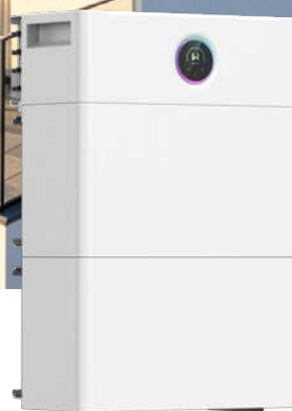


ESA Athena S3

All-in-One Micro Storage | 0.8kW/3kW | 3-15kWh

The Athena S3 is a professional-grade, all-in-one Micro-Storage system that brings high-performance energy independence to any home. It bridges the gap between traditional ESS and flexible modern living through stacking blind-mate design for fast and simplified installation. Designed for maximum versatility, the S3 fits seamlessly on balconies, terraces, or rooftops, utilizing 4 MPPTs and 1.6 DC oversizing to ensure superior energy harvest even in complex conditions. Its "Mix & Match" capability offers ultimate future-proofing, allowing you to combine new and old modules as your energy needs or local regulations evolve. From urban apartments to family houses, the S3 is the most adaptable solution that fits effortlessly into every corner of modern energy living.



COMING
SOON



SILENT | Silent Living, Anywhere

- <20dB whisper-quiet operation
- Fanless high-conductivity thermal design



SMART | Smarter Energy, Lower Bills

- AI-powered dynamic tariff savings
- Hardware-free cloud EMS integration
- 24/7 energy management via SEMS+



SECURE | Safe Beyond Limits, Secure by Design

- <60V DC touch-safe security
- Built-in aerosol for automatic protection
- -20°C Ready with built-in heating
- 10000 Cycles with a 10-Year warranty



SIMPLE | Simple to Install, Free to Expand

- Dual-mode: hardwired & plug-and-play
- Flexible mixing of old and new batteries
- Modular stacking with blind-mate design
- Wireless 4-unit parallel with zero wiring
- Lightweight battery modules under 29kg

Technical Data

GW3K-EMA-G10

Battery Side

Battery Type	LFP (LiFePO ₄)
Nominal Voltage (V)	54
Voltage Range (V)	52 ~ 56
Max. Continuous Charging Current (A)	63
Max. Continuous Discharging Current (A)	64
Max. Charging Power (kW)	3.4
Max. Discharging Power (kW)	3.2

PV Side

Max. Input Power (kW)	4.8
Max. Input Voltage (V)	60
MPPT Operating Voltage Range (V)*1	13 ~ 48
Start-up Voltage (V)	15
Nominal Input Voltage (V)	40
Max. MPPT Current (A)	36 / 36 / 36 / 36
Max. MPPT Short Circuit Current (A)	40 / 40 / 40 / 40
Number of MPPTs	4
Number of Strings per MPPT	1

AC Side (On-Grid)

Rated Power (kW)	0.8 ² / 3
Max. Power (kW)	3
Rated Apparent Power from Grid (kVA)	3.6
Rated Apparent Power to Grid (kVA)	3
Max. Apparent Power from Grid (kVA)	3.6
Max. Apparent Power to Grid (kVA)	3
Nominal Voltage (V)	220 / 230 / 240, L / N / PE
Voltage Range (V)	170 ~ 280
Nominal Frequency (Hz)	50 / 60
Frequency Range (Hz)	45 ~ 55 / 55 ~ 65
Rated Current from Grid (A)	16.0@220V; 15.7@230V; 15.0@240V
Rated Current to Grid (A)	13.7@220V; 13.1@230V; 12.5@240V
Max. Current from Grid (A)	16
Max. Current to Grid (A)	15.2
THDi	3%

Back-up Side

Rated Apparent Power (kVA)	3
Max. Apparent Power (kVA)	Off-grid:3; On-grid:3.6
Nominal Voltage (V)	220 / 230 / 240, L / N / PE
Nominal Frequency (Hz)	50 / 60
Max. Current (A)	Off-grid: 13.7; On-grid: 16.0
THDv (@Linear Load)	3%
On / Off-grid Switching Time (ms)	10

