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2023 V1.0

ENERGY STORAGE PRODUCT AND SOLUTION

“MAKE ENERGY CLEANER AND MORE EFFICIENT”



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ABOUT MEGAREVO

Established in 2018, Megarevo is a professional supplier of hybrid inverters, with cumulative inverter deliveries of 2.2GW+ to date.

Megarevo focuses on four application scenarios: residential energy storage, C&I energy storage, microgrid and grid-side energy storage, providing customers with standardized hybrid inverters, customized solutions and ODM services. Megarevo inverters include MEGA and REVO series of PCS, MPS microgrid products and energy storage systems, which have passed CGC, CE, TUV, UL, NRS certifications and the certifications in North America, the UK, Germany, Italy, Poland, Pakistan, South Africa, Australia and other regions.

With the mission of "make energy cleaner and more efficient", Megarevo always insists on innovation to provide high-quality and reliable products and services, and works together with global partners to move towards a sustainable future.



DEVELOPMENT PROCESS

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

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

2018

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 .

2020

2019

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

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.

In April , the 48V split-phase inverter obtained the North American certification.

In May, Obtained the ISO system certification.

In December, The market turnover exceeded 350 million RMB.

2022

2023

Shortlisted Asia inverter top 10 brands.



ENTERPRISE QUALIFICATION

TOP 10 Asian Energy Storage Inverter Brands

»Top 10 Domestic Energy Storage Inverter .

»Won the Best Energy Storage PCS Supplier Award of China Energy Storage Network for four consecutive years.

»Won the Best Small and Medium Power PCS Supplier by China Leader Energy Storage Alliance.

»China National High-tech Enterprises.

»China National Excellent Technical Solution Provider of New Energy Storage.



PRODUCTS LINE

Residential Products

Single-phase ESS Hybrid Inverter



- R3KL1
- R3K6L1
- R4KL1
- R4K6L1
- R5KL1
- R6KL1

G2 Hybrid Inverter



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

Three-phase ESS Hybrid Inverter



- R6KH3
- R6KH3-P
- R8KH3
- R8KH3-P
- R10KH3
- R10KH3-P
- R12KH3
- R12KH3-P
- R15KH3
- R15KH3-P

American ESS split-phase Inverter (Battery voltage > 80V)



- R6KH1NA
- R8KH1NA
- R10KH1NA
- R12KH1NA

American ESS Split-phase Inverter (Battery voltage: 48V)



- R5KLNA
- R6KLNA
- R8KLNA
- R10KLNA

Micro-grid/ Grid Products

Hybrid Inverter



- MPS0030
- MPS0050
- MPS0100
- MPS0150
- MPS0250
- MPS0500

Power Conversion System (Without isolation transformer)



- MEGA0500
- MEGA0630

Power Conversion System (With isolation transformer)



- MEGA0030TS
- MEGA0050TS
- MEGA0100TS
- MEGA0150TS
- MEGA0250TS
- MEGA0500TS

Container Type Energy Storage Booster



- MEGA1000-MV
- MEGA1260-MV
- MEGA2000-MV
- MEGA2500-MV

ESS

Storage Battery Cabinet



- E072B048
- E144B048

Outdoor Cabinet Type ESS



- ESS00100A-0030
- ESS00200A-0150

Container ESS



- ESSC0500A-1106

EMS, Communication Management Machine and Data Acquisition Stick







RESIDENTIAL PRODUCTS



Single-phase ESS Hybrid Inverter



> KEY STRENGTHS

-  Support 4 parallel machines.
-  Transfer time of on / off-grid \leq 20ms.
-  Compatible with lead-acid and lithium-ion battery access.
-  Strong impact load capacity of off-grid belt.

> APPLICATION AREA

-  Luxury villa
-  Residential electricity
-  Nomadic farm
-  Communication base station

L1 series single-phase hybrid inverters support simultaneous input of PV, batteries, DG, power grids, and loads. It has multiple application modes such as self-consume, peak shaving and valley filling, and backup power supply. It supports parallel connection of multiple machines and is suitable for various applications of home energy storage.

Input (PV)

Model	R3KL1	R3K6L1	R4KL1	R4K6L1	R5KL1	R6KL1
Max. power(kW)	4.6	4.6	6	6	7	7
Max. DC voltage(V)	550					
MPPT voltage range(V)	125~500					
Max.input current of single MPPT(A)	14					
MPPT tracker/strings	2/1					

AC output

Model	R3KL1	R3K6L1	R4KL1	R4K6L1	R5KL1	R6KL1
Rated output power(kVA)	3	3.68	4	4.6	5	6
Max. output current(A)	13	16	17.4	20	21.7	26
Grid voltage/range(V)	230/176~270					
Frequency (Hz)	50 / 60					
PF	0.99lagging-0.99leading					
THDi	<2%					
AC output topology	L+N+PE					

Battery

Model	R3KL1	R3K6L1	R4KL1	R4K6L1	R5KL1	R6KL1
Battery voltage range(V)	40~58					
Max. charging voltage(V)	58					
Max. charge/discharge current(A)	95/62.5	95/76.6	95/83.3	95/95.8	95/104.2	95/110
Battery type	lithium /Lead-acid					
Communication interface	CAN/RS485					

EPS output

Model	R3KL1	R3K6L1	R4KL1	R4K6L1	R5KL1	R6KL1
Rated power (kVA)	3	3.68	4	4.6	5	6
Rated output voltage(V)	230					
Rated output current(A)	13	16	17.4	20	21.7	26
Rated frequency (Hz)	50 / 60					
Automatic switching time (ms)	<20					
THDu	<2%					
Overload capacity	110%, 30S/120%, 10S/150%, 0.02S					

General data

Model	R3KL1	R3K6L1	R4KL1	R4K6L1	R5KL1	R6KL1
Battery charge/discharge efficiency	95.0%					
DC Max. efficiency	97.6%					
Europe efficiency	97.0%					
MPPT efficiency	99.9%					
Ingress protection	IP65					
Noise emission (dB)	<40					
Operation temperature (°C)	- 25~ 60					
Cooling	Natural					
Relative humidity	0 ~95% (non-condensing)					
Altitude	2,000m(>2,000 Derating)					
Dimensions W * D * H (mm)	550*200*520					
Weight (kg)	25					
Isolation transformer	No					
Self-consumption (W)	<3					

