active Power	30,000W	40,000W	50,000W	60,000W
Max. AC Apparent Power	33,400VA	44,500VA	55,600VA	66,700VA
Max. AC Output Current	3*51A	3*67.5A	3*84.3A	3*92A
Rated AC Voltage	380V/400V/415V, 3W+N+PE			
AC Voltage Range①	320V-520V (Adjustable)			
Rated Grid Frequency	50Hz / 60Hz			
Grid Frequency Range②	45Hz-55Hz / 55Hz-65Hz (Adjustable)			
THDI	<3% (Rated Power)			
DC Current Injection	<0.5%In			
Power Factor	>0.99 Rated power (Adjustable 0.8 LD - 0.8 LG)			
Protection				
DC Switch	Yes			
Anti-Islanding Protection	Yes			
AC Overcurrent Protection	Yes			
AC Short Circuit Protection	Yes			
DC Reverse Protection	Yes			
Surge Arrester	DC Type II / AC Type II			
Insulation Detection	Yes			
Leakage Current Protection	Yes			
PV String Monitoring	Optional			
Consumption Monitoring	Optional			
General				
Topology	Transformerless			
IP Rating	IP66			
Night Self Consumption	<1W (Standard)			
Cooling	Natural cooling	Fan cooling		
Operating Temperature Range	-25 C -60 C			
Relative Humidity Range	0-100%			
Max. Operating Altitude	4000m			
Dimensions (W*H*D)	635mm*530mm*224mm			635mm*530mm*233mm
Weight	36Kg	40Kg	42Kg	
HMI & COM				
Display	Wireless & APP+LED, LCD (Optional)			
Communication	RS485, Optional: WiFi / GPRS / LAN			
Certification				
Safety	IEC62109-1, IEC62109-2			
Grid Code	VDE-AR-N 4105, EN 50549-1, CEI 0-21, UNE 206006/206007-1, RD 1699/661&413, IEC 61727/62116, CQC			IEC 61727/62116, IEC 61683, CQC
Warranty	5 Years			

Remarks: · ①②The range of output voltage and frequency may vary depending on different grid codes.
· Specifications are subject to change without advanced notice.

THREE PHASE & MULTIPLE MPPT

SE 100/110/125KTL-M3

Application: Commercial & Industrial Sites



SUPERIOR PERFORMANCE

- Maximum efficiency of 98.8%
- Large string current, compatible with large PV modules
- 9 MPPT, fuse-free design technology



HIGH RELIABILITY

- IP66 protection level for outdoor installation
- Replaceable DC/AC Type II SPD
- Optional: AFCI, Night SVG, I/V detection, and integrated PID



INTELLIGENT MAINTENANCE

- Power consumption monitoring
- Remote configuration and upgrade
- Quick commissioning via mobile app
- String level current detection

Model	SE 100KTL-M3		SE 110KTL-M3	SE 125KTL-M3
Efficiency				
Max. Efficiency	98.5%		98.6%	98.8%
European Efficiency	98.0%		98.2%	98.2%
Input (PV)				
Max. Input Voltage	1100V			
Max. PV Configuration	150%			
Rated Input Voltage	620V			
Max. Input Current	5*32A/3*40A	6*32A/3*40A		
Max. Short Circuit Current	5*45A/3*50A	6*45A/3*50A		
Start Input Voltage/ Min. Operating Voltage	250V / 200V			
MPPT Operating Voltage Range	200V-1000V			
Max. Number of PV Strings	8*2	9*2		
No. of MPPTs	8	9		
Output (Grid)				
Rated AC Active Power	100,000W	110,000W	125,000W	
Max. AC Apparent Power	111,000VA	123,000VA	125,000VA	
Max. AC Output Current	3*168.8A	3*187A	3*181A	
Rated AC Voltage	380V/400V, 3W+N+PE			
AC Voltage Range*	320V-520V (Adjustable)			
Rated Grid Frequency	50Hz / 60Hz			
Grid Frequency Range**	45Hz-55Hz / 55Hz-65Hz (Adjustable)			
THDI	<3% (Rated Power)			
DC Current Injection	<0.5%In			
Power Factor	>0.99 Rated power (Adjustable 0.8 LD - 0.8 LG)			
Protection				
DC Switch	Yes			
Anti-Islanding Protection	Yes			
AC Overcurrent Protection	Yes			
AC Short Circuit Protection	Yes			
DC Reverse Protection	Yes			
Surge Arrester	DC Type II / AC Type II			
Insulation Detection	Yes			
Leakage Current Protection	Yes			
AFCI	Optional			
PID Recovery	Optional			
PV String Monitoring	Yes			
Consumption Monitoring	Optional			
General				
Topology	Transformerless			
IP Rating	IP66			
Night Self Consumption	<10W (Standard)			
Cooling	Fan cooling			
Operating Temperature Range	-25 C -60 C			
Relative Humidity Range	0-100%			
Max. Operating Altitude	4000m			
Dimensions (W*H*D)	936mm*678mm*365mm			
Weight	91.5Kg	92Kg		
HMI & COM				
Display	Wireless & APP+LED, LCD (Optional)			
Communication	RS485, Optional: WiFi / GPRS / LAN			
Certification				
Safety	IEC62109-1, IEC62109-2			
Grid Code	EN 50549-1/-2, IEC 61727/62116, VDE-AR-N 4105, CEI 0-21/16, UNE 206006/206007-1, UNE 217001			
Warranty	5 Years			

Remarks: · The range of output voltage and frequency may vary depending on different grid codes.
· Specifications are subject to change without advanced notice.

