ENERGY STORAGE PRODUCT AND SOLUTION

"MAKE ENERGY CLEANER AND MORE EFFICIENT"

SHENZHEN MEGAREVO TECHNOLOGY CO., LTD.

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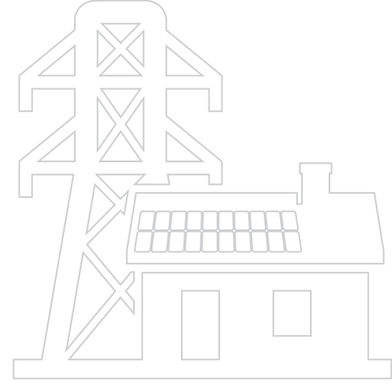


ABOUT US

Shenzhen Megarevo Technology Co., Ltd. (hereinafter referred to as "Megarevo") was established in 2018 as a professional supplier of hybrid inverters. Headquartered in Shenzhen, China, It has four major service centers and three production bases around the world. more than 300 employees worldwide, of which R&D members account for >50%.

As a high-tech enterprise, Megarevo has been committed to promoting the development of the global renewable energy industry, providing the industry with products and solutions with feasibility and economic benefits, helping customers overcome the power consumption dilemma, and achieving economic, flexible, and clean electricity usage. Today, with its profound technology accumulation and reliable products and services, Megarevo has earned the trust of over 1,000 customers worldwide. Having delivered an impressive total capacity of over 3GW+, it has become a renowned brand in the field of energy storage inverters globally.

Since its inception, Megarevo has focused on four major application scenarios: residential energy storage, commercial & industrial (C&I) energy storage, microgrid, and grid-side energy storage. The company offers standardized energy storage inverter products and customized solutions to meet to the diverse needs of customers. Currently, Megarevo provides a range of products including REVO residential energy storage inverters, PMAE modular on-grid inverters, MEGA C&I energy storage inverters, MPS microgrid products, and energy storage systems. These products have obtained certifications such as CGC, CE, TUV, UL, and NRS in various regions including North America, the UK, Germany, Poland, Pakistan, South Africa etc.

With the mission of "making energy cleaner and more efficient", Megarevo consistently prioritizes innovation tailored to customer needs, delivering competitive and valuable products. Moving forward, Megarevo will forge partnerships with an expanded network to foster a sustainable, low-carbon world.

DEVELOPMENT PATH

2018

In July 2018,
Shenzhen Megarevo Technology Co., Ltd
was formally established.

Launched MEGA series high-power C&I
energy storage converters in December.

2019

The first single-phase hybrid inverter
was released in December.

2020

In June, the first MPS hybrid inverter was launched
in Southeast Asia and Australian market.

October, won the 2020 National Renewable
Energy Solution Award in the China Renewable Investment Association.

2021

In July, Megarevo was officially recognized as
the National High-tech Enterprise.

In November, the first North American hybrid inverter
was released, and passed UL certification.

In December, the market turnover exceeded 100 million RMB.

2022

In April , Split-phase inverter (48V) obtained the North American certification.

In May, Obtained the ISO system certification.

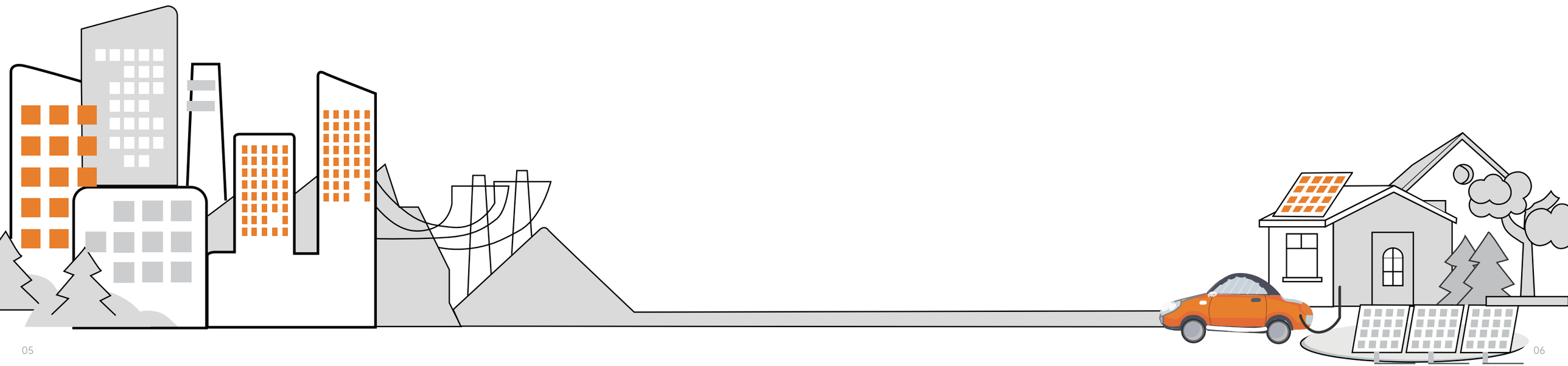
In December, The market turnover exceeded 350 million RMB.

2023

Release G2 series inverters and
PMAE modular converters.

Establishing offices in South Africa and Germany.

Building two manufacturing centers.



ENTERPRISE QUALIFICATION

TOP 10
Asian energy storage Inverter brands

- Shortlisted for Asia's top 10 energy storage inverter brands selected by APAC in 2022.
- Won the best energy storage PCS supplier award of China energy storage network for five consecutive years.
- Won the best small and medium power PCS supplier by China leader energy storage alliance.
- Chinese national high-tech enterprises.
- China national excellent technical solution provider of new energy storage.
- Passed iso45001, iso14001, iso9001 certifications.

PRODUCTS LINE

Residential products

05KL1D off-grid inverter

G2 series energy storage inverter

Three-phase hybrid inverter

Split-phase hybrid inverter
(battery high voltage)

Split-phase hybrid inverter
(battery low voltage)

Micro-grid/grid products

MPS microgrid hybrid Inverter

PMAE modular on-grid inverter

Power conversion system
(Without isolation transformer)

Power conversion system
(With isolation transformer)