Display and communication







Model	R3KL1	R3K6L1	R4KL1	R4K6L1	R5KL1	R6KL1
Display	LCD					
Interface:RS485/Wifi/4G/CAN/ DRM	Yes/ Opt/ Opt/ Yes/ Yes					
Safety standard	IEC/EN62109-1/-2					
EMC	IEC/EN 61000-6-1, IEC/EN 61000-6-3					
On-grid	South Africa NRS097-2-1:2017, UK G98,G99,EN 50549-1,Italy CEI 0-21, Germany VDE4105,IEC61727/62116/61683, Sweden EIFS 2018: 2					



G2 Hybrid Inverter



> KEY STRENGTHS

-  Small, light, easy to install, can save 50% labor installation cost.
-  High efficiency, improve the battery charging and discharging efficiency 96%.
-  Suitable for the latest 210mm high-power PV panel (Isc=18.5A).
-  The high power can cover 3~8kW to meet the single-phase load requirements of users.
-  Support mobile phone (Bluetooth +WIFI) setting and maintenance.
-  Integrated RSD and PLC(TBD).
-  Support 6 machines in parallel.
-  Screen optional (no screen, touch color screen can be customized).
-  Compatible with lead-acid and lithium-ion battery access.

> APPLICATION AREA



Luxury villa



Residential electricity



Nomadic farm



Communication base station

Based on the excellent performance of the previous generation of products, G2 hybrid inverter has improved the product volume and weight, making the product lighter and smaller, the full load efficiency has been increased by 0.5%, and the cost performance has been greatly improved.

DC Input

Model	R3KL1-G2	R3K6L1-G2	R4KL1-G2	R4K6L1-G2	R5KL1-G2	R6KL1-G2	R8KL1-G2
Max. Input Power (kW)	4.5	5.4	6	6.9	7.5	9	12
Start-up Voltage (V)	100						
Max. PV Voltage(V)	500						
MPPT Range/Nominal (V)	125~500/360						
Max. Input Current(A)	16/16	16/16	16/16	16/16	16/16	16/16	16/32
MPPT Tracker/Strings	2/1	2/1	2/1	2/1	2/1	2/1	3/2+1

AC output

Model	R3KL1-G2	R3K6L1-G2	R4KL1-G2	R4K6L1-G2	R5KL1-G2	R6KL1-G2	R8KL1-G2
Rated Power (kVA)	3	3.68	4	4.6	5	6	8
Max. Output Current(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(0.99 lagging-0.99 leading)						
THDi	<3%						
AC output topology	L+N+PE						

Battery

Model	R3KL1-G2	R3K6L1-G2	R4KL1-G2	R4K6L1-G2	R5KL1-G2	R6KL1-G2	R8KL1-G2
Battery voltage range(V)	40~58						
Max. charging voltage(V)	58						
Max. charge/discharge current(A)	60	72	80	92	100	120	160
Communication Interface	CAN						

EPS output

Model	R3KL1-G2	R3K6L1-G2	R4KL1-G2	R4K6L1-G2	R5KL1-G2	R6KL1-G2	R8KL1-G2
Rated power (kW)	3	3.6	4	4.6	5	6	8
Rated voltage(V)	230						
Rated current(A)	13	16	17.4	20	21.7	26	35
Rated frequency(Hz)	50 / 60						
Automatic switching time(ms)	<10						
THDu	<2%						
Overload capacity	110%, 60S/120%, 30S/150%, 10S						

General data

Model	R3KL1-G2	R3K6L1-G2	R4KL1-G2	R4K6L1-G2	R5KL1-G2	R6KL1-G2	R8KL1-G2
Battery chage/discharge efficiency	96.5%						
DC Max. efficiency	98.2%						
Europe efficiency	97.5%						
MPPT efficiency	99.9%						
Ingress protection	IP65						
Noise emission (dB)	<35						
Operation temperature (°C)	-25~ 60						
Cooling	Natural						
Relative humidity	0 ~95% (non-condensing)						
Altitude	2,000m (>2,000 Derating)						
Dimensions W * D * H (mm)	451*212*474						467*200*484
Weight (kg)	18						20
Inverter Topology	transformerless						
Self-consumption(W)	<3						

Display and communication

Model	R3KL1-G2	R3K6L1-G2	R4KL1-G2	R4K6L1-G2	R5KL1-G2	R6KL1-G2	R8KL1-G2
Display	/						
Interface:RS485 / Wifi / 4G / CAN / DRM	Yes/ Opt/ Opt/ Yes/ Yes						

Three-phase ESS Hybrid Inverter



> KEY STRENGTHS

- Support high-power components. Mainstream battery automatic matching.
- Support full power discharge, automatic battery charge and discharge management.

General Data

Model	R6KH3	R6KH3-P	R8KH3	R8KH3-P	R10KH3	R10KH3-P	R12KH3	R12KH3-P	R15KH3	R15KH3-P
Ingress Protection	IP65									
Operating Temperature Range (°C)	-25~60									
Relative Humidity	0~100%									
Operating Altitude (m)	4,000 (Derating above 2,000)									
Dimensions W*H*D (mm)	530*560*220									
Weight (kg)	30	30	31	31	31	31	33	33	34	34
Cooling	Natural									
Noise Emission (dB)	≤25									
Installation	Wall Mounted									
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									
Grid Regulation	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									
Safety Regulation	IEC/EN62109-1:2010, IEC/EN62109-2:2011									

Display and communication

Model	R6KH3	R6KH3-P	R8KH3	R8KH3-P	R10KH3	R10KH3-P	R12KH3	R12KH3-P	R15KH3	R15KH3-P
HMI	LCD;APP									
BMS	RS485,CAN									
EMS/Meter	RS485/RS485									
Supported Communication Interface	WIFI / GPRS									

Input DC (PV)

Model	R6KH3	R6KH3-P	R8KH3	R8KH3-P	R10KH3	R10KH3-P	R12KH3	R12KH3-P	R15KH3	R15KH3-P
Max.PV Input Power (kW)	9	9	12	12	15	15	18	18	22.5	22.5
Max. PV Voltage (V)	1,000									
MPPT Voltage Range (V)	180~850									
Full Power MPPT Voltage Range (V)	250~850	250~850	330~850	330~850	430~850	430~850	510~850	510~850	620~850	425~850
Start-up Voltage (V)	125									
Max.Input Current Per MPPT (A)	13/13	16/16	13/13	16/16	13/13	16/16	13/13	16/16	13/13	20/20
Max. Short-circuit Current (A)	16/16	25/25	16/16	25/25	16/16	25/25	16/16	25/25	25/25	30/30
Number of MPPT Rackers	2									
MPPT Number/Max. Input Strings Number	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	2/2
Rated Input Voltage (V)	700									

