



ESA 3-10 kW ANZ Distribute Launch

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GoodWe Solar Community

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DEEP IN SOLAR





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Features & Highlights

Flexible Inverter Design and Installation

- 2/4 MPPTs, each support up to 26A short-circuit input current
- 200% PV input oversizing
- Inbuilt meter (offered external CT)
- Support additional external Meter (single phase & three phases)
- Inbuilt back up (UPS level) & Support full house (63A) backup (no gateway)
- Change-over switch coming with box
- Support used as AC coupled solution
- Grid forming mode available for single unit
- Direct paralleling connection up to 6 units without extra devices

Superb Safety & Reliability

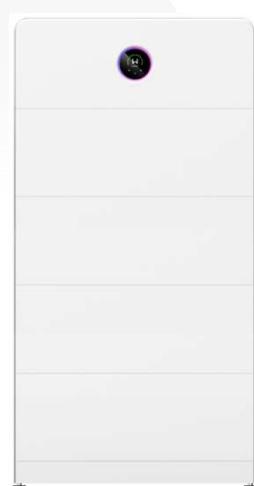
- Updated AFCI 3.0 level protection
- IP66 ingress protection
- Inbuilt DC isolator + battery isolator
- Noise level under 35dB
- 6-level battery protections
- Heating mode ensures reliable performance even in -18°C environment
- 10 year warranty (both INV and BAT)

Integrated Battery Series: Lynx D G2

- Stackable design – cable free for batteries
- 5kWh and 8kWh Module support 1C charging/discharging
- 6kWh and 9kWh Module (release later) support 0.5C charging/discharging
- Pack-level DC/DC –mixable size or old/new batteries
- Up to 48kWh each ESA product
- Module de-energize applicable (preliminary standard: TS5398/2025)

Smart Control & Monitoring

- New UI SEMS+ (available in Oct)
- VPP ready: Origin, Amber (coming soon), Synergy
- Backstop complied in SA and VIC
- Colorful LED indicators
- Quick commissioning with new SolarGO functions
- AI response with product via SEMS app



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Flexible Design & Installation



Specs Sheet - DC

Technical Data	GW3 / (5.12-49.92) -ESA-PS-G20	GW3.6 / (5.12-49.92) -ESA-PS-G20	GW5 / (5.12-49.92) -ESA-PS-G20	GW6 / (5.12-49.92) -ESA-PS-G20	GW8 / (5.12-49.92) -ESA-PS-G20	GW10 / (5.12-49.92) -ESA-PS-G20
Battery System Data						
Cell Type						LFP (LiFePO4)
Module Nominal Energy (kWh)						5.12 / 8.32
Number of Modules						1 ~ 6
System Usable Energy (kWh)						5 ~ 48
Nominal Voltage (V)						380
Operating Voltage Range (V)						350 ~ 550
Cycle Life						>6000 (25 ± 2°C 0.5C 90%DOD 70%EOL)
PV String Input Data 200% PV oversizing						
Max. Input Power (kW)	6.0	7.2	10.0	12.0	16.0	20.0
Max. Input Voltage (V)						600
MPPT Operating Voltage Range (V)						40 ~ 560
Start-up Voltage (V)						50
Nominal Input Voltage (V)						400
Max. Input Current per MPPT (A)						20
Max. Short Circuit Current per MPPT (A)						26
Number of MPP Trackers	2	2	2	2	4	4
Number of Strings per MPPT	1/1	1/1	1/1	1/1	1/1/1/1	1/1/1/1