Container PCS booster

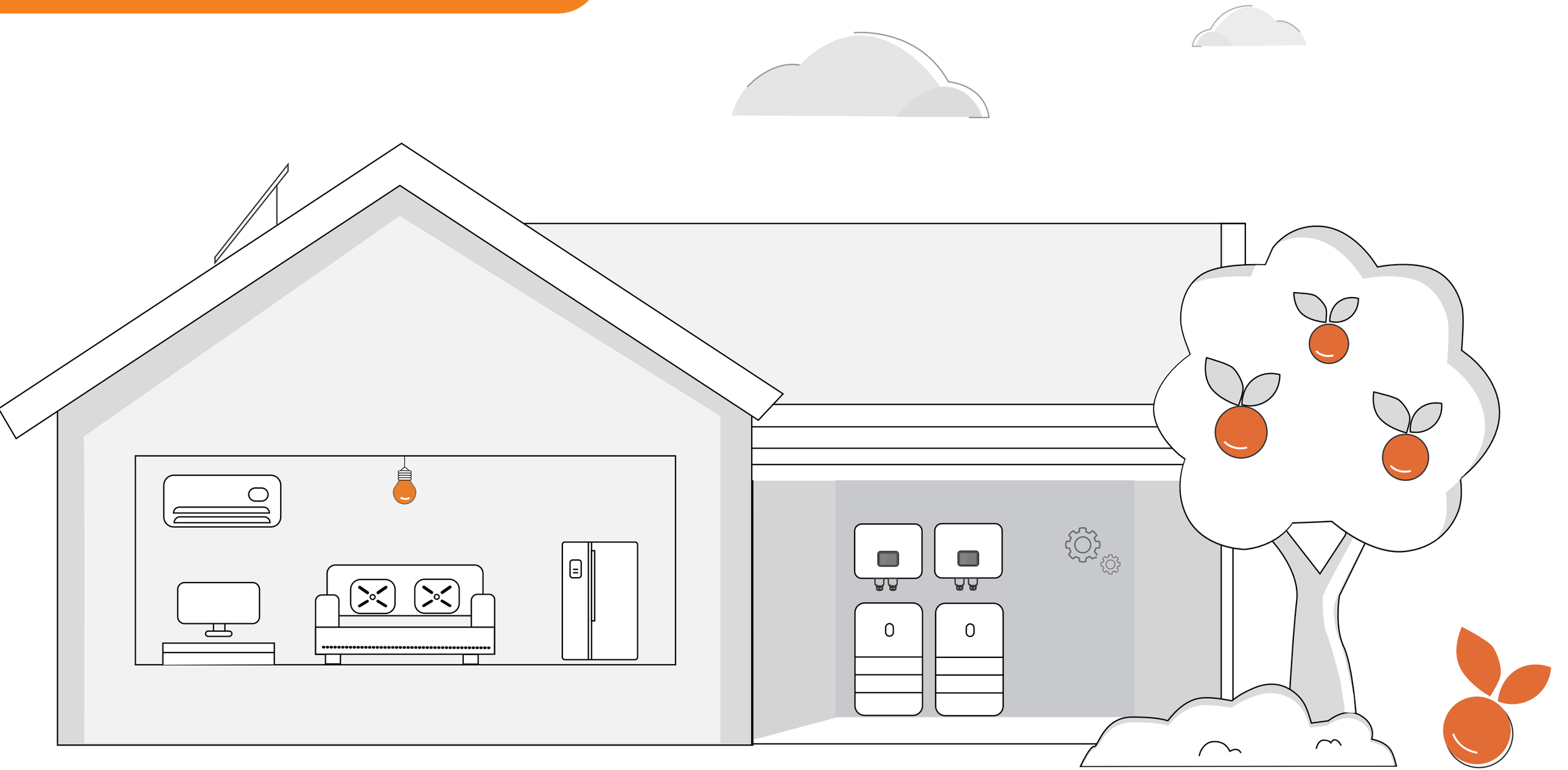
Energy storage system

Outdoor cabinet energy
storage system

Container energy storage system

EMS and stick logger

RESIDENTIAL PRODUCTS



05KL1D Off-grid inverter

KEY STRENGTHS

- Support AC and DC power activation.
- Adopt LCD display, more convenient operation.
- Supports 6 pcs in parallel, and it can be extended to 30kW.
- Max. 1.5x DC overmatching.
- Optional WIFI or GPRS for remote monitoring.
- Support three-phase function.

PV string input

Model	05KL1D
Max. input power (kW)	7.5
No. of MPPT trackers	1
No. of strings per MPPT trackers	1
Starting voltage (V)	100
Max. input voltage (V)	450
MPPT voltage range (V)	100~430
Max. input current per MPPT (A)	32
Max. short-circuit current per MPPT (A)	37

Battery

Rated voltage (V)	48
Battery voltage range (V)	40~56
Max. input/output current (A)	100/100
Battery type	Lithium /Lead-acid
Battery communication	CAN

Grid input

Rated voltage (V)	230
Input voltage range (V)	176~270
Rated grid frequency (Hz)	50/60
Max. charging current (A)	21.7
THDi	<3%
Grid type	L+N+PE

Generator input

Max. input power (kW)	5
Max. input current (A)	21.7

Off-grid output

Rated output power (kW)	5
Rated output voltage (Vac)	230
Max. output current (A)	26.1
Rated output frequency (Hz)	50/60
Voltage waveform	Pure sine wave
THDu	<2%
Power factor	1 (0.8 leading-0.8 lagging)
Automatic switching time (ms)	<10
Overload capacity	110%, 60S/ 120%, 30S/ 150%, 10S
Parallel capability	6 pcs in parallel

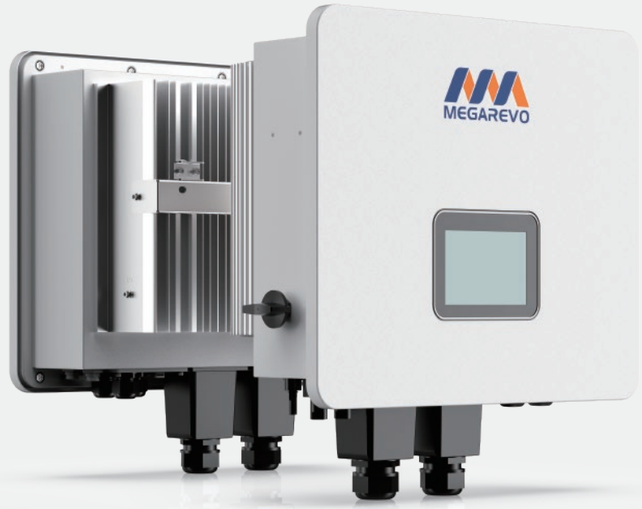
Protection

PV input reverse protection	Yes
Antislanding protection	Yes
Insulation resistance test	Yes
AC overcurrent protection	Yes
AC short circuit protection	Yes
AC overvoltage protection	Yes
AC undervoltage protection	Yes
DC/AC surge protection	Yes

General data

Max. inverter efficiency	94%
MPPT efficiency	99%
Operating temperature (℃)	-25℃ ~60℃
Relative humidity	5%-95%
Operating altitude (m)	<2,000 (>2,000 Derating)
Protection class	IP65
Weights (kg)	17
Dimensions W*D*H (mm)	467*454*200
Cooling	Natural
Noise emission (dB)	<35
Display	LCD
Communication interface	RS485 / WIFI (GPRS) / CAN / DRM / Dry-contact
Self-consumption at night (W)	<15
Contamination level	II
Topological	Non-isolated

G2 series energy storage inverter



KEY STRENGTHS

- Using soft switching technology, the overall machine efficiency is increased by 0.5%.
- Support AC coupling function.
- Support mobile phone (Bluetooth +WIFI) setting and maintenance.
- Compact design Save 50% on installation costs.
- Suitable for the latest 210mm high-power PV panel (Isc=18.5A).
- Ultra-low starting voltage, longer power generation time.

G2 COUPLER SERIES

G2 SERIES WITH GENERATOR INPUT

G2 SERIES STANDARD MODEL

.WITHOUT SCREEN

R3KL1-AC	R4KL1-AC	R5KL1-AC	R8KL1-AC			R3KL1-G2	R4KL1-G2	R5KL1-G2	R8KL1-G2
R3K6L1-AC	R4K6L1-AC	R6KL1-AC				R3K6L1-G2	R4K6L1-G2	R6KL1-G2	

.WITH SCREEN

R3KL1D-AC	R4KL1D-AC	R5KL1D-AC	R8KL1D-AC	R3KL1DA-G2	R4KL1DA-G2	R5KL1DA-G2	R8KL1DA-G2	R3KL1D-G2	R4KL1D-G2	R5KL1D-G2	R8KL1D-G2
R3K6L1D-AC	R4K6L1D-AC	R6KL1D-AC		R3K6L1DA-G2	R4K6L1DA-G2	R6KL1DA-G2		R3K6L1D-G2	R4K6L1D-G2	R6KL1D-G2	

PV string input

Model	R3KL1-G2 / R3KL1D-G2 / R3KL1DA-G2	R3K6L1-G2 / R3K6L1D-G2 / R3K6L1DA-G2	R4KL1-G2 / R4KL1D-G2 / R4KL1DA-G2	R4K6L1-G2 / R4K6L1D-G2 / R4K6L1DA-G2	R5KL1-G2 / R5KL1D-G2 / R5KL1DA-G2	R6KL1-G2 / R6KL1D-G2 / R6KL1DA-G2	R8KL1-G2 / R8KL1D-G2 / R8KL1DA-G2
Max. Input power (kW)	4.5	5.4	6	6.9	7.5	9	12
Start-up voltage (V)	100						
Max. PV input voltage (V)	550						
MPPT range/nominal (V)	80~500/360						
Max.input current of single MPPT (A)	16/16						16/32
Max. short-circuit current (A)	18.5/18.5						18.5/37