AC Output Data(on-grid)

Model	R6KH3	R6KH3-P	R8KH3	R8KH3-P	R10KH3	R10KH3-P	R12KH3	R12KH3-P	R15KH3	R15KH3-P
Nominal Output Power to Grid (kVA)	6	6	8	8	10	10	12	12	15	15
Max. Apparent Power to Grid (kVA)	6.6	6.6	8.8	8.8	11	11	13.2	13.2	16.5	16.5
Max. Apparent Power from Grid (kVA)	13.2	13.2	17.6	17.6	22	22	26.4	26.4	33	33
Max. Apparent Current from Grid (A)	19.1	19.1	25.5	25.5	31.8	31.8	38.2	38.2	47.6	47.6
Nominal Output Current to Grid (A)	8.7	8.7	11.5	11.5	14.4	14.4	17.3	17.3	21.7	21.7
Max.Output Current to Grid (A)	9.5	9.5	12.7	12.7	15.9	15.9	19.1	19.1	23.8	23.8
Nominal Grid Voltage (V)	380/400, 3W+N+PE									
Nominal Grid Frequency (Hz)	50/60									
THDi	<3%									

Battery

Model	R6KH3	R6KH3-P	R8KH3	R8KH3-P	R10KH3	R10KH3-P	R12KH3	R12KH3-P	R15KH3	R15KH3-P
Max.Charging / Discharging Power (kW)	6.6	6.6	8.8	8.8	11	11	13.2	13.2	16.5	16.5
Battery Voltage Range (V)	125~600									
Battery Working Voltage Range (V)	150~550									
Max.Charging / Discharging Current (A)	50									
Rated.Charging / Discharging Current (A)	40									
Battery Type	Lithium and Lead Acid Battery									

EPS Data(back up)

Model	R6KH3	R6KH3-P	R8KH3	R8KH3-P	R10KH3	R10KH3-P	R12KH3	R12KH3-P	R15KH3	R15KH3-P
Nominal Output Power (kVA)	8	8	8	8	10	10	12	12	15	15
Max. Apparent Power (kVA)	8.8	8.8	8.8	8.8	11	11	13.2	13.2	16.5	16.5
Nominal Output Current (A)	8.7	8.7	11.5	11.5	14.4	14.4	17.3	17.3	21.7	21.7
Max.Output Current (A)	9.5	9.5	12.7	12.7	15.9	15.9	19.1	19.1	23.8	23.8
Nominal Output Voltage (V)	400 ,3W+N+PE									
Nominal Output Frequency (Hz)	50/60									
THDu	<2%									
Max.Efficiency	97.9%	97.9%	97.9%	97.9%	98.2%	98.2%	98.2%	98.2%	97.6%	97.6%
Europe Efficiency	97.2%	97.2%	97.2%	97.2%	97.5%	97.5%	97.5%	97.5%	97.8%	97.8%
MPPT Efficiency	99.9%									
Max.Battery Charge/ Discharge Efficiency	97.5%	97.5%	97.5%	97.5%	97.5%	97.5%	97.6%	97.6%	97.8%	97.8%



American ESS Split-phase Inverter

Battery voltage: > 80V



> KEY STRENGTHS

A Single-machine bypass load capacity 100A.

UPS In the case of off-grid, it can be used to guarantee the critical load.

📶 Support remote monitoring, upgrade and automatic battery management.

🔋 Support battery BMS remote upgrade.

> APPLICATION AREA



Luxury villa



Residential electricity



Nomadic farm



Communication base station

The H1 series high-voltage hybrid inverter is specially designed for the American market. It consists of an inverter and transformer. It can meet the battery voltage range of 85~400V and is suitable for large-capacity home energy storage systems in North America.

Input (PV)

Model	R6KH1NA	R8KH1NA	R10KH1NA	R12KH1NA
Max. power(kW)	7.8	10.4	13	15.6
Max. DC voltage(V)	550			
MPPT voltage range(V)	125~500			
Max.input current of single MPPT(A)	12			
MPPT tracker/strings	4/1			

AC output

Model	R6KH1NA	R8KH1NA	R10KH1NA	R12KH1NA
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	L+N+PE			

Battery

Model	R6KH1NA	R8KH1NA	R10KH1NA	R12KH1NA
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,RS485			

EPS output

Model	R6KH1NA	R8KH1NA	R10KH1NA	R12KH1NA
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

Model	R6KH1NA	R8KH1NA	R10KH1NA	R12KH1NA
Max. efficiency	≥98.2%			
CEC efficiency	≥97.2%			
Ingress protection	IP65/NEMA 3R			
Noise emission(dB)	<25	<25	<29	<29
Operation temperature (°C)	-25~60			
Cooling	Natural			
Relative humidity	0~95% (non-condensing)			
Altitude	2,000m(>2,000 Derating)			
Weight(kg)	34			
Dimensions W * D * H (mm)	560* 220* 680			

Display and communication

Model	R6KH1NA	R8KH1NA	R10KH1NA	R12KH1NA
Display	LCD			
Interface:RS485/Wifi/4G/CAN/DRM	Yes/ Opt/ Opt/ Yes/ Yes			
Standby power consumption at night(W)	< 2.5 (With the battery < 5)			
Isolation transformer	Yes			
Safety standard	UL1741SA all options, UL1699B, CSA 22.2			
EMC	FCC Part 15, Class B			
On-grid	IEEE 1547, Rule 21 Phase I,II,III			







American ESS Split-phase Inverter

Battery voltage: 48V



> KEY STRENGTHS

-  Support 6 machines in parallel.
-  In the case of off-grid, it can be used to guarantee the critical load.
-  Support remote monitoring, upgrade and automatic battery management.
-  Support battery BMS remote upgrade.

> APPLICATION AREA



Luxury villa



Residential electricity



Nomadic farm



Communication base station

LNA series low-voltage north american hybrid inverter can be widely used in various home storage application environments. Combined with smart display, it makes operation and maintenance easier.