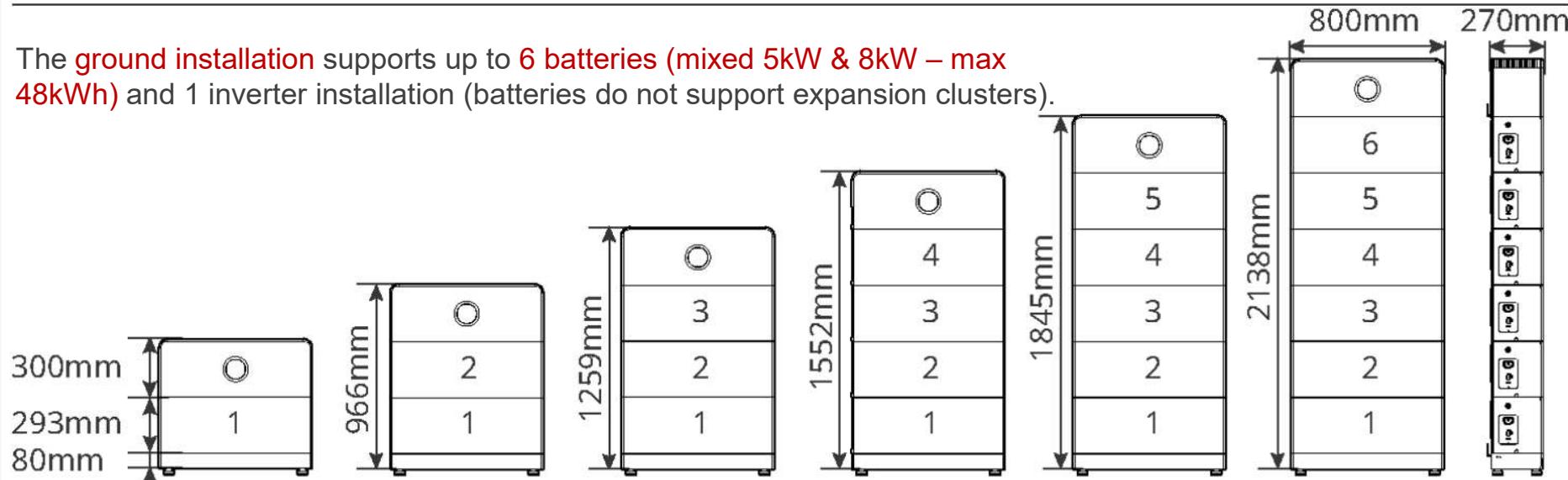
4 trackers on 8kW & 10kW



Flexible System Size

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The **ground installation** supports up to **6 batteries** (mixed 5kW & 8kW – max 48kWh) and 1 inverter installation (batteries do not support expansion clusters).



Technical Data	GW3K-EHA-G20	GW3.6K-EHA-G20	GW5K-EHA-G20	GW6K-EHA-G20	GW8K-EHA-G20	GW9.999K-EHA-G20	GW10K-EHA-G20
Weight (kg)	24	24	24	24	26	26	26
Dimension (W×H×D mm)	800*300*270	800*300*270	800*300*270	800*300*270	800*300*270	800*300*270	800*300*270



Real 200% Oversizing Functionality (need confirm)

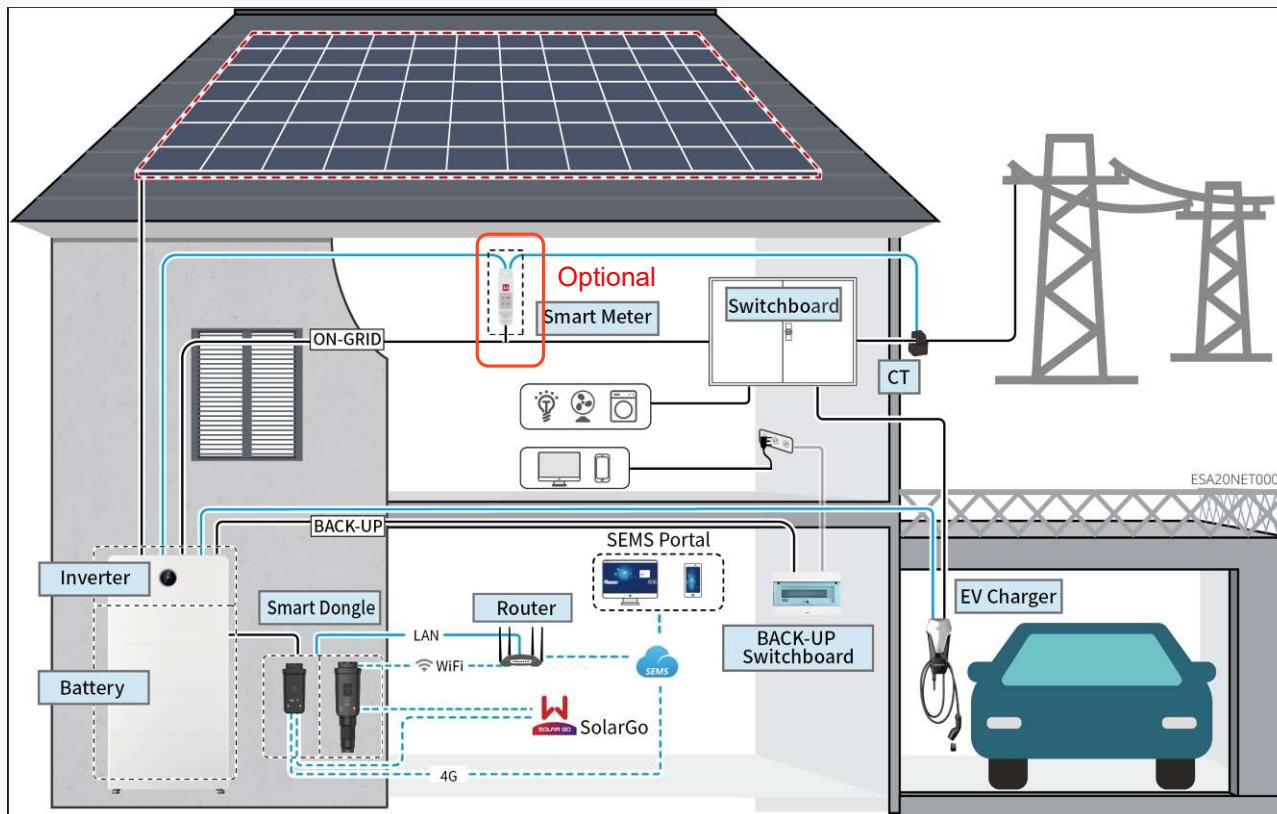
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Standard Single Device Diagram