AC output

Model	R3KL1-AC / R3KL1D-AC / R3KL1-G2 / R3KL1D-G2 / R3KL1DA-G2	R3K6L1-AC / R3K6L1D-AC / R3K6L1-G2 / R3K6L1D-G2 / R3K6L1DA-G2	R4KL1-AC / R4KL1D-AC / R4KL1-G2 / R4KL1D-G2 / R4KL1DA-G2	R4K6L1-AC / R4K6L1D-AC / R4K6L1-G2 / R4K6L1D-G2 / R4K6L1DA-G2	R5KL1-AC / R5KL1D-AC / R5KL1-G2 / R5KL1D-G2 / R5KL1DA-G2	R6KL1-AC / R6KL1D-AC / R6KL1-G2 / R6KL1D-G2 / R6KL1DA-G2	R8KL1-AC / R8KL1D-AC / R8KL1-G2 / R8KL1D-G2 / R8KL1DA-G2
Rated power (kW)	3	3.68	4	4.6	5	6	8
Max. AC current output to grid (A)	14.3	16	19.1	20	21.7	28.7	38.3
Nominal voltage/range (V)	230 /176~270						
Frequency (Hz)	50 /60						
Power factor	1(0.8 leading-0.8 lagging)						
THDi	<3%						
AC grid type	L+N+PE						

Battery

Battery voltage range (V)	40~58	
Max. charging voltage (V)	58	
Max. charge/discharge current (A)	60/60 / 72/72 / 80/80 / 92/92 / 100/100 / 120/120	160/160
Battery type	Lithium /Lead-acid	
Communication Interface	CAN/RS485	
Max.battery output power/ duration(kW/min)	/	8/20

EPS output

Rated power (kW)	3	3.68	4	4.6	5	6	8
Rated voltage (V)	230						
Max. AC current output to grid (A)	14.3	16	19.1	20	21.7	28.7	38.3
Rated frequency (Hz)	50 / 60						
Automatic switchover time (ms)	<10						
THDu	<2%						
Overload capacity	110%, 60S/ 120%, 30S/ 150%, 10S						

General data

Battery chage/dischage efficiency	96%	
PV Max. efficiency	98%	
Europe efficiency	97%	
MPPT efficiency	99.9%	
Ingress protection	IP65	
Noise emission (dB)	<35	
Operation temperature (℃)	-25 ~ 60	
Cooling	Natural	
Relative humidity	0 ~95% (non-condensing)	
Operating altitude (m)	2,000 (>2,000 Derating)	
Dimensions W*D*H (mm)	With Generator:454.5*220*499.7 / Without Generator:454.5*220*467	With Generator:484.5*220*499.7 Without Generator:484.5*220*467
Net weight (kg)	19 (20 With Generator Input)	22(23 Standard Model)
Topology	Non-isolated	
Standby loss(W)	<15	
Display	Optional (colorful touch screen /no screen)	
Interface:RS485/Wifi/4G/CAN/DRM	Yes/Opt/Opt/Yes/Yes	

Three-phase hybrid inverter

KEY STRENGTHS

- Support BMS (non-standard) remote upgrade.
- Support full power discharge, automatic battery charge and discharge management.
- Compatible with single-phase and three-phase loads.
- Capable of Supporting 100% Unbalanced Loads

PV string input

Model	R6KH3	R8KH3	R10KH3	R12KH3	R15KH3
Max.PV input power (kW)	9	12	15	18	22.5
Max. PV voltage (V)	1,000				
MPPT voltage range (V)	180~850				
Full power MPPT voltage range (V)	250~850	330~850	430~850	510~850	620~850
Min. input voltage/start-up voltage (V)	125/180				
Max. input current per MPPT (A)	13/13				
Max. short-circuit current (A)	16/16				25/25
No. of MPPT trackers	2				
No. of strings per MPPT trackers	1/1				2/2
Rated PV input voltage (V)	700				

AC Output

Nominal output power to grid (kVA)	6	8	10	12	15
Max. apparent power to grid (kVA)	6.6	8.8	11	13.2	16.5
Max. apparent power from grid (kVA)	13.2	17.6	22	26.4	33
Max. apparent current from grid (A)	19.1	25.5	31.8	38.2	47.6
Nominal output current to grid (A)	8.7	11.5	14.4	17.3	21.7
Max.output current to grid (A)	9.5	12.7	15.9	19.1	23.8
Nominal grid voltage (V)	380/400, 3W+N+PE				
Nominal grid frequency (Hz)	50/60				
THDi	< 3%				

Battery

Max.charging /discharging power (kW)	6.6	8.8	11	13.2	16.5
Battery voltage range (V)	125~600				
Battery optimal operating voltage range (V)	150~550				
Max.charging /discharging current (A)	50				
Rated.charging /discharging current (A)	40				
Battery type	Lithium /Lead acid				
Communication interface	CAN				

EPS output

Nominal output power (kVA)	6	8	10	12	15
Max. apparent power (kVA)	6.6	8.8	11	13.2	16.5
Nominal output current (A)	8.7	11.5	14.4	17.3	21.7
Max.output current (A)	9.5	12.7	15.9	19.1	23.8
Nominal output voltage (V)	400 ,3W+N+PE				
Nominal output frequency (Hz)	50/60				
THDu	< 2%				
Max.efficiency	97.9%	97.9%	98.2%	98.2%	98.5%
Europe efficiency	97.2%	97.2%	97.5%	97.5%	97.6%
MPPT efficiency	⩾99.5%				
Max.battery charge/discharge efficiency	97.5%	97.5%	97.5%	97.6%	97.8%

General Data

Ingress protection	IP65
Operating temperature range (℃)	-25~60
Relative humidity	0~95%
Operating altitude (m)	2,000 (>2,000 Derating)
Dimensions W*H*D (mm)	566*596*220
Net weight (kg)	32
Self-consumption at night (W)	< 15
Cooling	Natural
Noise emission (dB)	⩽35
EMC	IEC/EN 61000-6-1:2019, IEC/EN 61000-6-2:2019, IEC/EN 61000-6-3:2021, IEN/EN 61000-6-4:2019, IEC/EN 61000-3-2:2019/A1:2021, EN 61000-3-3:2013/A2:2021, IEC/EN 61000-3-11:2019, EN 61000-3-12:2011
On-grid Standards	Europe: EN 50549-1:2019/AC:2019, Poland:EN50549-1:2019/Rfg:2016/NC Rfg:2018/PTPiREE:2021, Germany:VDE-AR-N 4105:2018 /DIN VDE V 0124-100(VDE V 0124-100):2020, South Africa: NRS 097-2-1:2017 Edition 2.1, UK:G98/G99/1-6:2022, Spain:UNE217001:2020 /UNE217002:2020/NTS V2.1:2021-07, IEC61727:2004/IEC62116:2014/IEC61683:1999, Hungary:EN50549-1:2019/RFG:2016/ Hungary, Italy CEI0-21
Safety standard	IEC/EN62109-1:2010, IEC/EN62109-2:2011

Display and communication

HMI	LCD; APP
BMS	CAN
EMS/Meter	RS485/RS485
Supported communication interface	WIFI / GPRS

Three-phase hybrid inverter

Supports high power components

KEY STRENGTHS

- Support BMS (non-standard) remote upgrade.
- Support full power discharge, automatic battery charge and discharge management.
- Compatible with single-phase and three-phase loads.
- Supports high power components.
- Capable of Supporting 100% Unbalanced Loads.

