

Webinar

The New Hybrid Experience: How GoodWe's ES G2 Series inverter can provide energy autonomy for homeowners



Andrew Tyler
Regional Manager,
Sub-Saharan Africa (SSA)
GoodWe



Moderated by
Sean Rai-Roche
Section Editor
Solar Media / PV Tech

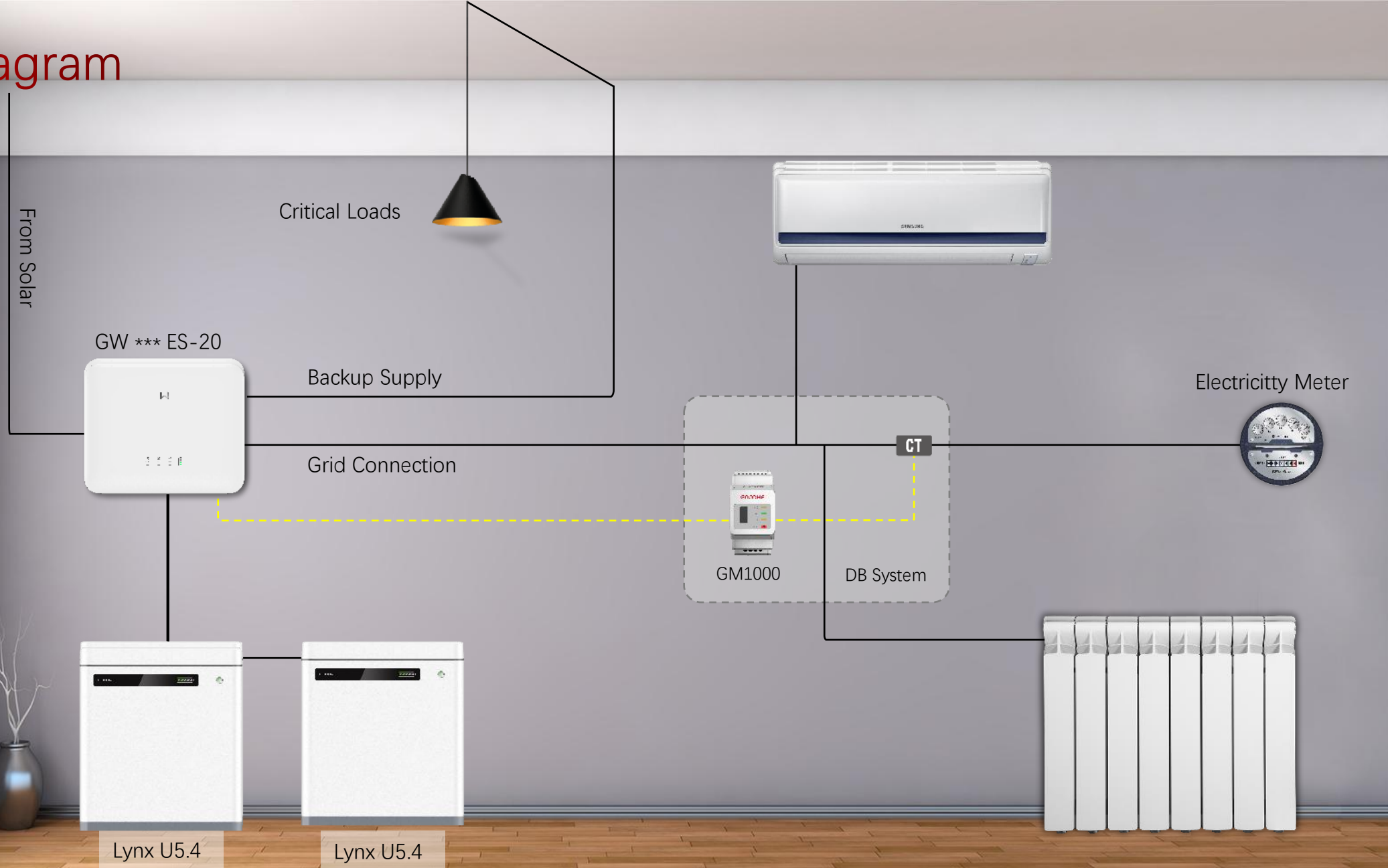
GOODWE

DRIVING THE WORLD'S SMART ENERGY FUTURE

GoodWe PV Tech

The New Hybrid Experience: How GoodWe' ES G2 Series inverter can
provide energy autonomy for homeowners