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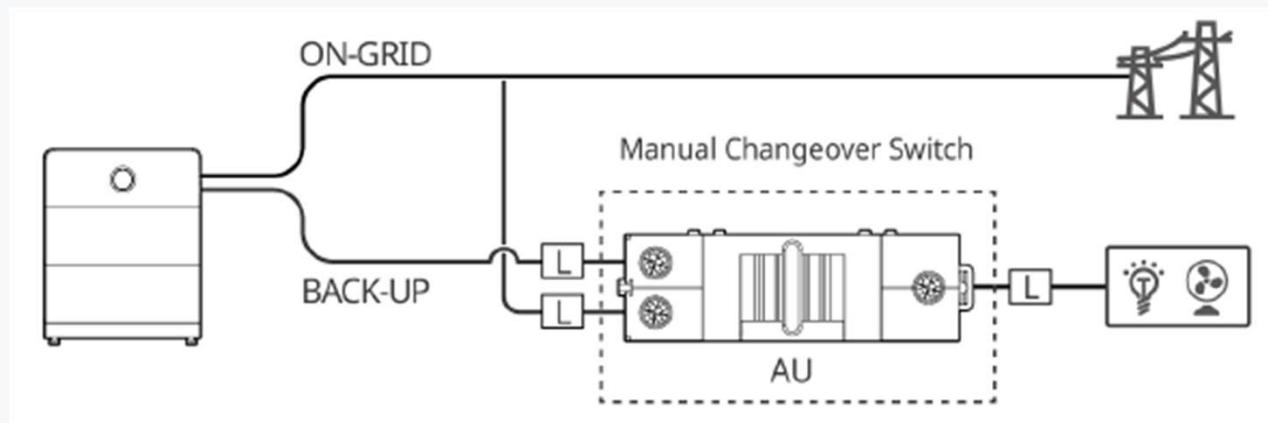


1. System support both Self-use or TOU mode
2. Inbuilt Backup: NO NEED for EXTRA BACKUP BOX
3. CT offered with inbuilt Meter and support external meter wiring



Full House Backup Solution

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Manual switch (only for Australia) x 1

ESA comes with inbuilt back up (UPS level shifting time)