SINGLE PHASE HYBRID INVERTER

SE 3.6KHB-60, SE 4.6/5/6KHB-120

Application: Residential Use



EXCELLENT PERFORMANCE

- Maximum efficiency of 97.3% and battery efficiency of 94.3%
- Maximum 9kW PV input power
- Maximum battery charge/discharge current of 120A
- Large MPPT current, compatible with high-power solar panels
- Advanced parallel function



HIGH RELIABILITY

- Key components from international renowned brands
- IP65 protection rating, ensuring adaptability to complex outdoor environment
- Multiple built-in protections



INTELLIGENT MAINTENANCE

- Quick commission via mobile app, 24/7 remote monitoring, configuration and upgrade
- Advanced energy management mechanism, with multiple built-in working modes and flexible customized settings
- Optional generator and smart load functions

Model	SE 3K6HB-60		SE 4K6HB-120		SE 5KHB-120		SE 6KHB-120	
Efficiency								
Max. Efficiency (PV to AC)					97.3%			
Eur. Efficiency (PV to AC)					96.8%			
Max. Efficiency (BAT to AC)					94.3%			
Input (PV)								
Max. PV Input Power	6,300W				9,000W			
Max. PV Voltage					550V			
Start-up Voltage					90V			
MPPT Operating Voltage Range					70V-540V			
Max. Input Current per MPPT					15A/15A			
Max. Short Circuit Current per MPPT					20A/20A			
String per MPPT					1/1			
Nos. of MPPT					2			
Input/Output (BAT)								
Battery Type					Lithium-ion/Lead-acid			
Nominal Battery Voltage					48V			
Battery Voltage Range					40V-65V			
Max. Charge/Discharge Current	60A/60A		120A/120A		120A/120A		120A/120A	
Max. Charge/Discharge Power	3,000W/3,000W		6,000W/6,000W		6,000W/6,000W		6,000W/6,000W	
Output (Grid)								
Nominal AC Output Power	3,600W		4,600W		5,000W		6,000W	
Max. AC Output Apparent Power	3,960VA		4,600VA		5,500VA		6,000VA	
Max.AC Output Power (PF=1)	3,960W		4,600W		5,500W		6,000W	
Max. AC Output Current	18A		22A		25A		27.2A	
Nominal Grid Voltage					220V/230V/240V, L+N+PE			
Grid Voltage Range					150V-300V (Adjustable)			
Nominal Grid Frequency					50Hz/60Hz			
Grid Frequency Range					45Hz-55Hz/55Hz-65Hz (Adjustable)			
Power Factor					> 0.99 @rated power (Adjustable 0.8 LD - 0.8 LG)			
THDI					<3% (Rated Power)			
Output (Back up)								
Nominal Output Power	3,000W		4,600W		5,000W		6,000W	
Nominal Output Current	13A		20A		21.7A		26A	
Peak Output Apparent Power (>1s)	4,500VA		6,900VA		7,500VA		9,000VA	
Nominal Output Voltage					220V/230V/240V, L+N+PE			
Nominal Output Frequency					50Hz/60Hz			
Transfer Time					<10ms (typical)			
THDV					<3% @100% R Load			
Protection								
Protection Category					Class I			
DC Switch					Yes			
Anti-islanding Protection					Yes			
AC Overcurrent Protection					Yes			
DC/AC Overvoltage Protection					DC Type II, AC Type III			
AC Short Circuit Protection					Yes			
DC Reverse Protection					Yes			
Surge Arrester					DC Type III, AC Type III			
Insulation Resistance Detection					Yes			
Leakage Current Protection					Yes			
Generator					Optional			
General								
Max. Operating Altitude					4000m (>2000m derating)			
Ingress Protection Rating					IP65			
Operating Temperature Range					-25 C ~60 C (>45 C derating)			
Relative Humidity					0~100%			
Cooling Method					Natural Cooling			
Mounting					Wall bracket			
Dimensions (W*H*D)					515mm*487mm*175mm			
Weight	16Kg				25Kg			
PV Connection Way					MC4/H4			
Battery Connection Way					Dedicated DC connector			
AC Connection Way (Grid & Back up)					Dedicated AC connector			
HMI & COM								
Display					Bluetooth & APP + LED, LCD (Optional)			
Communication Interface					RS485/CAN (for BMS), RS485, Ethernet, DRM/RS485 (for Meter), Optional: Wi-Fi/LAN			
Certification								
Safety					IEC 62109-1&2, IEC62040-1, IEC 62477-1			
Grid					VDE 4105, IEC 61727/62116, AS 4777.2, EN 50549-1, C10/11, G98/G99/G100, CEI 0-21, NRS 097-2-1, RD 1699/661/647/413, UNE 217002			
Warranty								
					5 Years			

Remarks: · The range of output voltage and frequency may vary depending on different grid codes.
· Specifications are subject to change without advanced notice.