PV string input

Model	R6KH3-P	R8KH3-P	R10KH3-P	R12KH3-P	R15KH3-P
Max.PV input power (kW)	9	12	15	18	22.5
Max. PV voltage (V)	1,000				
MPPT voltage range (V)	180~850				
Full power MPPT voltage range (V)	250~850	330~850	430~850	510~850	425~850
Start-up voltage (V)	125				
Max. input current per MPPT (A)	18/18				20/20
Max. short-circuit current (A)	25/25				30/30
No. of MPPT trackers	2				
MPPT number/Max. input strings number	1/1	1/1	1/1	1/1	2/2
Rated input voltage	600				

AC Output

Nominal output power to grid (kVA)	6	8	10	12	15
Max. apparent power to grid (kVA)	6.6	8.8	11	13.2	16.5
Max. apparent power from grid (kVA)	13.2	17.6	22	26.4	33
Max. apparent current from grid (A)	19.1	25.5	31.8	38.1	47.6
Nominal output current to grid (A)	8.7	11.5	14.4	17.3	21.7
Max.output current to grid (A)	9.5	12.7	15.9	19.1	23.8
Nominal grid voltage (V)	3W+N+PE, 220 / 380 V; 230 / 400 V; 240 / 415 V				
Nominal grid frequency (Hz)	50/60				
THDi	< 3%				

Battery

Max.charging /discharging power (kW)	6.6	8.8	11	13.2	16.5
Battery voltage range (V)	125~600				
Battery Working Voltage Range (V)	150~550				
Min.Full Power Voltage@EPS	160	210	260	310	385
Max.Charging/Discharging Current (A)	50				
Rated.charging /discharging current (A)	40				
Battery type	Lithium and Lead Acid Battery				

ESP Output

Nominal output power (kVA)	8	8	10	12	15
Max. apparent power (kVA)	8.8	8.8	11	13.2	16.5
Nominal output current (A)	8.7	11.5	14.4	17.3	21.7
Max.output current (A)	9.5	12.7	15.9	19.1	23.8
Nominal output voltage (V)	400 ,3W+N+PE				
Nominal output frequency (Hz)	50/60				
THDu	< 2%				
Max.efficiency	97.9%	97.9%	98.0%	98.0%	98.1%
Europe efficiency	97.3%	97.4%	97.5%	97.5%	97.5%
MPPT efficiency	99.9%				
Max.battery charge/discharge efficiency	97.0%				

General Data

Ingress protection	IP65
Operating temperature range (℃)	-35~60
Relative humidity	0~100%
Operating altitude (m)	2000m(Derating above 2000m)
Dimensions (W*H*D)	530*560*220mm
Weight	32kg
Cooling	Natural convection
Noise emission (dB)	⩽35
Installation	Wall mounted
Supported protections	Island Protection / PV reverse polarity protection / Battery reverse polarity protection / Insulation monitoring / Residual current monitoring / AC over current protection / AC over power protection / Back-up Output Short Protection / Short circuit protection / Island Protection / Battery reverse Polarity / Insulation Resistor Detection
EMC	IEC/EN 61000-6-1:2019, IEC/EN 61000-6-2:2019, IEC/EN 61000-6-3:2021, IEN/EN 61000-6-4:2019, IEC/EN 61000-3-2:2019/A1:2021, EN 61000-3-3:2013/A2:2021, IEC/EN 61000-3-11:2019, EN 61000-3-12:2011
On-grid Standards	Europe: EN 50549-1:2019/AC:2019, Poland:EN50549-1:2019/Rfg:2016/NC Rfg:2018/PTPiREE:2021, Germany:VDE-AR-N 4105:2018 /DIN VDE V 0124-100(VDE V 0124-100):2020, South Africa: NRS 097-2-1:2017 Edition 2.1, UK:G98/G99/1-6:2022, Spain:UNE217001:2020 /UNE217002:2020/NTS V2.1:2021-07, IEC61727:2004/IEC62116:2014/IEC61683:1999, Hungary:EN50549-1:2019/RFG:2016/ Hungary, Italy CEI0-21, Holland:EN 50549-1:2019/AC:2019 with Netcode elektriciteit:2022 Type A, Belgium:C10/11:2021, France:Arrêté du 9 juin 2020+Arrêté du 31 mai 2021, Denmark:TR 3.3.1:2023-01
Safety standard	IEC/EN62109-1:2010, IEC/EN62109-2:2011

Interface

HMI	LCD; APP
BMS	CAN
EMS/Meter	RS485/RS485
Supported communication interface	WIFI

Split-phase hybrid inverter (battery high voltage)

KEY STRENGTHS

- Mainstream battery automatic matching.
- Support remote software upgrade.
- Supporting critical load priority power supply.
- UL certified, CEC listed and SUNSPEC listed.
- The maximum current for bypass load of a single inverter can reach up to 90A.
- Support 100% unbalanced load capacity.

APPLICATIONS

» Luxury villa » Residential nomadic farm electricity » Nomadic farm » Communication base station

PV string input

Model	R6KH1NA	R8KH1NA	R10KH1NA	R12KH1NA
Max. power (kW)	7.8	10.4	13	15.6
Max. DC voltage (V)	500			
MPPT voltage range (V)	125~500			
Max.input current of single MPPT (A)	12			
No. of MPPT trackers	4			
No. of strings per MPPT trackers	1			

AC output

Rated output power (kVA)	6	8	10	12
Max. apparent Power (kVA)	6.6	8.8	11	12
Max. output current (A)	27.5	36.7	45.8	50
Grid voltage/range (V)	240/211~264			
Frequency (Hz)	50/60			
PF	0.8lagging-0.8leading			
THDi	<3%			
AC output topology	Split phase、single phase			

Battery

Battery voltage range (V)	85~400			
Max. charging voltage (V)	400			
Full battery voltage (V)	85	110	140	160
Max. charge/discharge current (A)	80/80			
Battery type	lithium /Lead-acid			
Communication interface	CAN			

EPS output

Rated power (kVA)	6	8	10	12
Rated output voltage (V)	220-240 /110-120			
Rated frequency (Hz)	50/60			
Automatic switching time (ms)	<20			
THDu	<2%			
Overload capacity	110%,30S/120%,10S/150%,0.02S			

General data

Max. efficiency	⩾98.2%
CEC efficiency	⩾97.2%
Ingress protection	IP65/Type 4
Noise emission(dB)	<25
Operation temperature (℃)	-25 ~ 60
Cooling	Natural
Relative humidity	0 ~95% (non-condensing)
Operation altitude	2,000m(>2,000 Derating)
Dimensions W*D*H (mm)	530*200*660
Net weight (kg)	32
Self-consumption at night (W)	<20

Display and communication

Display	LCD
Interface:RS485/Wifi/4G/CAN	Yes/Opt/Opt/Yes
Safety standard	UL1741SA all options, UL1699B, CSA 22.2
EMC	FCC Part 15, Class B

Split-phase hybrid inverter (battery low voltage)

KEY STRENGTHS

- Max. 3 pcs in parallel.
- Support parallel to 3 phase voltage function (120/240V or 208/400V).
- UL certified, CEC listed, SUNSPEC listed, UL1741SB and UL1741SA listed.
- Support Diesel generator connection.
- Support rapid shutdown function.
- 4 MPPT Trackers, support 4 PV inputs.