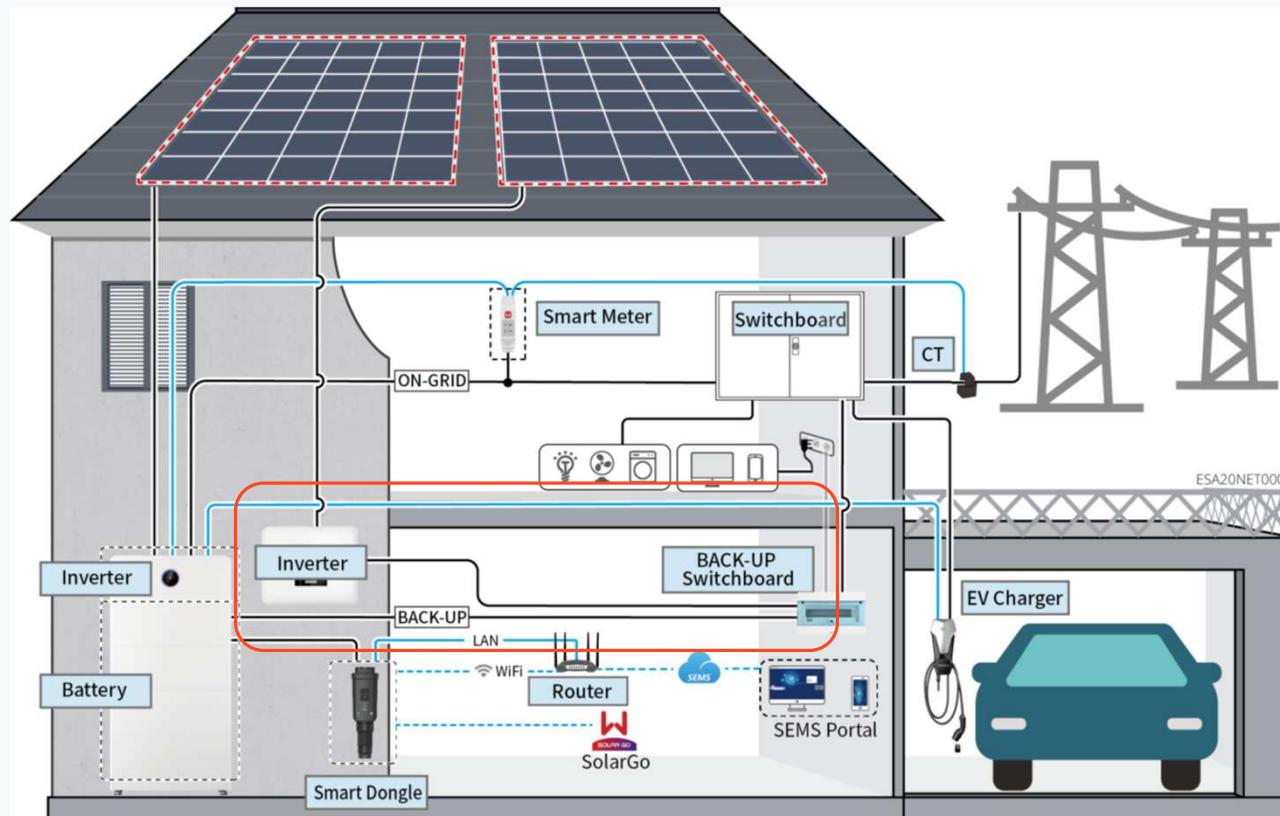
The whole ESA series support **full house backup** capability (63A)

Plus a **63A changeover switch** offered in the same packing box.



Grid forming function for AC coupled system

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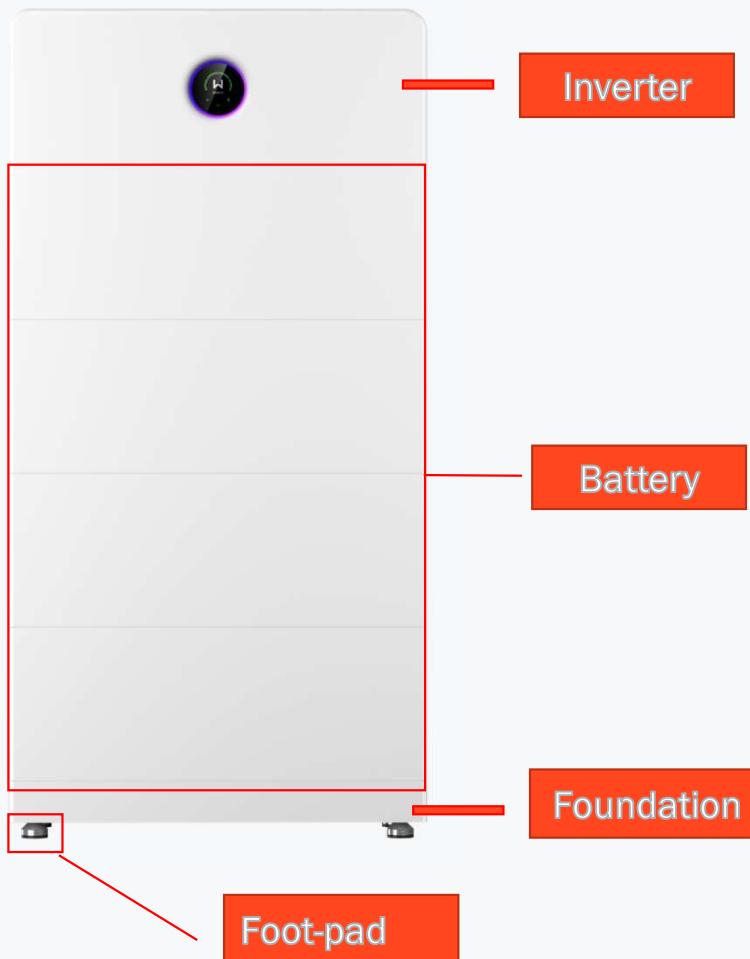
1. PV inverter connects to the Backup port of ESA, then ESA will use **Grid-forming function** to keep PV inverter working even grid is off.
2. Applicable on AC Coupling scenario as well.
3. Generator mode still available but cannot work with Grid-forming together.