SINGLE PHASE HYBRID INVERTER

SE 3/3.6/4.6/5/6KHB-D1/HV

Application: Residential Use



EXCELLENT PERFORMANCE

- Maximum efficiency of 97.8% and battery efficiency of 97.0%
- Maximum 12kW PV input power
- Maximum battery charge/discharge current of 42A
- Large MPPT current, compatible with high-power solar panels
- Supporting full-house load on backup port, with maximum capacity of 12kW



HIGH RELIABILITY

- Key components from international renowned brands
- IP66 protection rating, ensuring adaptability to complex outdoor environment
- Multiple built-in protections, with optional AFCI



INTELLIGENT MAINTENANCE

- Quick commission via mobile app, 24/7 remote monitoring, configuration and upgrade
- Advanced energy management mechanism, with multiple built-in working modes and flexible customized settings

Model	SE 3KHB-D1/HV		SE 3K6HB-D1/HV		SE 4K6HB-D1/HV		SE 5KHB-D1/HV		SE 6KHB-D1/HV	
Efficiency										
Max. Efficiency (PV to AC)					97.8%					
Eur. Efficiency (PV to AC)					97.5%					
Max. Efficiency (BAT to AC)					97.0%					
Input (PV)										
Max. PV Input Power					12,000W					
Max. PV Voltage					550V					
Start-up Voltage					90V					
MPPT Operating Voltage Range					70V-540V					
Max. Input Currentper MPPT					16A/16A					
Max. Short Circuit Current per MPPT					20A/20A					
String per MPPT					1/1					
Nos. of MPPTT					2					
Input/Output (BAT)										
Battery Type					Lithium-ion/Lead-acid					
Nominal Battery Voltage					360V					
Battery Voltage Range					80V-480V					
Max. Charge/Discharge Current					42A/42A					
Max. Charge/Discharge Power	9,000W/4,200W						9,000W/6,600W			
Output (Grid)										
Nominal AC Output Power	3,000W		3,600W		4,600W		5,000W		6,000W	
Max. AC Output Apparent Power	3,300VA		3,960VA		4,600VA		5,500VA		6,600VA	
Max .AC Output Power (PF=1)	3,300W		3,960W		4,600W		5,500W		6,600W	
Max. AC Output Current	15.0A		18.0A		21.0A		25.0A		28.7A	
Nominal Grid voltage	220V/230V/240V, L+N+PE									
Grid Voltage Range	150V-300V (Adjustable)									
Nominal Grid Frequency	50Hz/60Hz									
Grid Frequency Range	45Hz-55Hz/55Hz-65Hz (Adjustable)									
Power Factor	> 0.99 @rated power (Adjustable 0.8 LD - 0.8 LG)									
THDI	<3% (Rated Power)									
Output (Back up)										
Nominal Output Power	3,000W		3,600W		4,600W		5,000W		6,000W	
Nominal Output Current	13A		15.7A		20A		21.7A		26.1A	
Peak Output Apparent Power (1min)	3,600VA		4,320VA		5,520VA		6,000VA		7,200VA	
Peak Output Apparent Power (15s)	4,350VA		5,220VA		6,670VA		7,250VA		8,700VA	
Nominal Output Voltage	220V/230V/240V, L+N+PE									
Nominal Output Frequency	50Hz/60Hz									
Transfer Time	<10ms (typical)									
THDV	<3% @100% R Load									
Protection										
Protection Category					Class I					
DC Switch					Yes					
Anti-islanding Protection					Yes					
AC Over Current Protection					Yes					
DC/AC Overvoltage Protection					DC Type II, AC Type III					
AC Short Circuit Protection					Yes					
DC Reverse Protection					Yes					
Surge Arrester					DC Type III, AC Type III					
Insulation Resistance Detection					Yes					
Leakage Current Protection					Yes					
AFCI					Optional					
General										
Max. Operation Altitude					4000m (>2000m derating)					
Ingress Protection Degree					IP66					
Operating Temperature Range					-25~60 C (>45 C derating)					
Relative Humidity					0~100%					
Cooling Method					Natural Cooling					
Mounting					Wall bracket					
Dimensions (W*H*D)					470mm*360mm*172mm					
Weight	14.1Kg						14.6Kg			
PV Connection Way					MC4/H4					
HMI & COM										
Display					Bluetooth & APP + LED, LCD (optional)					
Communication interface					RS485/CAN (BMS), DRM/RS485 (for Meter), RS485, Optional: Wi-Fi/LAN					
Certification										
Safety					IEC 62109-1/2					
Grid					EN 50549-1, VDE 4105, AS 4777, CEI 0-21, G98/G99/G100, RD 1699/661/647/413, UNE 217002					
Warranty					5 Years					

Remarks: · The range of output voltage and frequency may vary depending on different grid codes.
· Specifications are subject to change without advanced notice.

SINGLE PHASE HYBRID INVERTER

SE 8/10KHB-T/EU

Application: Residential Use



MAXIMIZE PV INPUT POWER

- Up to 200% oversizing allowed with 3 MPPTs
- Support high power module with 30A PV input current
- Support AC coupled solar input



VERSATILE APPLICATIONS

- Stackable up to 9 units
- Standby generator connection for whole-home back up
- Four application modes
- Remote configuration and upgrade



FLEXIBLE BATTERY CONFIGURATION

- Support 40-64V Lithium or Lead-acid battery
- Maximum battery charge/discharge current of 210A



STABLE OUTPUT POWER

- Continuous 110% of nominal AC power
- Seamless backup transition (<10ms)