APPLICATIONS

» Luxury villa » Residential nomadic farm electricity » Nomadic farm » Communication base station

PV string input

Model	R5KLNA	R6KLNA	R8KLNA	R10KLNA
Max. power (kW)	7.5	9	12	13
Max. DC voltage (V)	500			
MPPT voltage range (V)	120~500			
Max.input current of single MPPT (A)	14			
No. of MPPT trackers	4			
No. of strings per MPPT trackers	1			

AC output

Rated output power (kVA)	5	6	8	10
Max. apparent power (kVA)	5.5	6.6	8.8	11
Rated output current (A)	20.8	25	33.3	41.7
AC output voltage (V)	120/240(split phase),240 (single phase)			
Frequency (Hz)	50/60			
PF	0.8lagging-0.8leading			
THDi	< 2%			
AC output topology	Split phase,2/3 phase,single phase			

Battery

Battery voltage range (V)	40~58			
Max. charging voltage (V)	58			
Max. charge/discharge current (A)	120/120	135/135	190/190	190/210
Battery type	lithium /Lead-acid			
Communication interface	CAN			

EPS output

Rated power (kVA)	5	6	8	10
Rated output voltage (V)	120/240 (split phase),240 (single phase)			
Rated output current (A)	20.8	25	33.3	41.7
Rated frequency (Hz)	50/60			
Automatic switchover time (ms)	< 10			
THDu	< 2%			
Overload capacity	110%/60s, 120%/30s, 150%/10s			

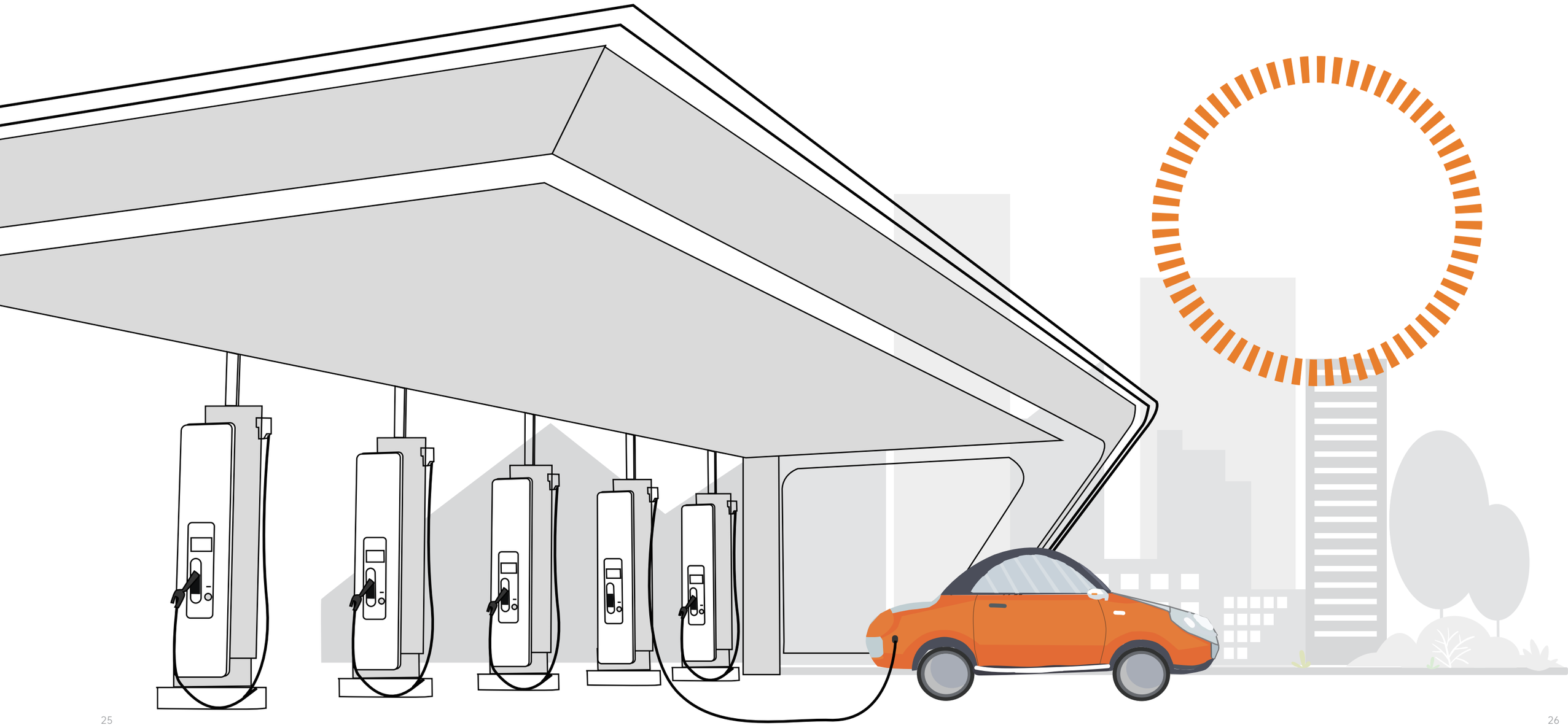
General data

MPPT Efficiency	99.9%
CEC efficiency	96.5%
Ingress protection	IP65/Type 3R
Operation temperature (℃)	-25 ~ 60 (>45 Derating)
Noise emission(dB)	<38
Cooling	Forced air
Relative humidity	0 ~95% (non-condensing)
Operating altitude	2,000m(>2,000 Derating)
Dimensions W *D *H (mm)	460*225*760
Net weight (kg)	41
Topology	Non-isolated
Self-consumption at night (W)	<25

Display and communication

Display	LCD/touch screen
Interface:RS485/Wifi/4G/ CAN/Bluetooth	Yes
Safety standard	UL1741, CSA C22.2 No. 107.1:16,UL1998
EMC	FCC Part 15, Class B
On-grid Standards	IEEE1547, CPUC Rule21, SRD V2.0, UL1741 SA, UL1741 SB
DC ARC-Fault	UL1699B

MICRO GRID / C&I PRODUCTS



MPS microgrid hybrid inverter

KEY STRENGTHS

- Internal integration PV interfaces, battery interfaces, load interfaces and grid interfaces
- Support single-phase and three-phase load power supply at the same time.
- Easy expansion, support PV flexible configuration.
- DC-coupled solution with 2% higher system efficiency.
- Control power AC and DC redundant power supply, the system is more secure and reliable.

APPLICATIONS

» Off-grid mine » Off-grid island » Nomadic farm » Villages without electricity

MPS0030/MPS0050

MPS0100/MPS0150

MPS0250

MPS0500

MEGAREVO

AC(on-grid)

Model	MPS0030	MPS0050	MPS0100	MPS0150	MPS0250	MPS0500
Max output power (kVA)	33	55	110	165	275	550
Rate output power (kW)	30	50	100	150	250	500
Rated voltage(V)	400					
Voltage range (V)	320~460					
Rated current (A)	43	72	144	216	361	722
Rated frequency (Hz)	50/60					
Frequency range (Hz)	45~55/55~65					
THDi	<3%					
Power factor	1lagging-1leading (Settable)					
AC connection	3W+N+PE					
Transformer ratio	100/400	200/400	270/400	270/400	270/400	315/400

AC(off-grid)

Max output power (kVA)	33	55	110	165	275	550
Rated power (kW)	30	50	100	150	250	500
Rated voltage (V)	400					
Rated current (A)	43	72	144	216	361	722
THDu	⩽1% linear; or⩽5% nonlinear					
Rated frequency (Hz)	50/60					
Overload capacity	110% long-term, 120% 1min					

PV input

Max.PV input voltage (V)	1,000					
Max.PV power (kW)	36/72	60/120	120/180/240	120/180/240	300/360	600/660/720
MPPT module quantity	1/2	1/2	2/3/4	2/3/4	5/6	10/11/12
MPPT voltage range (V)	250-850					
MPPT voltage range@full load (V)	450-850					

Battery

Battery voltage range (V)	250~850	320~850	420~850	420~850	420~850	500~850
Max. charging power (kW)	36/72	60/120	120/180/240	120/180/240	300/360	600/660/720

General data

Dimension W*D*H (mm)	800*800*1,900	800*800*1,900	1,200*800*2,050	1,200*800*2,050	(600*720*2,050)*1+ 1,200*800*2,050	(600*720*2,050)*2+ 1,600*1050*2,050
Net weight (kg)	576/607	720/750	1,120/1,150/1,180	1,250/1,280/1,310	1,980/2,010	3,265/3,295/3,325
Operation temperature (℃)	-30 ~ 55					
Relative humidity	0 ~95% non-condensing					
Ingress protection	IP20					
Noise emission (dB)	<70					
Operating altitude	<5000m(>3,000 Derating)					
Cooling	Air Cooling					

Display and communication

Display	LCD touch-screen
BMS communication	RS485, CAN
EMS communication	RS485, TCP/IP
Certificates	EN62109-1/-2, EN62477-1, EN61000-6-2, EN61000-6-4, South Africa NRS097-2-1:2017, Pakistan & India IEC61727, IEC62116, IEC 61683

MPS PV and battery configuration principles:

> Boost mode configuration principle - open voltage at low temperature at the limit of PV installation * number of PV panels in series ⩽ the lowest voltage of the battery;
> Buck mode configuration principle - the maximum power operating voltage at the extreme high temperature of PV installation⩾ the highest voltage of the battery;
> The PV and battery configurations of MPS must comply with the above configuration principles.