Input (PV)

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			
MPPT tracker/strings	4/1			

AC output

Model	R5KLNA	R6KLNA	R8KLNA	R10KLNA
Rated output power(kVA)	5	6	8	10
Max. apparent Power (kVA)	5.5	6.6	8.8	11
Max. output current(A)	24	28.8	38.3	47.8
Ac output voltage(V)	120/240(split phase), 208(2/3 phase),230 (single phase)			
Frequency (Hz)	50/60			
PF	0.8lagging-0.8leading			
THDi	< 3%			
AC output topology	Split phase, 2/3 phase, single phase			

Battery

Model	R5KLNA	R6KLNA	R8KLNA	R10KLNA
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/RS485			

EPS output

Model	R5KLNA	R6KLNA	R8KLNA	R10KLNA
Rated power(kVA)	5	6	8	10
Rated output voltage(V)	120/240 (split phase), 208 (2/3 phase),230 (single phase)			
Rated output current(A)	24	28.8	38.3	47.8
Rated frequency(Hz)	50/60			
Automatic switching time(ms)	< 20			
THDu	< 2%			
Overload capacity	125%,60S/150%,1S			

General data

Model	R5KLNA	R6KLNA	R8KLNA	R10KLNA
Max. efficiency	≥98.2%			
North american efficiency	≥97.2%			
Ingress protection	IP65/NEMA 3R			
Operation temperature (°C)	-25 ~ 60			
Noise emission(dB)	<25	<29	<29	<29
Cooling	Forced air			
Relative humidity	0 ~95% (non-condensing)			
Altitude	2,000m(>2,000 Derating)			
Dimensions W *D *H (mm)	460*225*760			
Weight(kg)	41			
Isolation transformer	No			
Self-consumption(W)	<3			

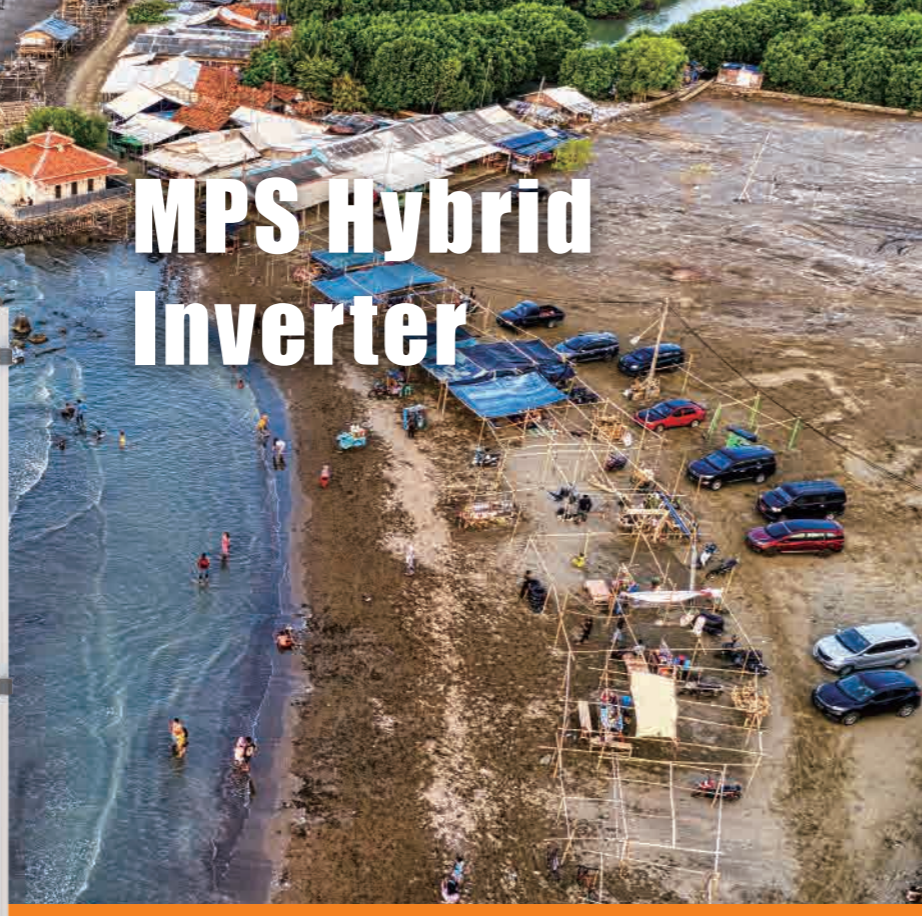
Display and communication

Model	R5KLNA	R6KLNA	R8KLNA	R10KLNA
Display	LCD, touch screen			
Interface:RS485/Wifi/4G/CAN/DRM	Yes			
Safety standard	UL1741, CSA C22.2 No. 107.1:16,UL1998			
EMC	FCC Part 15, Class B			
On-grid	IEEE1547, CPUC Rule21, SRD V2.0, UL1741 SA, UL1741 SB			
DCARC-Fault	UL1699B			

MICRO GRID / C&I PRODUCTS



MPS Hybrid Inverter



> KEY STRENGTHS

- Highly integrated, easy to deploy, shorten the installation and debugging time.
- Internal integration of optical / storage / PCS equipment, more unified bus control, increased system stability.
- Easy expansion, support PV flexible configuration.
- EMS functions are integrated into hybrid inverter, improve the economic benefits of the system.
- Support unattended, improve the operation and maintenance efficiency of the operator.



> APPLICATION AREA



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

MPS series hybrid inverters adopt an integrated design, integrating PV controllers, energy storage converters, and on/off-grid automatic switching units, which greatly improves customer deployment efficiency and reduces installation costs. PV capacity can be flexibly configured, which greatly improves system availability and is suitable for the remote areas and islands where power is relatively weak.

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)

Model	MPS0030	MPS0050	MPS0100	MPS0150	MPS0250	MPS0500
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					

PV input

Model	MPS0030	MPS0050	MPS0100	MPS0150	MPS0250	MPS0500
Max.PV input voltage(V)	1,000					
Max.PV power(kW)	60/120	60/120	120/180/240	120/180/240	300/360	600/660/720
MPPT voltage range(V)	250-850					
MPPT voltage range@full load (V)	450-850					

Battery

Model	MPS0030	MPS0050	MPS0100	MPS0150	MPS0250	MPS0500
Battery voltage range(V)	250~850	320~850	420~850	420~850	420~850	500~850
Max. charging power(kW)	60/120	60/120	120/180/240	120/180/240	300/360	600/660/720

General data

Model	MPS0030	MPS0050	MPS0100	MPS0150	MPS0250	MPS0500
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
Weight (kg)	620/650	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 (°C)	-30 ~ 55					
Relative humidity	0 ~95% non-condensing					
Ingress protection	IP20					
Noise emission (dB)	<70					
Altitude	5,000m(>3,000 Derating)					
Cooling	Air Cooling					

Display and communication

Model	MPS0030	MPS0050	MPS0100	MPS0150	MPS0250	MPS0500
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.