Installation Method

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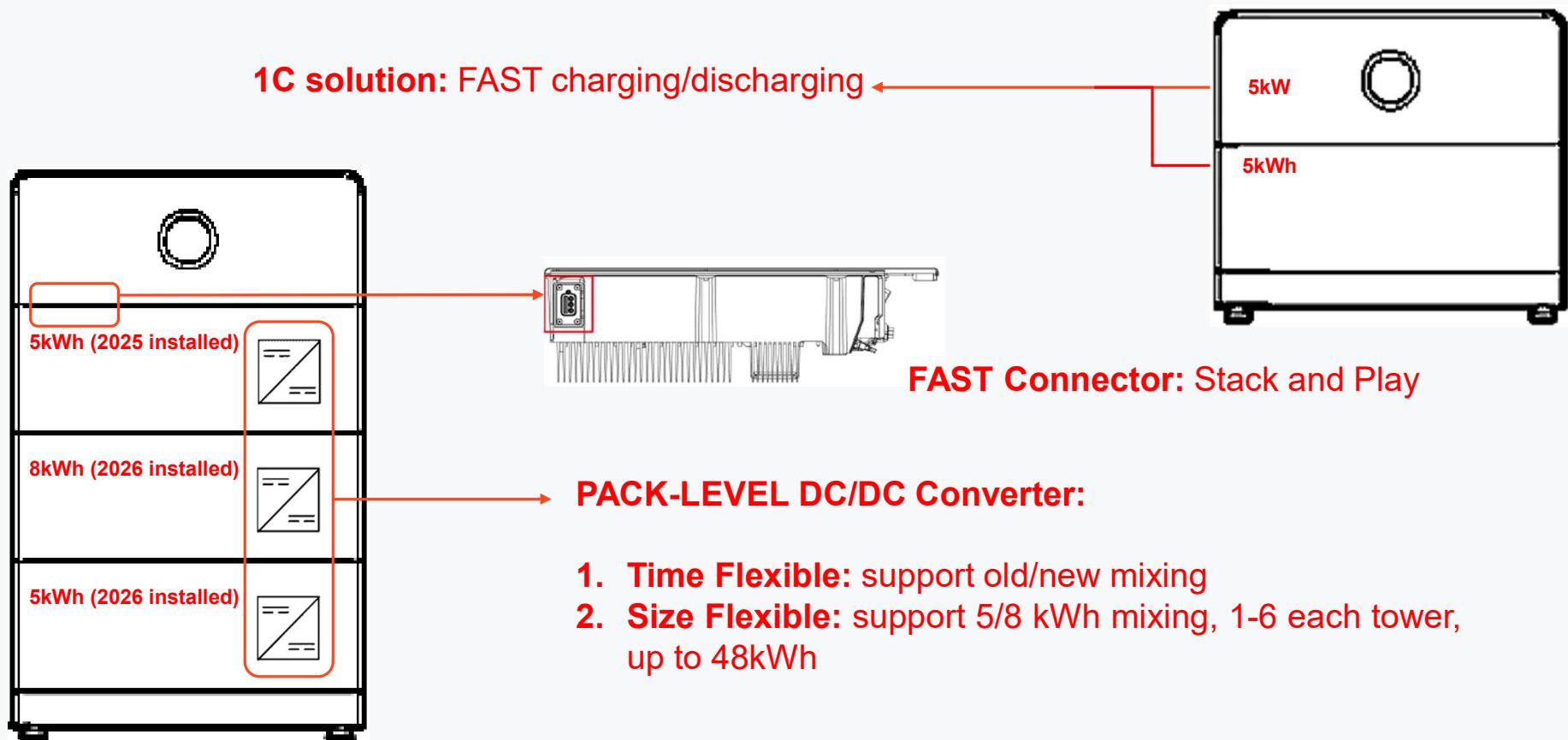
1. GWXXK-EHA-G20= Inverter + Foundation + Foot-pad.
2. GWXXK-EHA-G20 and BAT5/BAT8 need to be ordered separately.
3. If the user needs wall-mounted installation, the installation bracket needs to be ordered separately.
4. When wall-mounted: (**Bracket product code : ACS0040-00-00P**)
The battery also needs to be installed on the Foundation.
The maximum number of batteries that can be installed is as follows

Battery	MAX.Quantity
GW5.1-BAT-D-G20	3
GW8.3-BAT-D-G20	2
GW5.1-BAT-D-G20 + GW8.3-BAT-D-G20	1 for each



Battery Installation

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02

Safety & Reliability

Six-level Battery Protection

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Cell-level Protection

Top-brand LiFeO₄ battery cell



Monitoring-level Protection



BMS compliant with ISO 13849 functional safety



Real-time battery health tracking



functional safety

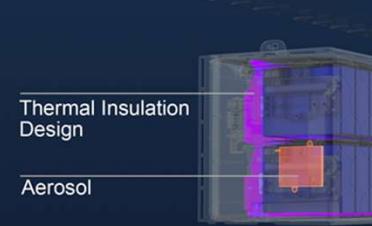
Electrical Protection

- ⊕ Short Circuit Protection
- Ⓐ Over-current Protection
- ⚡ Insulation Monitoring