PMA modular

KEY STRENGTHS

- Separate air duct design for high granularity temperature, IP60-IP20 protection classification design control.
- Bluetooth APP interaction is easy to debug and monitor.
- 19-inch 3U standard size design, support horizontal/ vertical installation.
- Standard power capacity modules are adapted to standard energy storage cell clusters.
- Leading three-level space vector modulation SVPWM with wide voltage range charging and discharging for parallel operation of multiple machines.
- Leading midpoint balance technology, with DC component adjustment and low-frequency pulse current in the bypass bus, can prolong battery life and improve unbalanced and nonlinear adaptability.

DC(battery)

Model	PMA050	PMA060	PMA0100
Max. DC power (kW)	60	75	126
DC voltage range (V)	590~950		
Max. DC current (A)	±100	±125	±200
Voltage stabilization accuracy	±1%		
Current stabilization accuracy	±2%		

AC(on-grid)

Rated AC power (kW)	50	62.5	105
Max. AC power (kW)	60	75	126
AC connection	3W+PE		
Rated voltage (V)	400		
Rated AC current (A)	72	90	166
Max. AC current (A)	86	110	200
THDi	< 2%		
Allowable grid voltage range (V)	400±15%		
Allowable grid frequency range (Hz)	50±2/60±2		
Power factor	-1~+1		

System

Max. efficiency	98.5%		
Charge/discharge switching time (ms)	< 20		
Protection degree	IP20 (power compartment) IP6X (control compartment)		
Relative humidity	< 95% (Non-condensing)		
Operating temperature range	-30℃~+60℃(>45℃ derating)		
Max. operating altitude	5,000m(> 3,000m Derating)		
Communication interface	RS485/CAN/Ethernet		
BMS/EMS access	Yes		
Dimensions W *D *H (mm)	483*550*133	483*550*133	483*600*177
Weight (kg)	30	30	40

APPLICATIONS

» Peak load shifting » Demand side management » Emergency power supply » Dynamic expansion

PMAE modular on-grid inverter

KEY STRENGTHS

- Intelligent electrical protection with fault isolation and fast breaking.
- Supports parallel connection of 4 cabinets, easily realizing MW level system.
- Multiple safety protection with SPD ISO GFCI monitoring function and intelligent electrical protection linkage.
- Supports shared or separate application of battery clusters.
- Supports constant voltage control and constant power control.
- The 10 inch industrial screen with integrated EMS function ,supports local remote maintenance.

DC(battery)

Model	PMAE0250	PMAE0500	PMAE0630
Quantity of battery strings	1/4	1/5	1/6
DC voltage range (V)	590~950 (600~900 full load)	590~950 (600~900 full load)	590~950 (600~900 full load)
Max. DC current (A)	±500	±1,000	±1,200
Voltage stabilization accuracy	±1%		
Current stabilization accuracy	±2%		

AC(on-grid)

Rated AC power (kW)	250	500	630
Max. AC power (kW)	275	550	693
AC connection	3W+PE		
Rated voltage (V)	400		
Rated AC current (A)	360	722	909
Max. AC current (A)	433	866	1,090
THDi	< 3%		
Allowable grid voltage range (V)	400±15%		
Allowable grid frequency range (Hz)	50±2		
Power factor adjustment range	-1~+1		
Active power accuracy	1%		
Reactive power accuracy	2%		

System

Max. efficiency	98.5%	98.7%	98.7%
Charge/discharge switching time (ms)	< 20		
Protection degree	IP20		
Relative humidity	< 95% (Non-condensing)		
Operating temperature range	-30~60 (derating over 45℃)		
Max. operating altitude	5,000m(> 3,000m Derating)		
Communication interface	RS485/CAN/Ethernet		
BMS/EMS access	Yes		
Dimension W*D*H (mm)	600*750*1,800		
Weight (kg)	300	430	470

APPLICATIONS

- Demand side management
- Emergency power supply
- Peak load shifting
- Dynamic expansion

Power conversion system (without isolation transformer)

KEY STRENGTHS

- Support multiple parallel connection, easy to expand capacity.
- Transformerless design, high operating efficiency.
- Support constant voltage control and constant power control.
- Support Low & high voltage ride through function.

DC(battery)

Model	MEGA0500	MEGA0630
Voltage range (V)	600~900	
Max. current (A)	929	1,170

AC(on-grid)

Max output power (kW)	550	693
Rate output power (kW)	500	630
Rated voltage (V)	400	
Voltage range (V)	320~460	
Rated current (A)	722	909
Max. output current (A)	800	1,000
Rated frequency (Hz)	50/60	
Frequency range (Hz)	45~55/55~65	
THDi	<3%	
Power factor	1lagging-1leading (Settable)	
AC connection	3W+PE	

General data

Max.efficiency	98.7%
Ingress protection	IP21
Noise emission (dB)	<70
Operating temperature (℃)	-30 ~ 55
Cooling	Forced air
Relative humidity	0 ~95% non-condensing
Operating altitude	5,000m(>3,000 Derating)
Dimension W*D*H (mm)	1,000*700*2,050
Net weight (kg)	950
Transformer	/
Self-consumption (W)	<208W

Display and communication

Display	LCD touch-screen
BMS communication	RS485, CAN
EMS communication	RS485, TCP/IP
Certificates	IEC/EN62109-1/-2, IEC/EN 62477-1, IEC/EN 61000-6-2, IEC/EN 61000-6-4, CGC

APPLICATIONS

- PV charging station
- Wind power storage
- Grid-side storage
- Combined thermal power FM

Power conversion system (with isolation transformer)

KEY STRENGTHS

- Reactive power, active power adjustable.
- Multiple working modes are available, which can be flexibly applied to various working scenarios.
- Built-in isolation transformer, adapt to impact load.
- Redundant design for auxiliary power supply.
- Highest power density, maximum efficiency reach 97.5%.
- Support 4 pcs in parallel.