Power Conversion System

(Without isolation transformer)



> KEY STRENGTHS

- Friendly and Flexible**
 - > Wide battery voltage range, support multiple battery access.
 - > Off-grid cold start function, support multi-machine parallel function.

- Safe and Reliable**
 - > High performance DSP, optimized control circuit design, high reliable system.

- Abundant Configuration**
 - > Integrated design for easy transportation and integration.
 - > Support RS485, CAN communication mode, can accept BMS instruction in real time.

> APPLICATION AREA

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

MEGA series PCS is specially designed for grid-level applications. It has multi-machine parallel, grid black start, SVG function, supports IEC61850 communication protocol, and can meet various scenarios of power generation, transmission, distribution and consumption.

DC(battery)

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

AC(on-grid)

Model	MEGA0500	MEGA0630
Max output power(kVA)	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)	794	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	

AC(off-grid)

Model	MEGA0500	MEGA0630
Rated voltage(V)	400	
THDU	<1% Linear <5% Nonlinear	
Rated frequency(Hz)	50/60	
Overload capacity	110% ~long-term	

General data

Model	MEGA0500	MEGA0630
Max. efficiency	98.7%	
Ingress protection	IP21	
Noise emission (dB)	<70	
Operating temperature (°C)	-30~ 55	
Cooling	Forced air	
Relative humidity	0 ~95% non-condensing	
Altitude	5,000m(>3,000 Derating)	
Dimension W * D * H (mm)	1,200*800*2,050	
Weight(kg)	950	
Transformer	No	
Self-consumption(W)	<100	

Display and communication

Model	MEGA0500	MEGA0630
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	

Power Conversion System (With isolation transformer)



> KEY STRENGTHS

Friendly and Flexible

- > Reactive power, active power adjustable.
- > Off-grid cold start function, support multimachine parallel function.

Safe and Reliable

- > Built-in isolation transformer, high load adaptability.
- > AC/DC dual backup for auxiliary power supply.

Abundant Configuration

- > Integrated on / off-grid automatic switching components, saving users' system costs.

Intelligent and Efficient

- > Highest power density, maximum efficiency of 97.5%.

> APPLICATION AREA



MEGA series energy storage converter is developed based on the application requirements of large C&I such as peak load shifting, battery backup, etc. It adopts full digital control technology, integrates the leading technological achievements of contemporary power electronics, and the highest efficiency of the product reaches 97.5%. Support multi-machine parallel function, can meet the power demand of 30kW~3MW.

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)

Model	MEGA0030TS	MEGA0050TS	MEGA0100TS	MEGA0150TS	MEGA0250TS	MEGA0500TS
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)

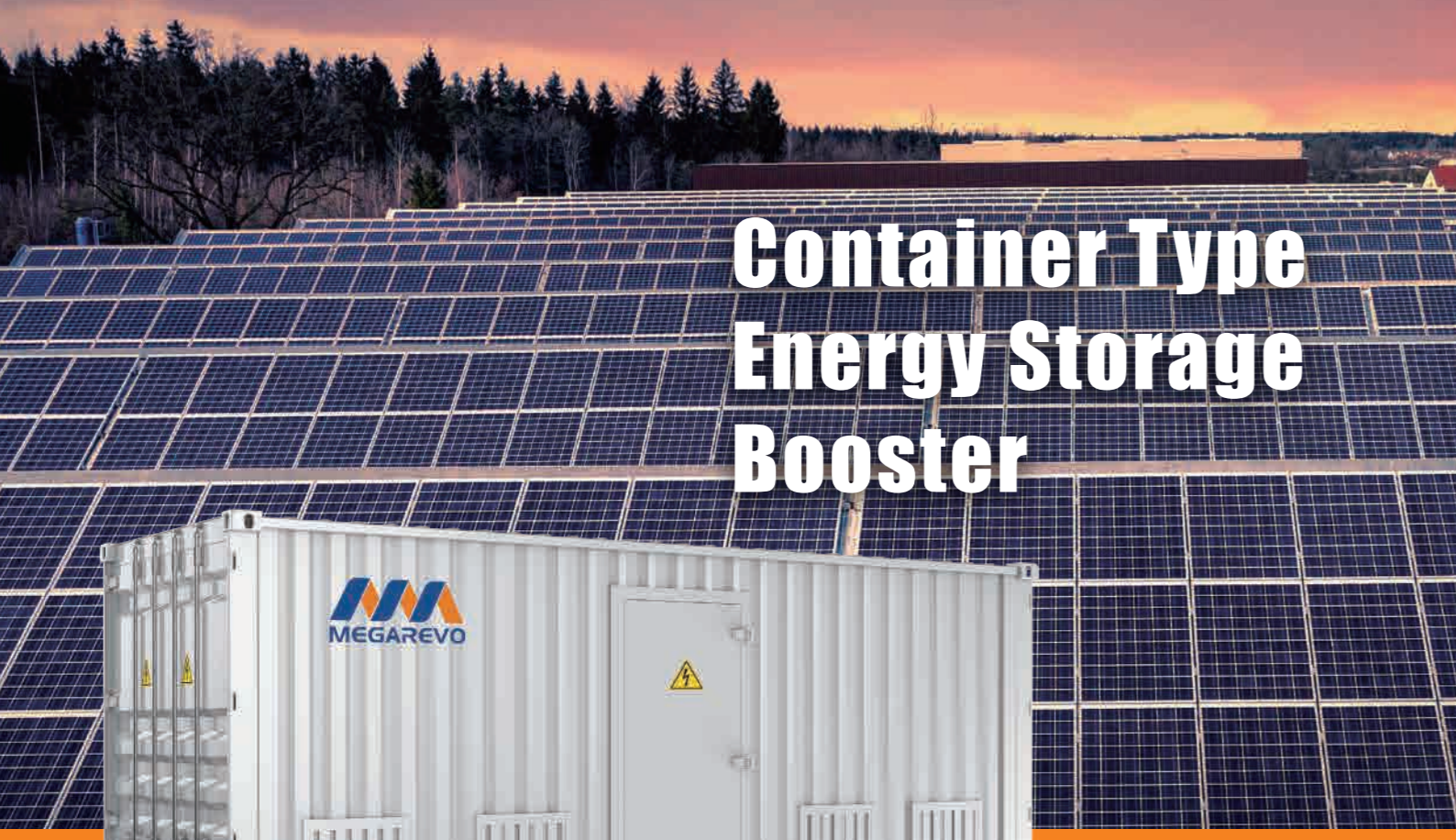
Model	MEGA0030TS	MEGA0050TS	MEGA0100TS	MEGA0150TS	MEGA0250TS	MEGA0500TS
Rated voltage(V)	400					
THDU	<1% Linear <5% Nonlinear					
Rated frequency(Hz)	50/60					
Overload capacity	110% long-term					