System Diagram



Series Combination

GW5048D-ES

ES Series

GW5048-EM

EM Series

GW5000S-BP

SBP Series

ES Series

SBP Series

GW5000-ES-20

GW5000M-ES-20

GW5000-SBP-20



Features

Easy Installation - Plug&Play Design

Easy Commissioning - One APP for All

House Fit-in - Mute and Soft Style

Integrated PV2 Isolator



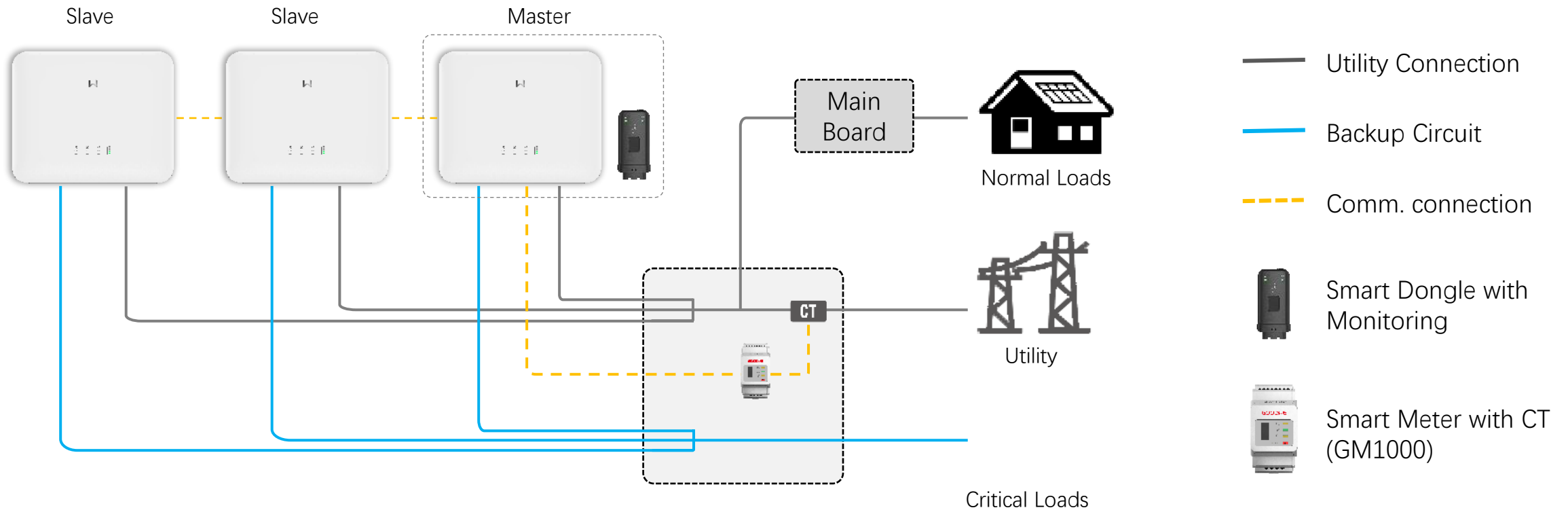
GOODWE
Smart Energy Innovator



Comparison With G1

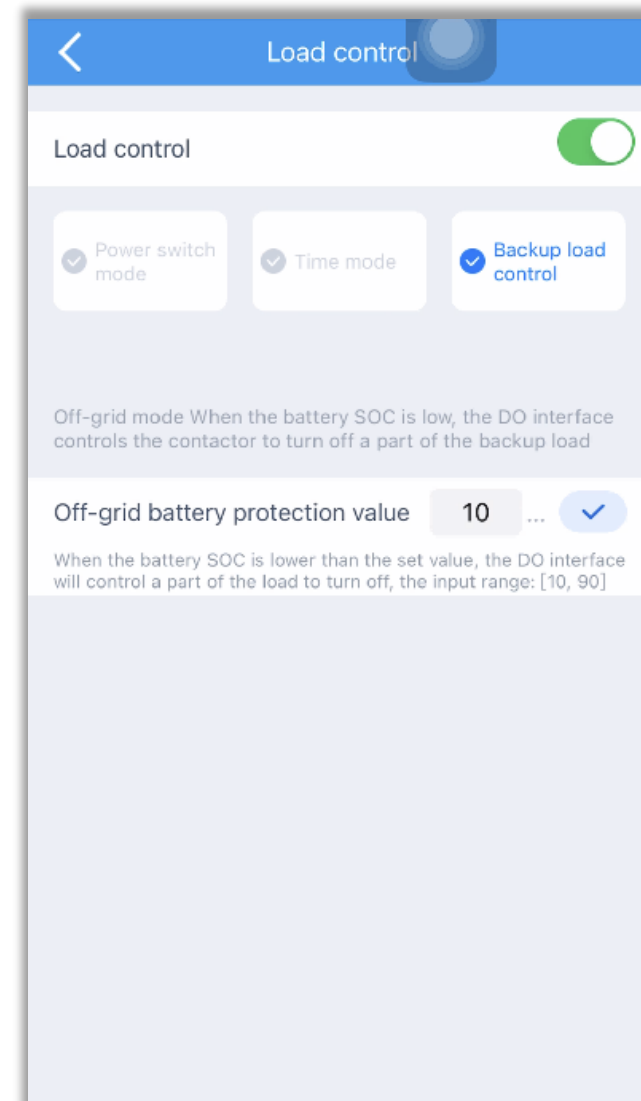
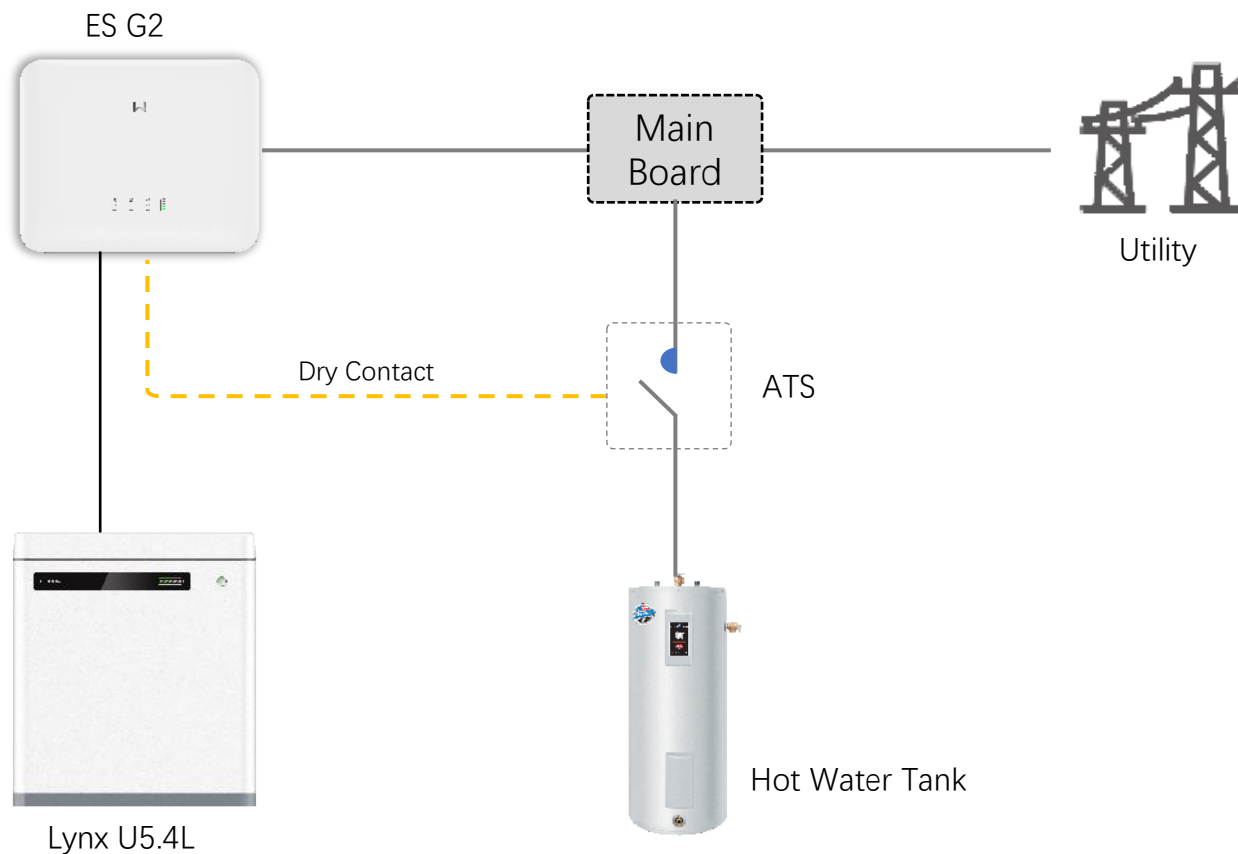
Model Name		Generation 1	Generation 2
		GW5048D-ES	GW5000-ES-20
Battery Input	Max. Charge/Discharge Current (A)	100	120
	Max charge power (W)	4,6kW	5000
	Max discharge power (W)	4,6KW	5300
	Max. Input Power (W)	6500W	7500W
	Max. Input Current per MPPT (A)	11	16
Grid Output	Nominal Apparent Power Output to Utility (VA)*3	5000	5000
	Max. Apparent Power from Utility Grid (VA)	6900W	10000W
Backup Output	Max. Continuous Output Power with Grid (VA)	4600W	10000W
	Max. Continuous Output Power (Only Battery) (VA)	4600W	5000W
Effeciency	Max. Efficiency	97.60%	97.60%
	European Efficiency	97%	97%
	Max. Battery to Load Efficiency	94%	>95%
Protections	DC Surge Arrester	Type 3	Type 2
	AC Surge Arrester	Type 3	Type 3
	DC Arc Fault Circuit Interrupter	NA	Optional
General	Communication with Portal	WiFi/LAN	WiFi/Wifi+LAN/4G
	Weight (Kg)	28	21.5
	Dimension (W×H×Dmm)	516*440*184	505.9*434.9*154.8