Model	SE 8KHB-180-T/EU		SE 10KHB-210-T/EU	
Efficiency				
Max. Efficiency (PV to AC)			98.0%	
Max. Efficiency (BAT to AC)			94.5%	
Input (PV)				
Max. PV Input Power	12,000W		15,000W	
Max. PV Voltage			600V	
Start-up Voltage			90V	
MPPT Operating Voltage Range			70V-540V	
Max. Input Current per MPPT			30A/22A/22A	
Max. Short Circuit Current per MPPT			40A/30A/30A	
String per MPPT			2/2/2	
Nos. of MPPT			3	
Input/Output (BAT)				
Battery Type			Lithium-ion/Lead-acid	
Nominal Battery Voltage			48V	
Battery Voltage Range			40V-64V	
Max. Charge/Discharge Current	210A/180A		210A/210A	
Max. Charge/Discharge Power	10,000W/8,000W		10,000W/10,000W	
Output (Grid)				
Nominal AC Output Power	8,000W		10,000W	
Max. AC Output Apparent Power	8,800VA		11,000VA	
Max. AC Output Power (PF=1)	8,800W		11,000W	
Max. AC Output Current	40A		50A	
Nominal Grid Voltage			220V/230/240V, L+N+PE	
Grid Voltage Range			150V-300V (Adjustable)	
Nominal Grid Frequency			50Hz/60Hz	
Grid Frequency Range			45Hz-55Hz/55Hz-65Hz (Adjustable)	
Power Factor			> 0.99 @rated power (Adjustable 0.8 LD - 0.8 LG)	
THDI			<3% (Rated Power)	
Output (Back up)				
Nominal Output Power	8,000W		10,000W	
Nominal Output Current	34.8A		43.5A	
Peak Output Apparent Power (1s)	16,000VA		20,000VA	
Nominal Output Voltage			220V/230/240V, L+N+PE	
Nominal Output Frequency			50Hz/60Hz	
Transfer Time			<10ms (typical)	
THDV			<3% @100% R Load	
Protection				
Protection Category			Class I	
DC Switch			Yes	
Anti-islanding Protection			Yes	
AC Overcurrent Protection			Yes	
DC/AC Overvoltage Protection			DC Type II, AC Type III	
AC Short Circuit Protection			Yes	
DC Reverse Protection			Yes	
Surge Arrester			DC Type II, AC Type II	
Insulation Resistance Detection			Yes	
Leakage Current Protection			Yes	
AFCI			Optional	
Generator			Yes	
General				
Max. Operation Altitude			4000m (>2000m derating)	
Ingress Protection Degree			IP66	
Operating Temperature Range			-25 C ~60 C (>45 C derating)	
Relative Humidity			0~100%	
Cooling			Fan Cooling	
Mounting			Wall bracket	
Dimensions (W*H*D)			420mm*800mm*240mm	
Weight			39Kg	
PV Connection Way			Terminals	
HMI & COM				
Display			Bluetooth & APP + LED, LCD (optional)	
Communication Interface			RS485/CAN (for BMS), DRM/RS485 (for Meter), RS485, Optional: Wi-Fi/LAN	
Certification				
Safety			IEC 62109-1&2	
Grid			IEC 61727/62116, AS 4777.2, NRS 097-2-1	
Warranty			5 Years	

Remarks: · The range of output voltage and frequency may vary depending on different grid codes.
· Specifications are subject to change without advanced notice.

SPLIT PHASE HYBRID INVERTER

SE 5/6/7.6/10/11.4KHB-UL

Application: Residential Use



MAXIMIZE PV INPUT POWER

- Up to 200% oversizing allowed with 3 MPPTs
- Support high power module with 30A PV input current
- Support AC coupled solar input
- Integrated arc fault circuit interrupter (AFCI) and rapid shutdown



VERSATILE APPLICATIONS

- Stackable up to 9 units
- Standby generator connection for whole-home back up
- Four application modes, mixed with time control
- Remote configuration and upgrade



FLEXIBLE BATTERY CONFIGURATION

- Built-in DC Breaker for safety and reliability