APPLICATIONS

- PV charging station
- C&I energy storage
- Charging station

MEGA0030TS/MEGA0050TS

MEGA0100TS/MEGA0150TS

MEGA0250TS

MEGA0500TS

DC(battery)

Model	MEGA0030TS	MEGA0050TS	MEGA0100TS	MEGA0150TS	MEGA0250TS	MEGA0500TS
Voltage range (V)	250~850	320~850	420~850	420~850	420~850	500~850
Max. current (A)	137	178	270	405	673	1,128

AC(on-grid)

Max. output power (kVA)	33	55	110	165	275	550
Rate output power (kW)	30	50	100	150	250	500
Rated voltage (V)	400					
Voltage range (V)	320~460					
Rated current (A)	43	72	144	216	361	722
Max. output current (A)	48	80	159	238	397	794
Rated frequency (Hz)	50/60					
Frequency range (Hz)	45~55/55~65					
THDi	<3%					
Power factor	1lagging-1leading (Settable)					
AC connection	3W+N+PE					

AC(off-grid)

Rated voltage (V)	400
THDu	< 1% Linear < 5% Nonlinear
Rated frequency (Hz)	50/60
Overload capacity	110%long-term

General data

Max.efficiency	96.3%	96.5%	97.1%	97.1%	97.3%	97.5%
Ingress protection	IP21					
Noise emission (dB)	<70					
Operating temperature (℃)	-30 ~ 55					
Cooling	Forced air					
Relative humidity	0 ~95% non-condensing					
Operating altitude	5,000m(>3,000 Derating)					
Dimension W*D*H (mm)	800*800*1,900	800*800*1,900	800*800*1,900	800*800*1,900	1,200*800*2,050	1,600*1050*2,050
Net weight(kg)	621	712	936	1,057	1,582	2,665
Transformer ratio	100/400	200/400	270/400	270/400	270/400	315/400
Self-consumption (W)	<100					<208
On/ Off grid switching	Automatic					

Display and communication

Display	LCD touch-screen
BMS communication	RS485, CAN
EMS communication	RS485, TCP/IP
Certificates	IEC/EN62109-1/-2, IEC/EN 62477-1, IEC/EN 61000-6-2, IEC/EN 61000-6-4, CGC

Container PCS booster

KEY STRENGTHS

- Support multiple battery input to improve battery cycle life.
- Built-in EMS function to improve energy efficiency management.
- High frequency switching design, low current ripple and high power quality.
- Latest IGBT module, high efficiency conversion.
- System can be expanded to MW level by parallel.
- Integrated multiple boost systems.

APPLICATIONS

» PV charging station » Wind power storage » Combined thermal power FM » Grid-side storage

DC(battery)

Model	ESSC1000A-MV35	ESSC1260A-MV35	ESSC2000A-MV35	ESSC2500A-MV35
Battery voltage range (V)	500-900			

AC(on-grid)

Max. apparent power (kVA)	1,100	1,386	2,200	2,750
Rate output power (kW)	1,000	1,260	2,000	2,500
Rated voltage (kV)	35（10kV optional）			
Voltage range (kV)	38.5±2×2.5%（6、10、22）optional			
Rated current (A)	16.5	20.8	33	41.2
Max. output current (A)	18.1	22.9	36.3	45.4
Rated frequency (Hz)	50/60			
Frequency range (Hz)	45-55/55-65			
THDi	<3%			
Power factor	1lagging-1leading（Settable）			
AC connection	3W+PE			

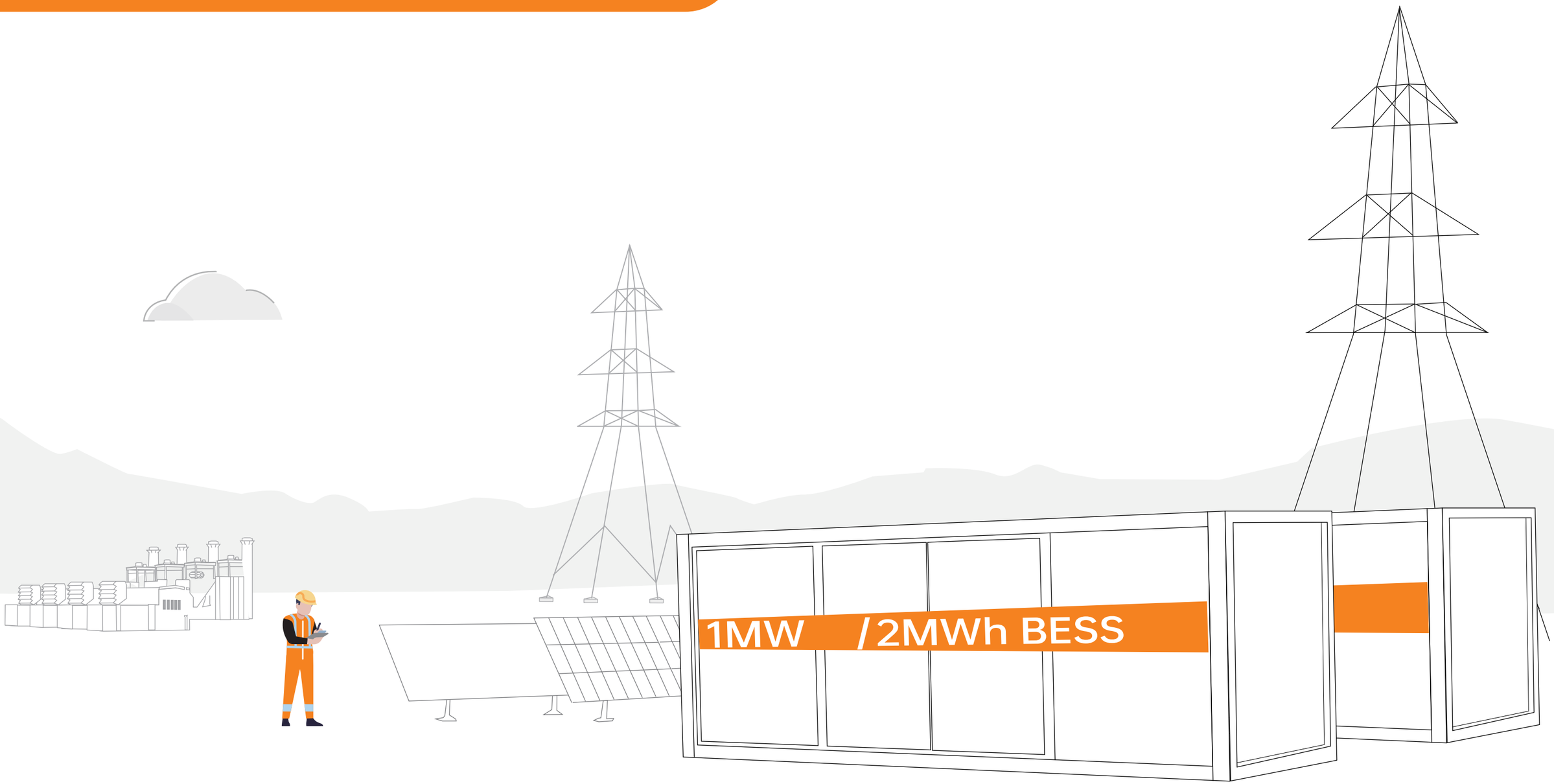
General data

Max.efficiency	98%			
Ingress protection	IP54			
Noise emission(dB)	<75			
Operating temperature (℃)	-30 ~ 55			
Cooling	Temperature controlled forced air cooling			
Relative humidity	0 ~95% non-condensing			
Operating altitude	5,000m(>3,000 Derating)			
Dimension W*D*H (mm)	4,300*2,438*2,591	4,300*2,438*2,591	6,058*2,438*2,591	6,058*2,438*2,591
Net Weight (kg)	4,500	4,500	8,000	8,000
Isolation Transformer of PCS	No			
Booster transformer	Integrated			

Display and communication

Display	LCD touch-screen
BMS communication	RS485/CAN
EMS communication	RS485, TCP/IP

ENERGY STORAGE SYSTEM



Outdoor cabinet energy storage system

KEY STRENGTHS

- Support flexible expansion of PV capacity.
- Support simultaneous access to load, battery, grid, DG, and PV.
- Integrated EMS function, safe and stable.
- Support battery capacity and discharge time prediction.
- Built-in isolation transformer has strong load adaptability.