Paralleling System

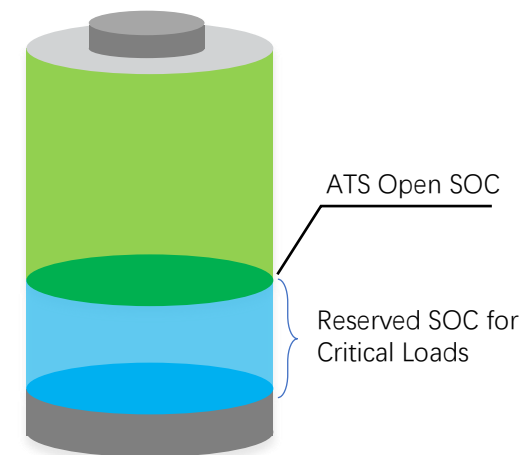
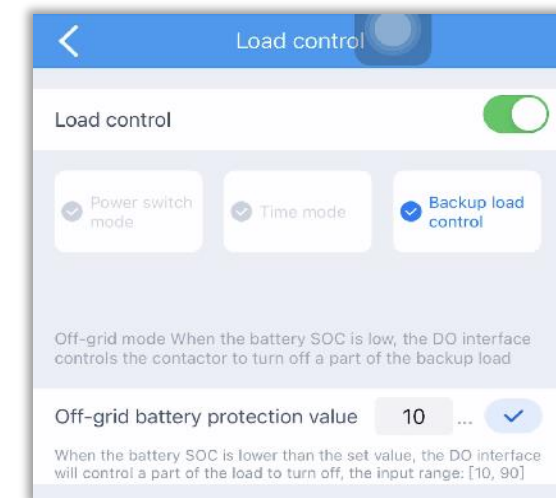
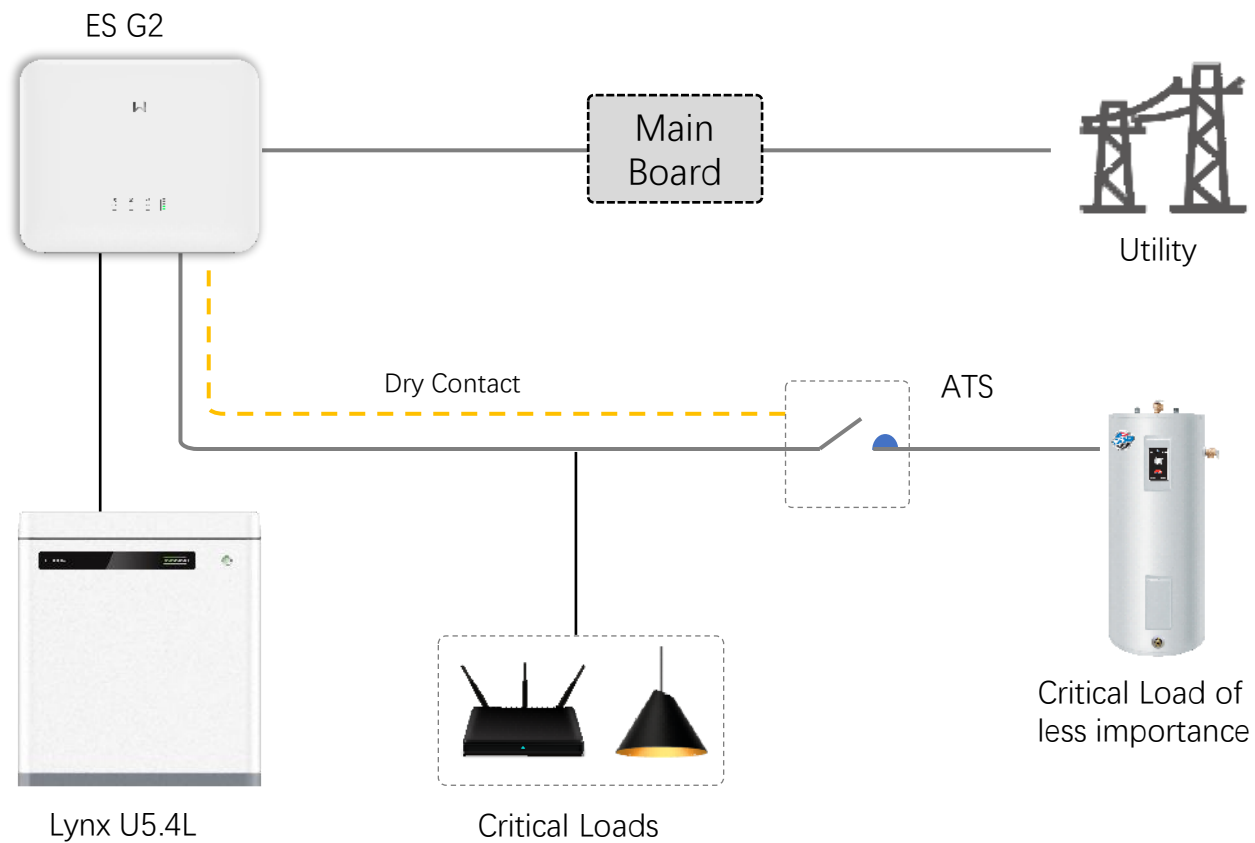


3 pcs could be paralleled, by Master & Slave relationship with smart communication dongle. Slave Inverter in fault mode will **automatically be bypassed**.