Structural Protection

- 💧 IP66 protection
- ≣ Die casting design
- ➡ Blind-mate design

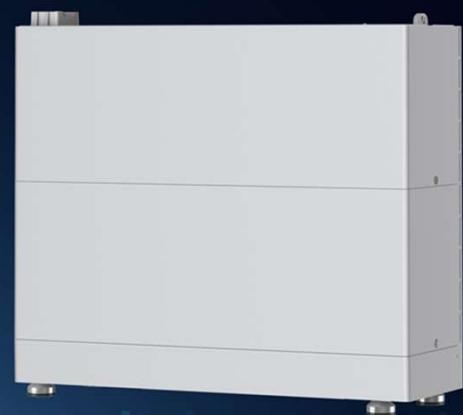
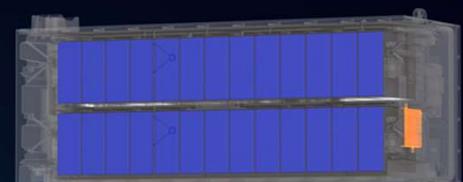
Emergency Protection



System-level Protection

Real-time interaction

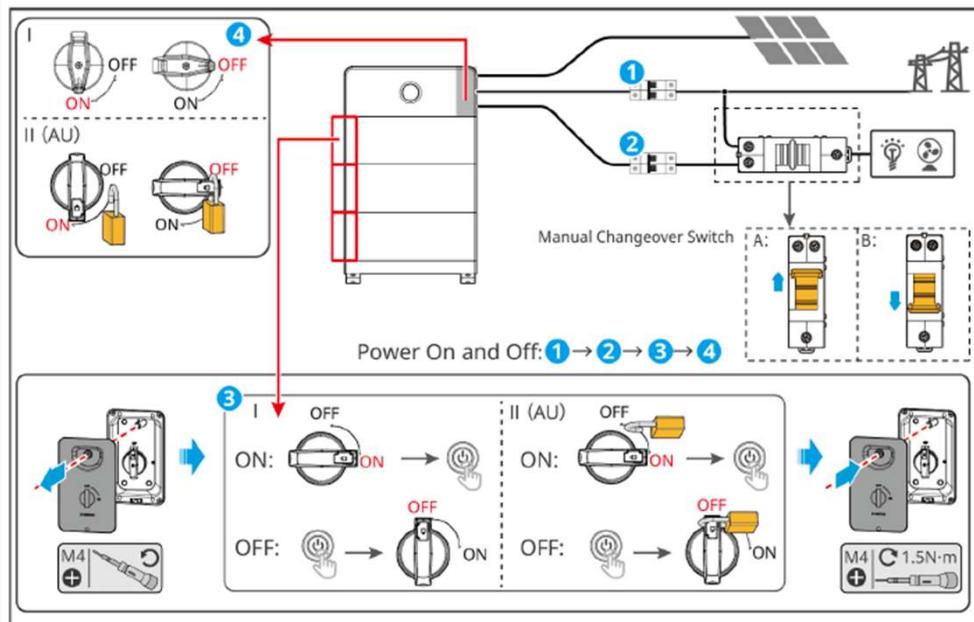
Charging & discharging protection





Multi-level Switching Solution for AU

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1. ON-GRID circuit breaker.
2. BACK-UP circuit breaker.
3. Battery switch (for each MODULE)
4. Certified PVII switch of the inverter.

Where the modular parts are connected together by cable and connectors conforming to Z.4.11.102 **Type B connector**, an internal air gap isolation device is not required if the following are met:

- (i) The modules are connected in series.
- (ii) The connectors mounted on the modular enclosure and on the cables provided are rated at least IP2X.
- (iii) The connectors are in de-energised state (automatically or manually put into a de-energised state) when cables are not inserted into the connector of the modular assembly, or are being removed from the connector of the modular assembly.
- (iv) If the de-energisation is provided by electronic switching the electronic switching is tested to verify the electronics do not cause a hazard by inadvertently switching on due to electromagnetic interference or single fault. The electronic switching shall be tested



Applicable for Module De-energize (preliminary standard: TS5398/2025)

Super Quite Design

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Inverter Noise < 30dB
Battery Noise < 35dB

Suitable for all restrict low-noise scenarios such as residential communities, schools, governmental and public buildings, etc.