- Support 40-64V Lithium or Lead-acid battery
- Maximum battery charge/discharge current of 210A



STABLE OUTPUT POWER

- Continuous 110% of nominal AC power
- Support 120/240/208V connections
- Seamless backup transition (<10ms)

Model	SE 5KHB-130-D2/UL	SE 6KHB-130-D2/UL	SE 7K6HB-180 T2/UL	SE 10KHB-210-T2/UL	SE 11K4HB-210 T2/UL
Efficiency					
Max. Efficiency (PV to AC)	98.0%				
Max. Efficiency (BAT to AC)	94.5%				
CEC. Efficiency	96.5%				
Input (PV)					
Max. PV Input Power	7,500W	9,000W	12,000W	15,000W	15,000W
Max. PV Voltage	600V				
Start-up Voltage	90V				
MPPT Operating Voltage Range	70V-540V				
Max. Input Current per MPPT	30A/22A		30A/22A/22A		
Max short current per MPPT	40A/30A		40A/30A/30A		
String per MPPT	2/2		2/2/2		
Nos. of MPPT	2		3		
Input/Output (BAT)					
Battery Type	Lithium-ion/Lead-acid				
Nominal Battery Voltage	48V				
Battery Voltage Range	40V-64V				
Max. Charge/Discharge Current	210A/130A	210A/130A	210A/180A	210A/210A	210A/210A
Max. Charge/Discharge Power	10,000W/5,000W	10,000W/6,000W	10,000W/7,600W	10,000W/10,000W	10,000W/10,000W
Output (Grid)					
Nominal AC Output Power	5,000W	6,000W	7,600W	10,000W	10,000W
Max. AC Output Apparent Power	5,500VA	6,600VA	7,600VA	11,000VA	11,400VA
Max. AC Output Power (PF=1)	5,500W	6,600W	7,600W	11,000W	11,400W
Nominal AC Output Current	20.9A	25A	31.7A	41.7A	41.7A
Max. AC Output Current	22.9A	27.5A	34.8A	45.8A	47.5A
Nominal Grid Voltage	120V/240V (Split phase) / 208V (2/3 phase)				
Nominal Grid Frequency	50Hz /60Hz				
Grid Frequency Range	45Hz-55Hz/55Hz-65Hz (Adjustable)				
Power Factor	> 0.99 @rated power (Adjustable 0.8 LD - 0.8 LG)				
THDI	<3% (Rated Power)				
Output (Back up)					
Nominal Output Power	5,000W	6,000W	7,600W	10,000W	10,000W
Max. AC Output Power (PF=1)	5,500W	6,600W	7,600W	11,000W	11,400W
Nominal Output Current	20.9A	25A	31.7A	41.7A	41.7A
Peak Power (1s)	10,000VA	12,000VA	15,200VA	20,000VA	20,000VA
Nominal Output Voltage	120V/240V (Split phase) / 208V (2/3 phase)				
Nominal Output Frequency	50Hz/60Hz				
Transfer Time	< 10ms (typical)				
THDV	<3% @100% R Load				
Protection					
Protection Category	Class I				
DC Switch	Yes				
Anti-islanding Protection	Yes				
AC Overcurrent Protection	Yes				
DC/AC Overvoltage Protection	DC Type II, AC Type IV				
AC Short Circuit Protection	Yes				
DC Reverse Protection	Yes				
Surge Arrester	DC Type II, AC Type II				
Insulation Resistance Detection	Yes				
Leakage Current Protection	Yes				
AFCI	Yes				
RSD	Yes				
Generator	Yes				
General					
Max. Operation Altitude	2000m				
Ingress Protection Degree	NEMA 3R				
Operating Temperature Range	-25 C ~60 C (>45 C derating)				
Relative Humidity	0~100%				
Cooling Method	Fan Cooling				
Mounting	Wall bracket				
Dimensions (W*H*D)	16.5*31.5*9.4 inch (420mm*800mm*240mm)				
Weight	40Kg/88lb				
PV Connection Way	Terminals				
HMI & COM					
Display	Wireless & APP + LED, LCD (optional)				
Communication Interface	RS485/CAN (for BMS), DRM/RS485 (for meter), RS485, Optional: Wi-Fi/LAN				
Certification					
Safety	UL 1741/CSA C22.2/UL 1699B				
Grid	UL1741SB, IEEE1547: 2018, HECO SRD 2.0				
EMC	FCC Part 15 Class B				
Warranty	5 Years				