General data

Model	MEGA0030TS	MEGA0050TS	MEGA0100TS	MEGA0150TS	MEGA0250TS	MEGA0500TS
Max. efficiency	96.3%	96.5%	97.1%	97.1%	97.3%	97.5%
Ingress protection	IP21					
Noise emission (dB)	<70					
Operating temperature (°C)	-30~ 55					
Cooling	Forced air					
Relative humidity	0 ~95% non-condensing					
Altitude	5,000m(>3,000 Derating)					
Dimension W*D*H (mm)	800*800*1,900	800*800*1,900	800*800*2,050	800*800*2,050	1,200*800*2,050	1,600*1,050*2,050
Weight(kg)	605	676	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					
On/ Off grid switching	Automatic					

Display and communication

Model	MEGA0030TS	MEGA0050TS	MEGA0100TS	MEGA0150TS	MEGA0250TS	MEGA0500TS
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 Type Energy Storage Booster

Megarevo's container type energy storage booster is the core component of peak and frequency regulation of large-scale energy storage power stations. It supports multiple sets of battery input and comprehensively improves battery cycle life. In addition, the system integrates various booster systems, and supports turnkey service.

> KEY STRENGTHS

-  **Safe and Reliable**
 - > Support multiple battery input to improve battery cycle life.
 - > High switching frequency design, low current ripple and high power quality.

-  **Friendly and Flexible**
 - > System can be expanded to MW level by parallel.

-  **Intelligent and Efficient**
 - > Built-in EMS function to improve energy efficiency management.
 - > Latest IGBT module, high efficiency conversion.

-  **Abundant Configuration**
 - > Integrated multiple boost systems.
 - > Integrated ventilation system.

> APPLICATION AREA



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)

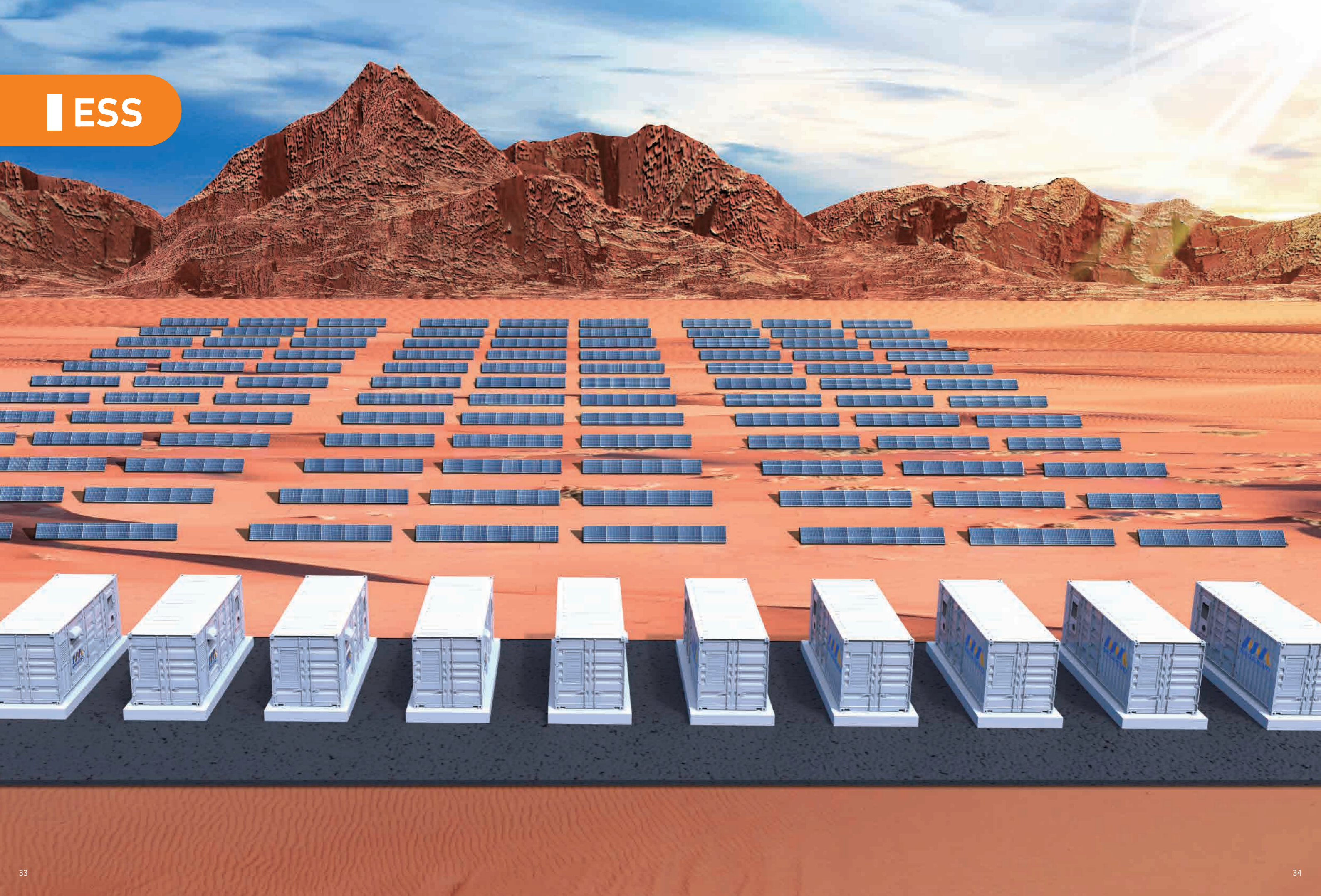
Model	ESSC1000A-MV35	ESSC1260A-MV35	ESSC2000A-MV35	ESSC2500A-MV35
Max. apparent power(kVA)	1,100	1,386	2,200	2,750
Rate output power(kW)	1,000	1,260	2,000	2,500
Rated voltage(kV)	35			
Voltage range(kV)	38.5±2×2.5% (6、10、22) optional			
Rated current(A)	16.5	20.8	33	41.2
Max. output current(A)	18.1	22.9	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