Protection

PV String Current Monitoring	Intergrated
PV Insulation Resistance Detection	Intergrated
Anti-islanding Protection	Intergrated
AC Overcurrent Protection	Intergrated
AC Short Circuit Protection	Intergrated
AC Overvoltage Protection	Intergrated
DC Surge Protection	Type III
AC Surge Protection	Type II
Remote Shutdown	Intergrated

General Data

Operating Temperature Range (°C)	-20 ~ +55
Relative Humidity	0 ~ 100%
Max. Operating Altitude (m)	3000
Cooling Method	Natural Convection
User Interface	LED, WLAN + APP
Communication with BMS	CAN
Communication	RS485, WiFi + LAN + Bluetooth
Communication Protocols	Modbus-RTU
Weight (kg)	15
Dimension (W × H × D mm)	480 × 290 × 170
Noise Emission (dB)	<20
Ingress Protection Rating	IP65
Mounting Method	Floor stacked
Power Factor	0.8 leading ~ 0.8 lagging

*1: Please refer to the user manual for the MPPT Voltage Range at nominal Power.

*2: Default 0.8 kW, shall be adjusted by a qualified electrician in accordance with local regulations.

*: Please visit GoodWe website for the latest certificates.

*: As a part of our policy of continuous improvement, we reserve the right to alter design and specifications without further notice.

Technical Data		GW3.0-BAT-LVD-G10
Battery Type	LFP (LiFePO ₄)	
Rated Capacity (Ah)	314	
Rated Energy (kWh)	3	
Usable Energy (kWh) ^{*1}	2.75	
Nominal Voltage(V) (Battery)	9.6	
Voltage Range(V) (Battery)	8.61 ~ 10.83	
Operating Voltage Range (V) (single phase system)	52 ~ 56	
Max. Input Current (System) (A)	32	
Max. Output Current (System) (A)	33	
Max. Input Power (System) (kW) ^{*2}	1.7	
Max. Output Power (System) (kW) ^{*2}	1.7	
Charging Temperature Range (°C)	-20 ~ +55 (with heating film)	
Discharging Temperature Range (°C)	-20 ~ +55	
Relative Humidity	4 ~ 100%	
Max. Operating Altitude (m)	3000	
Noise Emission (dB)	<20	
Communication	CAN	
Weight (kg)	29	
Useable Extinguishing Agent	CO ₂ , H ₂ O	
Crucial Material	LiFePO ₄ , C, Cu, LiPF ₆ , Al, (C ₃ H ₆) _n	
Ingress Protection	IP65	
Protective Class	II	
Dimensions (W × H × D mm)	480 × 308.6 × 260	
Max. Storage time	12 months (-20°C ~ +35°C); 6 months (+35°C ~ +45°C)	
Scalability	5	
Mounting Method	Floor stacked	
Standard and Certification	Safety	IEC62619 / IEC63056
	EMC	EN IEC 61000-1 / EN IEC 61000-2 / EN IEC 61000-3 / EN IEC 61000-4
	Transportation	UN38.3

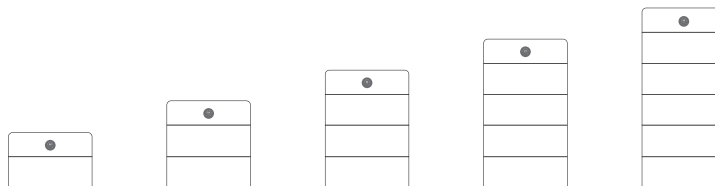
*1: Test conditions, 100% DOD(cell 2.85~3.6V voltage range), 0.2P charge & discharge at 25±2°C for battery system at the beginning of life.

Usable energy is defined by its initial design value. Actual available energy may vary depending on charge/discharge rate, environmental conditions (e.g. temperature), transport and storage factors.

*2: Max.Input Power/Max.Output Power/Peak Output Power derating will occur related to Temperature and SOC.

*: Please visit GoodWe website for the latest certificates.

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Number of Hybrid Inverter	1	1	1	1	1
Number of Battery Modules (pcs)	1	2	3	4	5
Total Rated Energy (kWh)	3	6	9	12	15
Total Weight (kg)	44	73	102	131	160
Total Dimensions (W × H × D mm)	480 × 290 × 435	480 × 290 × 702	480 × 290 × 969	480 × 290 × 1236	480 × 290 × 1503