Remarks: · The range of output voltage and frequency may vary depending on different grid codes.
· Specifications are subject to change without advanced notice.

THREE PHASE HYBRID INVERTER

SE 5/6/8/10KHB-D3P

Application: Residential Use



EXCELLENT PERFORMANCE

- Maximum efficiency of 97.8% and battery efficiency of 97.0%
- Maximum 15kW PV input power, supporting continuous overload capacity of 110% and unbalanced output of 150%
- Maximum battery charge/discharge current of 50A
- Large MPPT current, compatible with high-power solar panels
- Advanced parallel function



HIGH RELIABILITY

- Key components from international renowned brands
- IP65 protection rating, ensuring adaptability to complex outdoor environment
- Multiple built-in protections, with optional AFCI



INTELLIGENT MAINTENANCE

- Quick commission via mobile app, 24/7 remote monitoring, configuration and upgrade
- Advanced energy management mechanism, with multiple built-in working modes and flexible customized settings

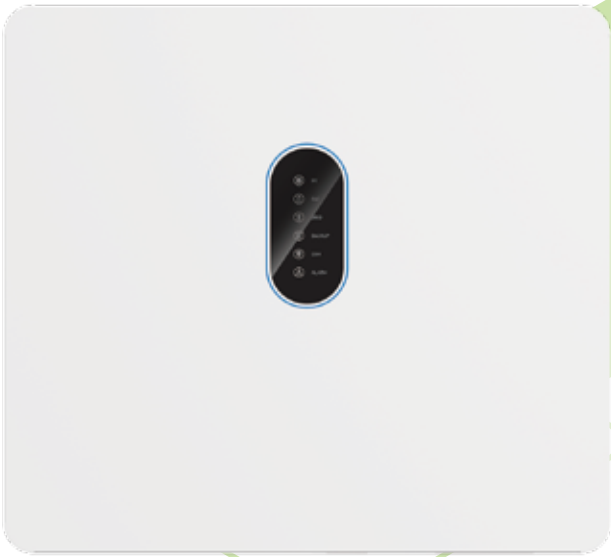
Model	SE 5KHB-D3P	SE 6KHB-D3P	SE 8KHB-D3P	SE 10KHB-D3P
Efficiency				
Max. Efficiency (PV to AC)	97.3%		97.8%	
Eur. Efficiency (PV to AC)	96.7%		97.0%	
Max. Efficiency (BAT to AC)	96.9%	97.0%	96.9%	97.0%
Input (PV)				
Max. PV Input Power	15,000W			
Max. PV Voltage	1000V			
Start-up Voltage	120V			
MPPT Operating Voltage Range	160V-950V			
Max. Input Current per MPPT	20A/30A			
Max. Short Circuit Current per MPPT	30A/40A			
String per MPPT	1/2			
Nos. of MPPT	2			
Input/Output (BAT)				
Battery Type	Lithium-ion/Lead-acid			
Nominal Battery Voltage	250V-600V			
Battery Voltage Range	120V-600V			
Max. Charge/Discharge Current	50A/50A			
Max. Charge/Discharge Power	15,000W/5,800W	15,000W/7,000W	15,000W/9,100W	15,000W/11,300W
Output (Grid)				
Nominal AC Output Power	5,000W	6,000W	8,000W	10,000W
Max. AC Output Apparent	5,500VA	6,600VA	8,800VA	11,000VA
Max. AC Output Power (PF=1)	5,500W	6,600W	8,800W	11,000W
Max. AC Output Current	3*8.3A	3*10A	3*13.3A	3*16.7A
Max. Single Phase Power	2,500W	3,000W	4,000W	5,000W
Max. Input Power	15,800W			
Max. Input Current	3*25A			
Nominal Grid Voltage	380V/400V/415V, 3W+N+PE			
Grid Voltage Range	260V-520V (Adjustable)			
Nominal Grid Frequency	50Hz/60Hz			
Grid Frequency Range	45Hz-55Hz/55Hz-65Hz (Adjustable)			
Power Factor	> 0.99 @rated power (Adjustable 0.8 LD - 0.8 LG)			
THDI	<5%			
Output (Back up)				
Nominal Output Power	5,000W	6,000W	8,000W	10,000W
Nominal Output Current	3*7.6A	3*9.1A	3*12.2A	3*15.2A
Max. Single Phase Power	2,500W	3,000W	4,000W	5,000W
Peak Output Apparent Power (5min)	6,000VA	7,200VA	9,600VA	12,000VA
Peak Output Apparent Power (10s)	7,500VA	9,000VA	12,000VA	15,000VA
Nominal Output Voltage	380V/400V/415V, 3W+N+PE			
Nominal Output Frequency	50Hz/60Hz			
Transfer Time	<10ms (typical)			
THDV	<3% @100% R Load			
Protection				
Protection Category	Class I			
DC Switch	Yes			
Anti-islanding Protection	Yes			
AC Overcurrent Protection	Yes			
DC/AC Overvoltage Protection	DC Type II, AC Type III			
AC Short Circuit Protection	Yes			
DC Reverse Protection	Yes			
Surge Arrester	DC Type II, AC Type II			
Insulation Resistance Detection	Yes			
Leakage Current Protection	Yes			
GFCI	Yes			
AFCI	Optional			
General				
Max. Operation Altitude	4000m (>2000m derating)			
Ingress Protection Degree	IP65			
Operating Temperature Range	-25 C ~60 C (>45 C derating)			
Relative Humidity	0~100%			
Cooling Method	Natural Cooling			
Mounting	Wall bracket			
Dimensions (W*H*D)	560mm*580mm*218.3mm			
Weight	32Kg			
PV Connection Way	MC4/H4			
HMI & COM				
Display	LED, LCD (optional), APP			
Communication Interface	RS485/CAN (for BMS), DRM, RS485 (for Meter), Wi-Fi/LAN (Optional, for Portal)			
Certification				
Safety	IEC/EN 62109-1&2			
EMC	IEC/EN 61000			
Grid	VDE 4105, EN 50549-1, CEI 0-21, PPDS, RD 1699/661/647/413, UNE 217002, AS 4777.2, C10/11, G98/G100, IEC 61727/62116			
Warranty	5 Years			