Model	ESSC1000A-MV35	ESSC1260A-MV35	ESSC2000A-MV35	ESSC2500A-MV35
Max. efficiency	98%			
Ingress protection	IP54			
Noise emission(dB)	<75			
Operating temperature (°C)	-30~ 55			
Cooling	Temperature controlled forced air cooling			
Relative humidity	0 ~95% non-condensing			
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
Weight(kg)	4,500	4,500	8,000	8,000
Transformer	No			
Self-consumption(W)	<20	<20	<40	<40
Booster transformer	Manual (default)/ Automatic (optional)			

Display and communication

Model	ESSC1000A-MV35	ESSC1260A-MV35	ESSC2000A-MV35	ESSC2500A-MV35
Display	LCD touch-screen			
BMS communication	RS485/CAN			
EMS communication	RS485, TCP/IP			



Residential Energy Storage Battery Cabinet



Outdoor Cabinet Type Energy Storage System



> APPLICATION AREA



Nomadic farm



Luxury villa



Communication base station



Residential

> KEY STRENGTHS



Easy installation, simple connection.



Compatible with CANbus/RS485 communication interface.



Support battery expansion.



System cycle life ≥ 10 years.

> APPLICATION AREA



C&I user side



Power shortage areas



Off-grid island



Off-grid mine



Nomadic farm

> KEY STRENGTHS



Simple structure, small footprint, flexible layout, easy installation operation and maintenance.



Built-in fire control, temperature control, system warning function for multiple security.



Intelligent control system, can be connected to the local monitoring system for system control.

Technical specification:

Model	E072B048	E144B048
Total energy (kWh)	2.4/4.8/7.2	9.6/12/14.4
Nominal voltage (V)		48
Designed life (°C/°F)		≥ 10 years (25/77)
Storage temperature (°C)		-10 ~ +60
Max. working altitude (m)		<4,000
Relative humidity		10%~90%
Installation		GT-XL
Ingress protection		IP21
Weight (kg)	32	48
Dimension W*D*H (mm)	580*350*680	580*350*1,200
Certificates		CE

DC data

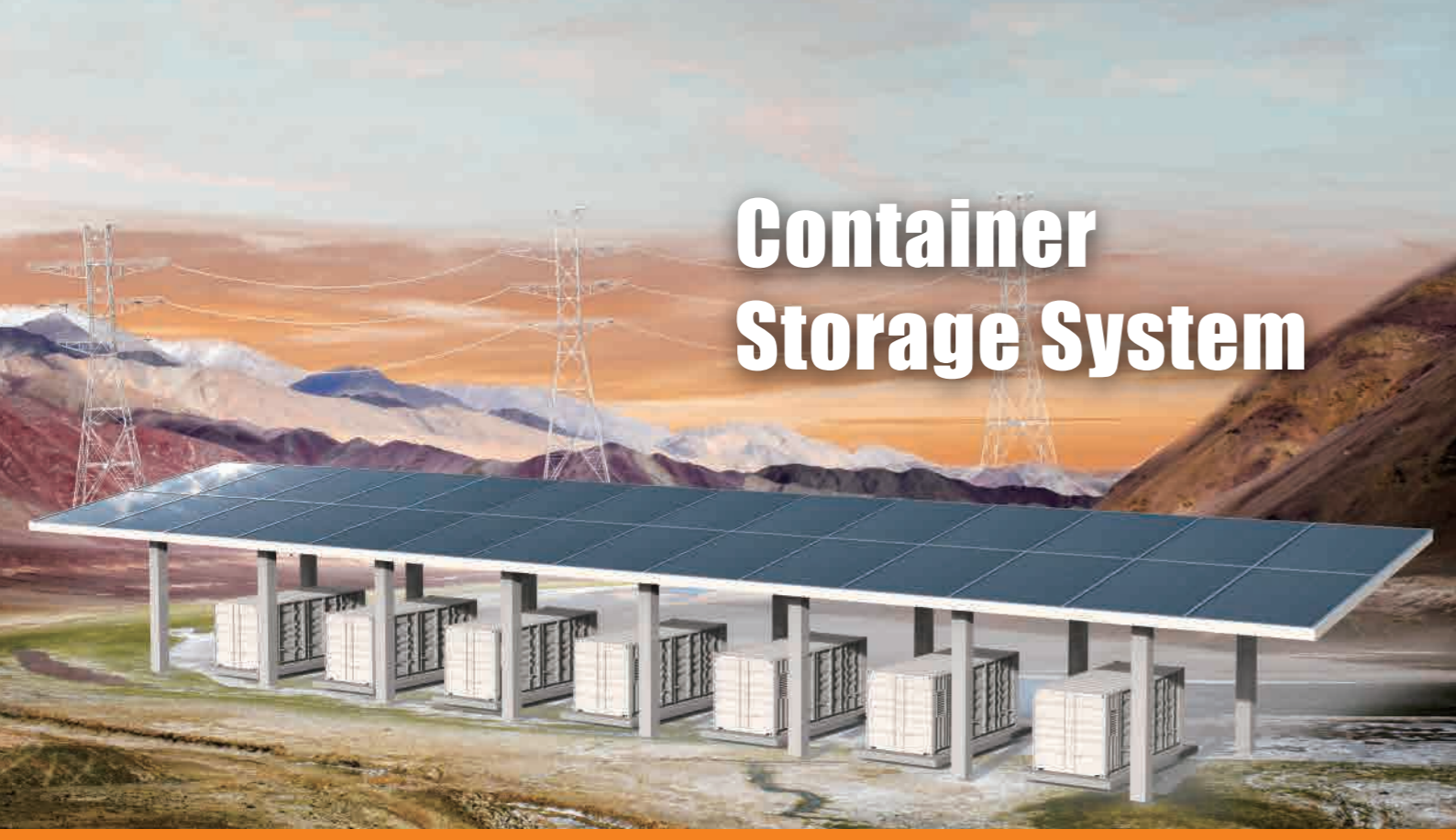
Technical specification	
Battery capacity (kWh)	100~200
Number of battery racks	1~2
BMS communication interface	RS485/CAN
DC voltage range(V)	420~850