Smart Load Control

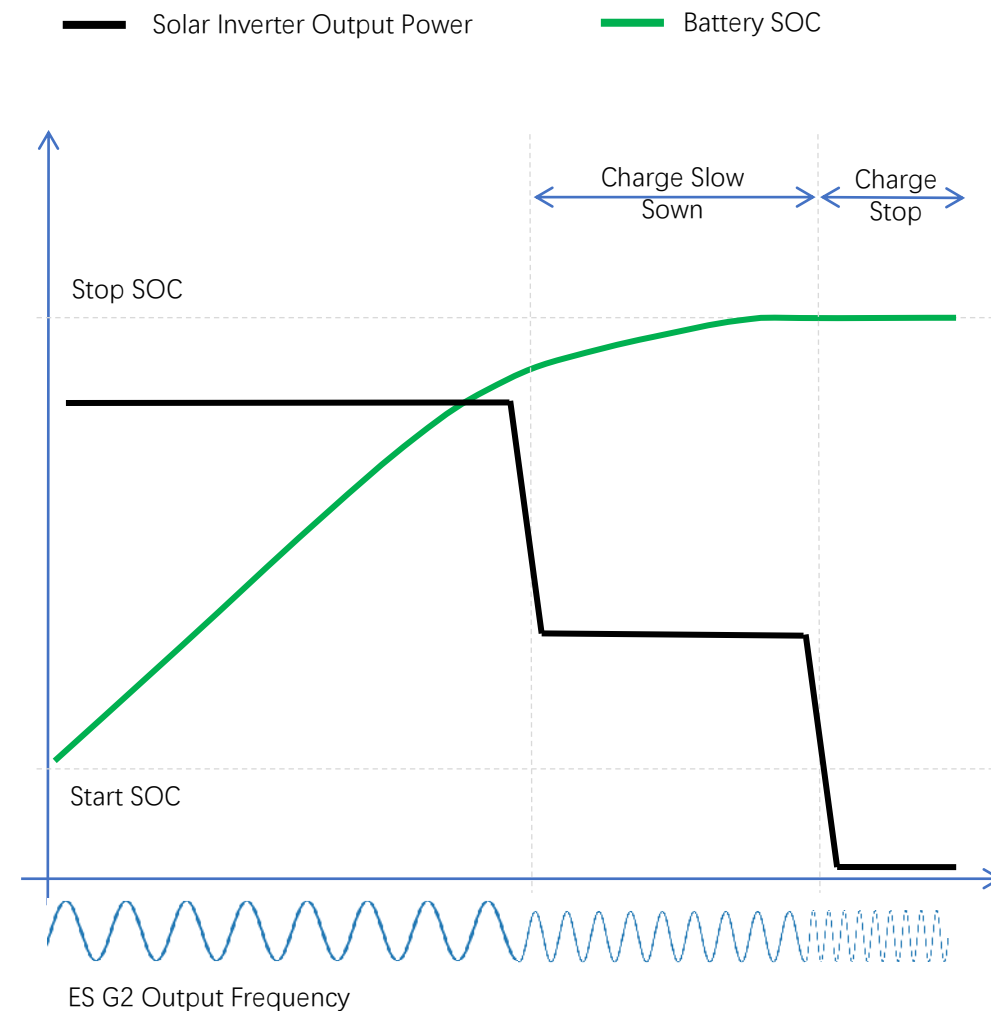