Remarks: · The range of output voltage and frequency may vary depending on different grid codes.
· Specifications are subject to change without advanced notice.

THREE PHASE HYBRID INVERTER

SE 12/15/20/25/30KHB

Application: Residential & Small-Medium C&I Use



EXCELLENT PERFORMANCE

- Maximum efficiency of 98.4% and battery efficiency of 98.0%
- Maximum 150% PV input power, supporting continuous overload capacity of 110% and unbalanced output of 150%
- Maximum battery charge/discharge current of 2*75A
- Large MPPT current, compatible with high-power solar panels
- Advanced parallel function



HIGH RELIABILITY

- Key components from international renowned brands
- IP66 protection rating, ensuring adaptability to complex outdoor environment
- Multiple built-in protections, with optional AFCI



INTELLIGENT MAINTENANCE

- Quick commission via mobile app, 24/7 remote monitoring, configuration and upgrade
- Advanced energy management mechanism, with multiple built-in working modes and flexible customized settings

Model	SE 12KHB-D3		SE 15KHB-D3		SE 20KHB-D3		SE 25KHB-T3		SE 30KHB-T3	
Efficiency										
Max. Efficiency (PV to AC)			98.2%						98.4%	
Eur. Efficiency (PV to AC)					97.9%					
Max. Efficiency (BAT to AC)					98.0%					
Input (PV)										
Max. PV Input Power	18,000W		22,500W		30,000W		37,500W		45,000W	
Max. PV Voltage					1000V					
Start-up Voltage					150V					
MPPT Voltage Range					160V-950V					
Max. Input Current per MPPT			32A/32A				32A/32A/32A			
Max. Short Circuit Current per MPPT			40A/40A				40A/40A/40A			
String per MPPT			2/2				2/2/2			
Nos. of MPPT			2				3			
Input/Output (BAT)										
Battery Type					Lithium-ion/Lead-acid					
Battery Voltage Range at Rated Power	230V-800V		285V-800V		380V-800V		190V-800V		230V-800V	
Battery Voltage Range					120V-800V					
Max. Charge/Discharge Current			60A/60A				2*75A/2*75A			
Max. Charge/Discharge Power	18,000W/ 14,400W		22,500W/ 18,000W		30,000W/ 24,000W		37,500W/ 30,000W		45,000/ 36,000W	
Output (Grid)										
Nominal AC Output Power	12,000W		15,000W		20,000W		25,000W		30,000W	
Max. AC Output Power	13,200VA		16,500VA		22,000VA		27,500VA		33,000VA	
Max. AC Output Power (PF=1)	13,200W		16,500W		22,000W		27,500W		33,000W	
Max. AC Output Current	3*20A		3*25A		3*33.3A		3*41.7A		3*50A	
Max. Single Phase power	10,000VA		10,000VA		10,000VA		11,000VA		11,000VA	
Max. Input Power	36,000VA				40,000VA				45,000VA	
Max. Continuous AC Pass Through			63A				75A			
Nominal Grid Voltage					380V/400V/415V, 3W+N+PE					
Grid Voltage Range					277V-520V (Adjustable)					
Nominal Grid Frequency					50Hz/60Hz					
Grid Frequency Range					45Hz-55Hz/55Hz-65Hz (Adjustable)					
Power Factor					> 0.99 @rated power (Adjustable 0.8 LD - 0.8 LG)					
THDI					<3% (Rated Power)					
Output (Back up)										
Nominal Output Power	12,000W		15,000W		20,000W		25,000W		30,000W	
Nominal Output Current	3*18.2A		3*22.7A		3*30.3A		3*37.9A		3*45.5A	
Peak Output Apparent Power (5min)	14,400VA		18,000VA		24,000VA		30,000VA		36,000VA	
Peak Output Apparent Power (10s)	18,000VA		22,500VA		30,000VA		37,500VA		45,000VA	
Nominal Output Voltage					380V/400V/415V, 3W+N+PE					
Nominal Output Frequency					50Hz/60Hz					
Transfer Time					<10ms (typical)					
THDV					<3% @100% R Load					
Protection										
Protection Category					Class I					
DC Switch					Yes					
Anti-islanding Protection					Yes					
AC Overcurrent Protection					Yes					
DC/AC Overvoltage Protection					DC Type II, AC Type III					
AC Short Circuit Protection					Yes					
DC Reverse Protection					Yes					
Surge Arrester					DC Type II, AC Type II					
Insulation Resistance Detection					Yes					
Leakage Current Protection					Yes					
AFCI					Optional					
General										
Max. Operation Altitude					4000m (>2000m derating)					
Ingress Protection Degree					IP66					
Operating Temperature Range					-25 C ~60 C (>45 C derating)					
Relative Humidity					0~100%					
Cooling			Natural Cooling				Smart Fan Cooling			
Mounting Method					Wall bracket					
Dimensions (W*H*D)					660mm*596mm*235mm					
Weight			45Kg				55Kg			
PV Connection Way					MC4/H4					
HMI & COM										
Display					Bluetooth & APP + LED, LCD (optional)					
Communication Interface					RS485/CAN (for BMS), RS485, DRM/RS485 (for Meter), Optional: Wi-Fi/LAN, 3*DO, 2*DI					
Certification										
Safety					IEC 62109-1&2					
EMC					IEC/EN 61000					
Grid					VDE 4105, EN 50549-1, CEI 0-21, NRS 097-2-1, RD 1699/661/647/413, UNE 217002, AS 4777.2, C10/11, IEC 61727/62116					
Warranty					5 Years					

Remarks: · The range of output voltage and frequency may vary depending on different grid codes.
· Specifications are subject to change without advanced notice.

DATA LOGGER V1000+



- Built-in web server for LAN monitoring
- 12 Months of data storage
- Automatic network clock synchronization
- RS485 interface for inverter connection
- Standard RJ45 patch cable
- Power export control supported

Model		V1000+
Connection	Inverter: RS485 Router: RJ45	
Access Number	40pcs	
Transmission Maximum Distance	1200m	
Display	LED	
Input		
Input Voltage	Input: AC 90V-250V 50/60Hz Output: DC 5V	
Static Current Consumption	1A	
General		
Operating Temperature	-25℃~55℃	
Humidity	10%~95% relative humidity, no condensation	
IP Rating	IP20	
Dimension (L*W*H)	118mm*78mm*29mm	
Certification		
Safety	FCC, CE, ROHS	

WIFI COMMUNICATION MODULE SE WIFI-R



- Easy plug-and-play installation for quick and convenient setup
- Preferred monitoring solution for residential use

Model		SE WIFI-R
Connection	TTL	
Standards	802.11 b/g/n	
Transmission Maximum Distance	100m Unobstructed environment	
Setting	APP / WEB	
Input		
Input Voltage	DC 5V	
Static Power Consumption	<1.6W	
General		
Operating Temperature	-25℃~60℃	
Humidity	0%~100% relative humidity, no condensation	
IP Rating	IP65	
Dimension (L*W*H)	71mm*41mm*92mm	
Certification		
Safety	FCC / CE-RED / SRRC	