General Data

Technical specification	
Ingress protection	IP54
Fire extinguishing system	Support
Operating temperature (°C)	-30~ 55
Dimension W*D*H (mm)	Customization*1,300*2,400
Weight (kg)	Customization
BMS communication mode	CAN, RS485
EMS communication mode	RS485, TCP/IP
PCS cooling way	Temperature control intelligent air cooling
Battery cooling way	Air conditioning cooling
Altitude	4,500m (>3,000 Derating)

AC data

Technical specification	
Rated AC power(kW)	30~150
Max. AC power(kW)	30~150
Rated AC current(A)	43~216
Max. AC current(A)	48~238
DC current component	<0.5%
THDi	<3% (Rated power)
Rated grid voltage(V)	400
Allowable grid voltage range(V)	320~460
Rated grid frequency(Hz)	50/60
Allowable grid frequency range(Hz)	45~55/55~65
Power factor	1lagging-1leading
Isolation method	With the isolation



Container Storage System

In order to reduce the production losses caused by power outages in summer, Megarevo has launched 20 foot high-energy-density ESS. The DC side consists of 8*138kWh lithium battery energy units, and the AC side uses MEGA series PCS, through the EMS operation strategy, interacts with the grid in a friendly way, and provides power support for customers during power limited period.

> KEY STRENGTHS



Friendly and Flexible

- > Standardized design, easy for capacity expansion, easy for maintenance.
- > Independent air flow design for high reliability.



Abundant Configuration

- > All kinds of power configuration for different projects.
- > Integrated monitoring system.



Safe and Reliable

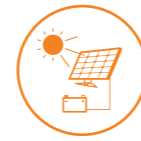
- > Support battery management system and comprehensive thermal management.
- > Realize the fault classification protection algorithm.



Intelligent and Efficient

- > Support real-time online monitoring of system status.
- > Large capacity, long life, high discharge rate.

> APPLICATION AREA



PV charging station



Wind power storage



Combined thermal power FM



Grid-side storage

DC data

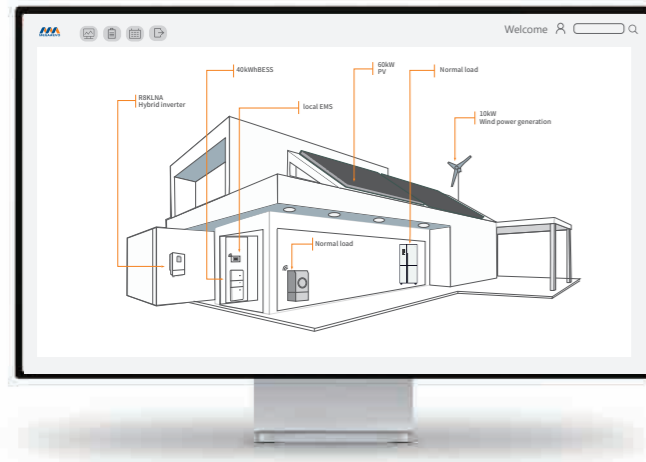
Model	ESSC0500A-1106
Battery capacity (MWh)	1,106
Number of battery racks	8
BMS communication interface	RS485/CAN
DC voltage range (V)	600-850

AC data

Model	ESSC0500A-1106
Rated AC power(kW)	500
Max. AC power(kW)	550
Rated AC current(A)	722
Max. AC current(A)	800
DC current component	<0.5%
THDi	<3% (Rated power)
Rated grid voltage(V)	400
Allowable grid voltage range(V)	320-460
Rated grid frequency(Hz)	50/60
Allowable grid frequency range	45-55/55-65
Power factor	1lagging-1leading
Isolation method	No isolation

General data

Model	ESSC0500A-1106
Ingress protection	IP54
Fire extinguishing system	support
Running time (full power)	2h
Operating temperature (°C)	-30~ 55
Dimension W*D*H (mm)	12,192*2,438*2,896
Weight (T)	3.5
BMS communication	RS485, CAN
EMS communication	RS485, TCP/IP
PCS cooling way	Temperature control intelligent air cooling
Battery cooling way	Air conditioning cooling
Altitude	4,500m(>3,000 Derating)
Relative humidity	0 ~95% non-condensing



EMS

(Energy Management System)

EMS is developed by Megarevo for a variety of application 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 to improve the efficiency of clean energy and save energy cost. 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

Perfect Functions

- > Support multiple communication protocols.
- > Support 5-year historical data review.

Intelligent Security

- > More accurate and comprehensive monitoring.
- > Real-time control of PCS and battery operation data.

Easy & Convenient

- > User-friendly operation interface, simple and easy to operate.
- > Support mobile APP/ wechat mini program for remote management.

> APPLICATION AREA

<p>Microgrid system energy control</p>	<p>C&I peak cutting and valley filling energy control</p>
<p>PV charging station energy control</p>	<p>Frequency modulation peak modulation energy control</p>



BR3000

(Communication Management Machine)

BR3000 communication management machine adopts 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.

> KEY STRENGTHS

- > Supports 4 RS485, 1 RS232, 2 Ethernet interfaces, standard 4G, support WIFI/CAN customization.
- > Linux operating system, perfect debugging software, convenient and flexible device access.
- > Embedded WEB built-in database, data cloud platform, mobile phone Wechat mini program access.
- > Equipped with large capacity Flash and memory, supporting device data browsing and historical data report through embedded WEB.

Data Acquisition Stick



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 of time, improve efficiency and significantly reduce administrative costs. With its extended features such as GNSS, shutdown alerts and bluetooth, stick logger enable quick configuration on site and simple plant operations.

FOUR GLOBAL SERVICE OUTLETS



7*24h

Timely response

3 Days

Reservation service

5 Days

Troubleshooting

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

Megarevo service capacity 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.



Residential Energy Storage Project in Bangkok, Thailand

R8KH3*2

■ 16kW/10kWh+5kWp PV

■ 2022.06

■ On-grid, self-consumption



Microgrid Cases

In areas with no electricity and weak electricity, Megarevo's micro-grid solution combines solar energy technology to provide sufficient energy for local residents and provide power for their life and production.

So far, Megarevo has solved power consumption problems for more than 1,000 economically backward regions.



State Grid Microgrid Project



PV-ESS-EV Project in Henan, China



Microgrid Project in Yulin Coal Mine Area, China



Microgrid Project in Torugart Port, China



Microgrid Project in Pakistan



PV-ESS-EV Charging Station Project in Norway



Microgrid Project in Dominican



Microgrid Project in XinJiang, China



Microgrid Project in Sierra Leone, Africa



Microgrid Project Nanjing, China

C&I and Grid Side Cases