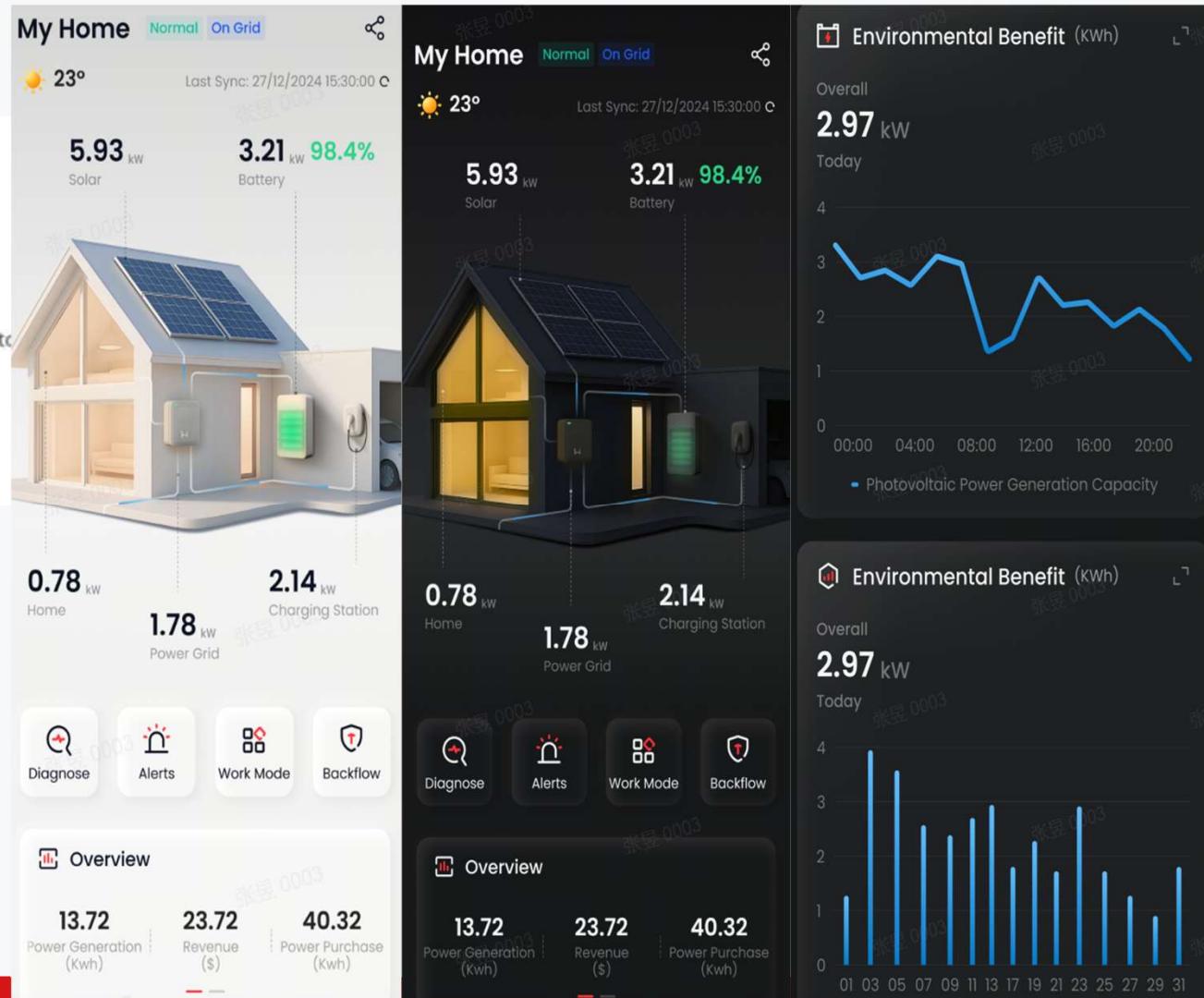
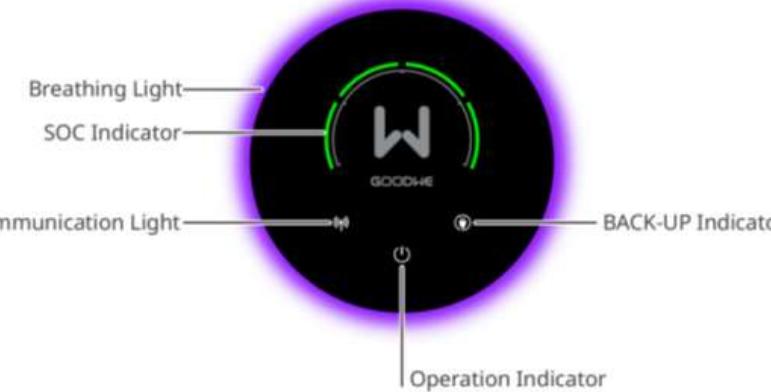
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Monitoring and Smart Control