LAN COMMUNICATION MODULE SE LAN-R



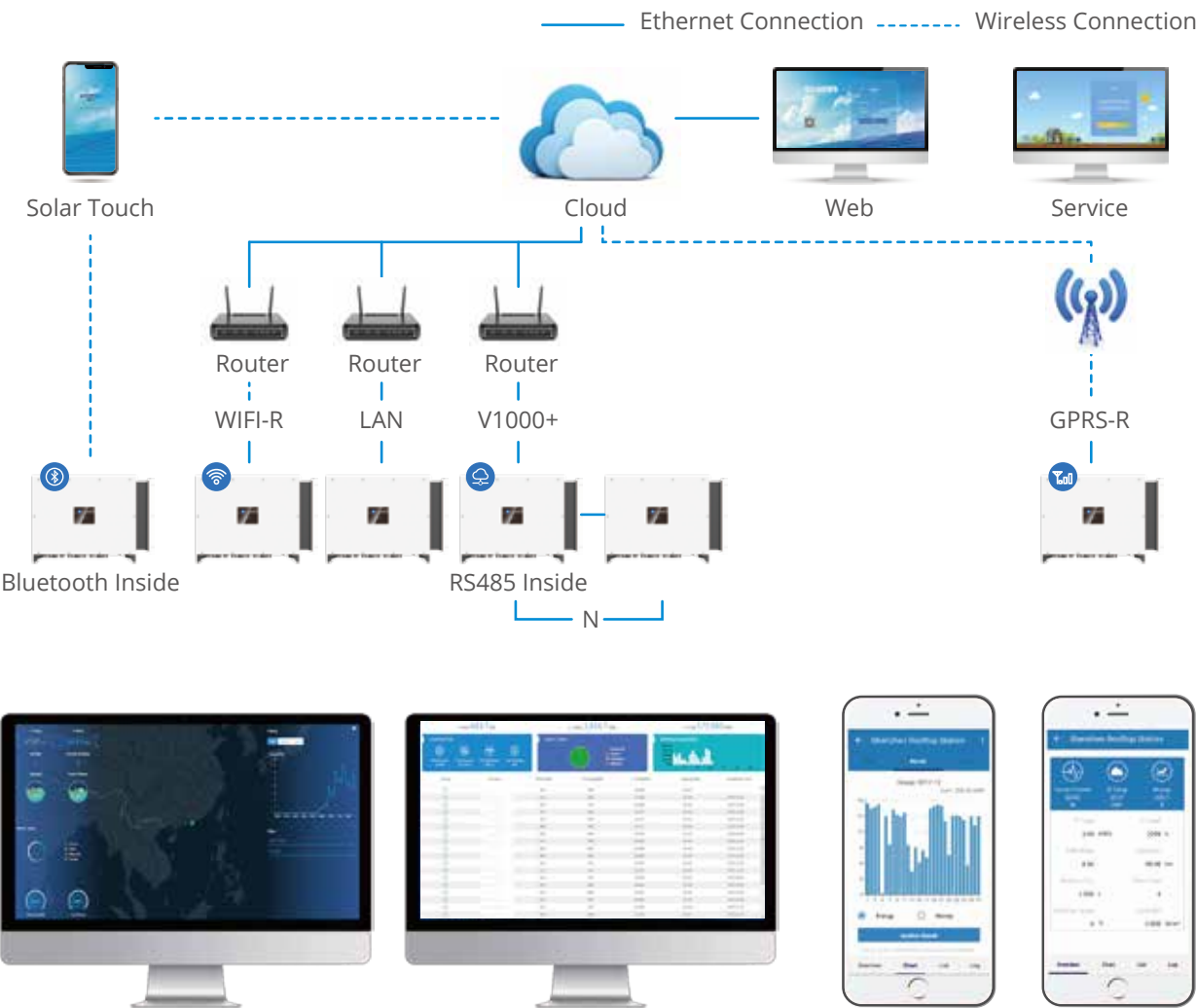
- Easy plug-and-play installation for quick and convenient setup
- Mobile internet monitoring, ideal for rural and remote areas

Model		SE LAN-R
Connection	TTL	
Standards	IEEE 802.3	
Transmission Maximum Distance	100m CAT5	
Setting	APP	
Input		
Input Voltage	DC 5V	
Static Power Consumption	<1.6W	
General		
Operating Temperature	-25℃~60℃	
Humidity	0%~100% relative humidity, no condensation	
IP Rating	IP65	
Dimension (L*W*H)	71mm*41mm*117mm	
Certification		
Safety	FCC, CE-RED, SRRC	

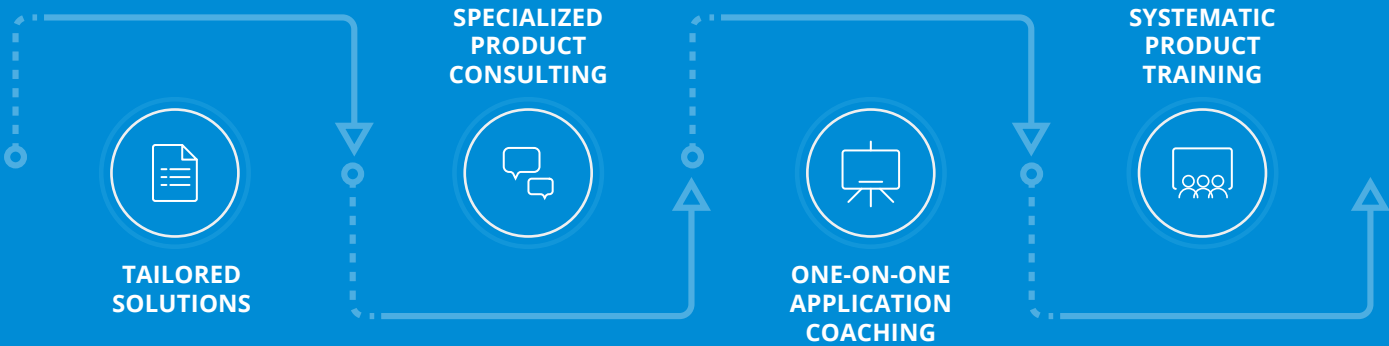
SMART SOLAR CLOUD



- Suitable for residential/commercial/storage applications
- Cloud services provided from Europe, the Americas, Singapore, India and China
- Monitoring the operational status of inverters, generators, communication modules, energy storage within the system
- Full visibility into energy consumption and production processes
- Remote diagnosis and detection technology with operational data visualization and intelligent analysis



PRESALES SUPPORT



AFTER SALE SERVICE



GLOBAL NETWORK



VISION & MISSION

Become the technology and market leader in the new energy industry through continuous innovation, distinctive and highly competitive products and services.

MARKETING PROMOTION



APPLICATION REFERENCES



FOSHAN, CHINA
4.2MW



SHANTOU, CHINA
2MW



HUNAN, CHINA
6MW



VIETNAM
200kW



TAICHUNG CITY, TAIWAN
1.5MW



CHIAYI COUNTY, TAIWAN
20MW