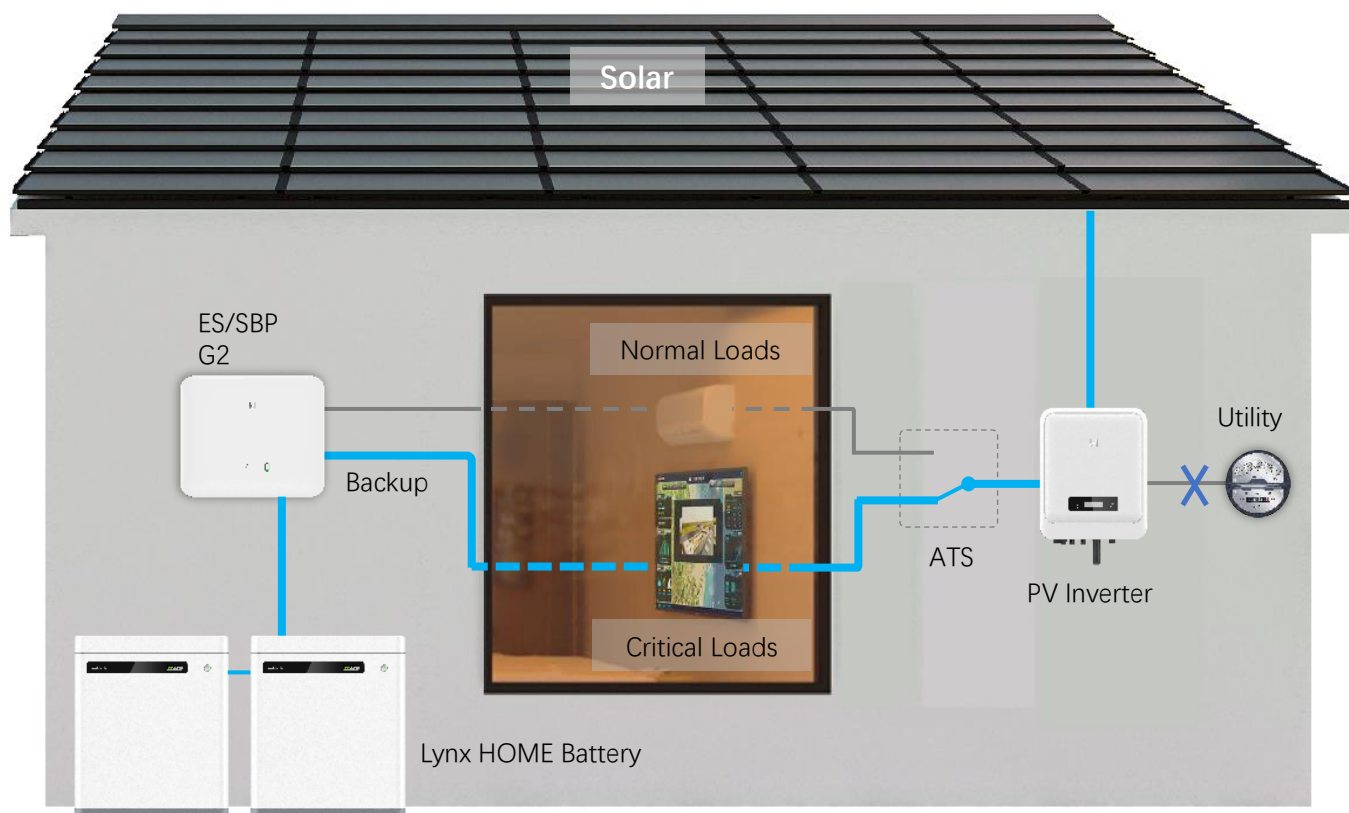