APPLICATIONS

- Off-grid area
- Without electricity (power shortage) area
- Remote rural area

AC data

Model	ESSA0030B-0055	ESSA0050B-0055	ESSA0050B-0100	ESSA0100B-0215
Rated power (kW)	30	50	50	100
Rated voltage (V)	400			
Rated current (A)	43	72	72	144
Voltage range (V)	320V-460V			
Rated frequency	50/60Hz			
Frequency Range	45-55/55-65Hz			
THDi(on-grid)	<3%			
THDu (off-grid)	⩽ 1% linear; ⩽ 5% non-linear			
Power factor	1 (0.8 leading ~ 0.8 laging can be set)			
Overload capacity	110% Long term			
AC output	3W+N+PE			
Isolation transformer	100/400	200/400	200/400	270/400
On -grid off-grid switching	Support			

PV data

Max.PV input voltage (V)	1,000			
Max. PV power (kW)	60/120	60/120	60/120	120/180/240
MPPT operating voltage range (V)	250~850			
MPPT full load voltage range (V)	450~850			
Buck-boost mode	Support			

Battery data

Cell type	3.2V/120Ah/1C, LFP	3.2V/120Ah/1C, LFP	3.2V/280Ah/1C,LFP	3.2V/280Ah/1C,LFP
Nominal voltage (V)	460.8V, 1P144S	460.8V, 1P144S	358.4V, 1P112S	768V, 1P240S
Nominal energy (kWh)	55.296	55.296	100.352	215.04
Working voltage range (V)	403.2~511.2	403.2~511.2	319.2~397.6	672~850
Max. charge and discharge rate	1C@25℃	1C@25℃	0.5C@25℃	0.5C@25℃
Number of battery cycles	⩾3,800	⩾3,800	⩾5,000	⩾5,000

System data

Dimensions W *D *H (mm)	1,770×1,510×2,270	1,770×1,510×2,270	1,770×1,510×2,270	2,450×1,550×2,400
Net weight (kg)	2,000	2,200	2,400	3,900
Operating temperature (℃)	0 ~ +45			
Relative humidity	0 ~95% (non-condensing)			
Ingress protection	IP54			
Noise emission (dB)	<75			
Operating altitude	3,000m			
Cooling	Intelligent air cooling			
fire extinguishing system	Aerosols/NOVEC1230			
Display	Touch LCD display+cloud platform			
EMS communication	RS485, TCP/IP			

Container energy storage system

KEY STRENGTHS

- Multiple working modes can be flexibly set.
- Support battery management system and comprehensive thermal management.
- The electrical compartment and battery compartment are separated to prevent runaway spread of heat.
- Support real-time online monitoring of system status.
- Support simultaneous access to load, battery, grid, DG, and PV.
- Integrated design, easy to transport and install, flexible deployment.

APPLICATIONS

» C&I peak shaving and valley filling » Emergency Power Supply » Grid side peak regulation and frequency modulation

AC data

Model	ESSC0500B-1075	ESSC1000B-2150
Rated power (kW)	500	1,000
Rated voltage (V)	400	
Rated current (A)	722A	1,445A
Voltage range (V)	320V-460V	
Rated frequency	50/60Hz	
Frequency Range	45-55/55-65Hz	
THDi(on-grid)	<3%	
THDu (off-grid)	⩽ 1% linear; ⩽ 5% non-linear	
Power factor	1 (0.8 leading ~ 0.8 laging can be set)	
Overload capacity	110% Long term	
AC output	3W+N+PE	
Isolation transformer	315/400	
On -grid off-grid switching	Support	

PV data

Max.PV input voltage (V)	1,000	
Max. PV power (kW)	600/660/720	1,200/1,320/1,440
MPPT operating voltage range (V)	250~850	
MPPT full load voltage range (V)	450~850	
Buck-boost mode	Support	

Battery data

Cell type	3.2V/280Ah/1C, LFP	
Nominal voltage(V)	768V/1P240S	
Nominal energy (MWh)	1.0752	2.1504
Working voltage range (V)	672~850V	
Max. charge and discharge rate	0.5C@25℃	
Number of Battery Cycles	⩾5,000	

System data

Dimensions W *D *H (mm)	6,058×2,438×2,896	12,192×2,438×2,896
Net weight (kg)	21,000	38,000
Operating temperature (℃)	0 ~ +45	
Relative humidity	0 ~95% (non-condensing)	
Ingress protection	IP54	
Noise emission (dB)	<75dB	
Operating altitude	3,000m	
Cooling	Intelligent air cooling	
fire extinguishing system	FM200/NOVEC1230	
Display	Touch LCD display+cloud platform	
EMS communication	RS485, TCP/IP	

EMS (Energy management system)

EMS is developed by Megarevo for a variety of applications a scenarios of energy storage systems. Through independent learning and data analysis, EMS can provide users with optimal charging and discharging operation strategies to help customers improve the efficiency of clean energy and save energy costs. In addition, the EMS supports system monitoring and real-time fault alarms. It can easily master the system charging state, battery voltage, temperature, auxiliary system status and other detailed information anytime and anywhere.

KEY STRENGTHS

- Support multiple communication protocols.
- Support 5-year historical data review.
- More accurate and comprehensive monitoring.
- Real-time control of PCS and battery operation data.
- User-friendly operation interface, simple and easy to operate.
- Support mobile APP/ wechat mini program for remote management.

APPLICATIONS

- Microgrid system energy control
- C&I peak cutting and valley filling energy control
- Frequency modulation peak modulation energy control
- PV charging stationenergy control

BR3000 (Communication management machine)

BR3000 communication management machine adopts a high-performance 4-core A9 processor, main frequency up to 1.4GHz, supports 2 10/100 adaptive industrial Ethernet interfaces, 4 serial communication interfaces (1 RS232/4 RS485), can be customized WIFI/CAN, large capacity SD memory card interface, built-in RTC, buzzer, etc. It can provide users with powerful computing capacity and flexible communication modes, small size and easy installation. Embedded with 512MB DDR3 SDRAM and 8G Flash memory, abundant communication ports are ideal for PV power station communication, power environment monitoring in computer rooms, ESS energy management and other applications.

Data acquisition stick

4G Wifi Bluetooth-wifi

The data acquisition stick supports GPRS, WiFi, 4G, Ethernet and other communication modes. In addition, the bucket rod logger supports serial communications such as RS485/RS232/RS422/TTL. The multi-cover design makes it suitable for most inverters. By collecting the operating status of the inverter, rod loggers can effectively monitor the PV system over long periods, improve efficiency and significantly reduce administrative costs. With its extended features such as GNSS, shutdown alerts and Bluetooth, the stick logger enables quick configuration on-site and simple plant operations.

FOUR GLOBAL SERVICE OUTLETS

German

Waldstr.30, 73773 Aichwald,
Baden-Württemberg, Germany

California, USA

5215 N O'Connor Blvd 11th Floor,Irving,
TX 75039, United States

South Africa

Unit 70 Quarrywood, the Straight Avenue,
Lonehill, South Africa

Shenzhen, China

WINLEAD, Guangming District,Shenzhen City,
Guangdong Province, P.R. China

7*24h

Timely response

3 Days

Reservation service

5 Days

Troubleshooting

- After-sales technical consultation and training services.
- On-site power-on maintenance, and remote upgrade service.
- Answer difficult questions.
- Replacement of spare parts.
- Value-added services outside of insurance.

The service capacity of Megarevo covers the four regional markets of Northern Europe, North America, South Africa and Southeast Asia. In addition, the company also focuses on supporting local dealers to provide customers with comprehensive technical support and timely response services.

USER CASES

Residential energy storage Project in bangkok,Thailand

R8KH3*2






- 16kW/10kWh+5kWp PV
- 2022.06
- On-grid,self-consumption

USER CASES

Microgrid case in south africa

■ 50kW/200kWh+50kWp PV ■ 2023.10 ■ On/off-grid self-consumption

Other microgrid case

XinJiang microgrid project

Hunan grid microgrid project

Sierra leone microgrid project in

Pakistan microgrid project

Nanjing microgrid project

South africa microgrid project

USER CASES

C&I energy storage case

■ 300kW/650kWh ■ 2023.08 ■ Peak load shifting ■ JiangSu.china

South african C&I BESS project

Norway charging station project

JiangSu charging station project

ShenZhen charging station project

Grid side energy storage case

■ 100MW/200MWh ■ 2021.05 ■ Grid-side peak shaving and frequency modulation

■ 100MW/200MWh ■ 2022.02 ■ Grid-side peak shaving and frequency modulation