New SEMS UI and Local LED

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LED Indicator



Certification & Compliance



CEC listing for Inverter:

Model Number ↴	Brand ↴	Manufacturer ↴	Approved Date ↴	Expiry Date ↴	Certificate Number	Series
GW9.999K-EHA-G20 (AS4777-2 2020)	GoodWe	GoodWe Technologies Co Ltd	25-07-2025	25-07-2028	AZ 69028613	ESA
GW6K-EHA-G20 (AS4777-2 2020)	GoodWe	GoodWe Technologies Co Ltd	25-07-2025	25-07-2028	AZ 69028613	ESA
GW3K-EHA-G20 (AS4777-2 2020)	GoodWe	GoodWe Technologies Co Ltd	25-07-2025	25-07-2028	AZ 69028613	ESA
GW3.6K-EHA-G20 (AS4777-2 2020)	GoodWe	GoodWe Technologies Co Ltd	25-07-2025	25-07-2028	AZ 69028613	ESA
GW5K-EHA-G20 (AS4777-2 2020)	GoodWe	GoodWe Technologies Co Ltd	25-07-2025	25-07-2028	AZ 69028613	ESA
GW8K-EHA-G20 (AS4777-2 2020)	GoodWe	GoodWe Technologies Co Ltd	25-07-2025	25-07-2028	AZ 69028613	ESA

Will be updated on SA flexible export, VIC backstop, Synergy approved list soon.

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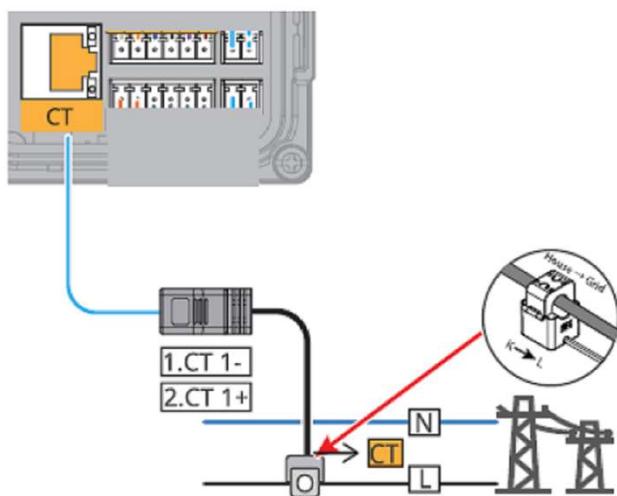
Available Accessories

Accessories

Standard configuration:

Inbuilt meter + CT (in the box)

CT size: 120A/40mA, recommended CT cable length is $\leq 30m$



Metering

Smart Meter (Optional)



GMK110 (single)

GM330 (parallel)

Export power limit
Load monitoring

Accessories

Communication Modules

Communication Devices



Wi-Fi/LAN Kit 2.0*
Cyber Security
(standard)



4G Kit-20
(optional, coming
soon)

*1.0 dongle will no longer be compatible.

*Paralleling function is inbuilt, **no need to add Ezlink3000 for parallel operation.**

05

Benchmark



Key Performance Comparison

	Sigenergy SigenStor	Anker SOLIX X1	AlphaESS SMILE-M5-S	GoodWe ESA	Competitiveness
Appearance					
Power Range	5-12kW	3.68-6kW	3.6-5kW	3-9.9kW	+
Maximum Isc	20A	20A	25A	26A	+
MPPT	2-4, up to 550V input	2, up to 550V input	2, up to 560V input	2-4, up to 560V input	+
Battery Size	5kWh & 8kWh mixable, up to 48kWh	5kWh, up to 30kWh	5kWh, up to 30kWh	5kWh & 8kWh mixable, up to 48kWh	+
C-rate	0.5C	0.6C	1C	1C	+
Backup	Full House Backup with external Gateway	Inbuilt backup	Inbuilt backup	Inbuilt Full House Backup	+



Key Performance Comparison (continued)

	Sigenergy SigenStor	Anker SOLIX X1	AlphaESS SMILE-M5-S	GoodWe ESA	Competitiveness
Appearance					
On-grid Expandability	Up to 10 in paralleling	Up to 3 in paralleling	/	Up to 6 in paralleling (no need for extra dongle or module)	+
Off-grid Expandability	Up to 3 in paralleling	/	/		
Battery Safety	6-level protection	/	/	6-level protection	+
AFCI	Standard	/	/	Standard	+
Noise Level	NA (Fan Cooling)	INV: ≤30dB BAT: NA	<35 dB(A) @ 1 m	Natural cooling INV: ≤30dB BAT: ≤35dB	+

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THANK YOU