Smart Load Control

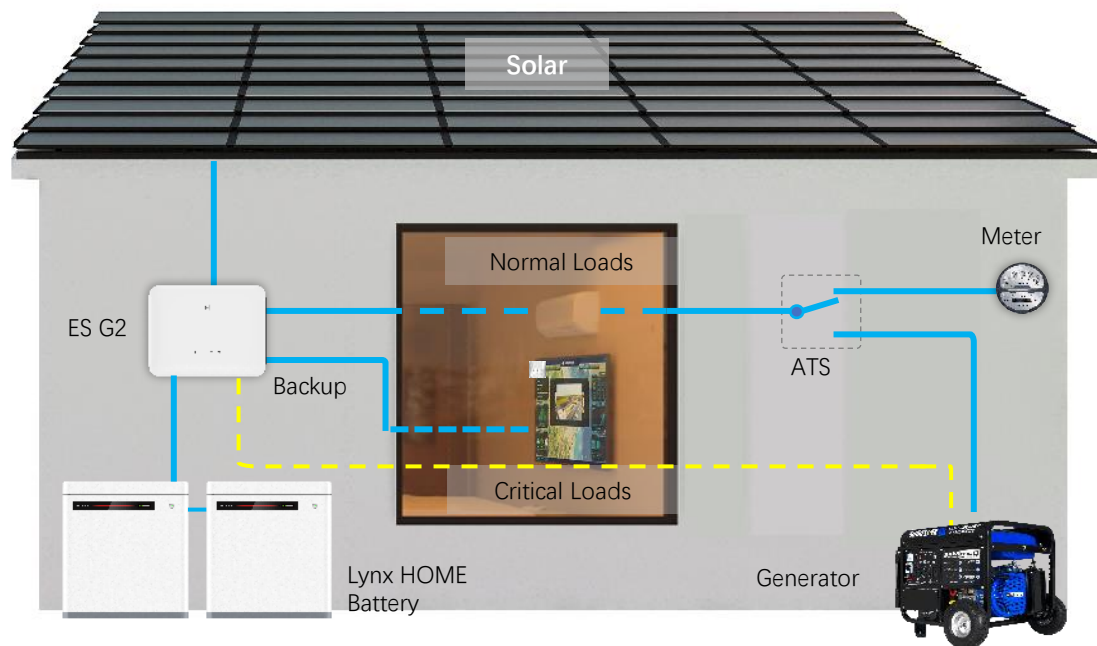


Micro-Grid Integration

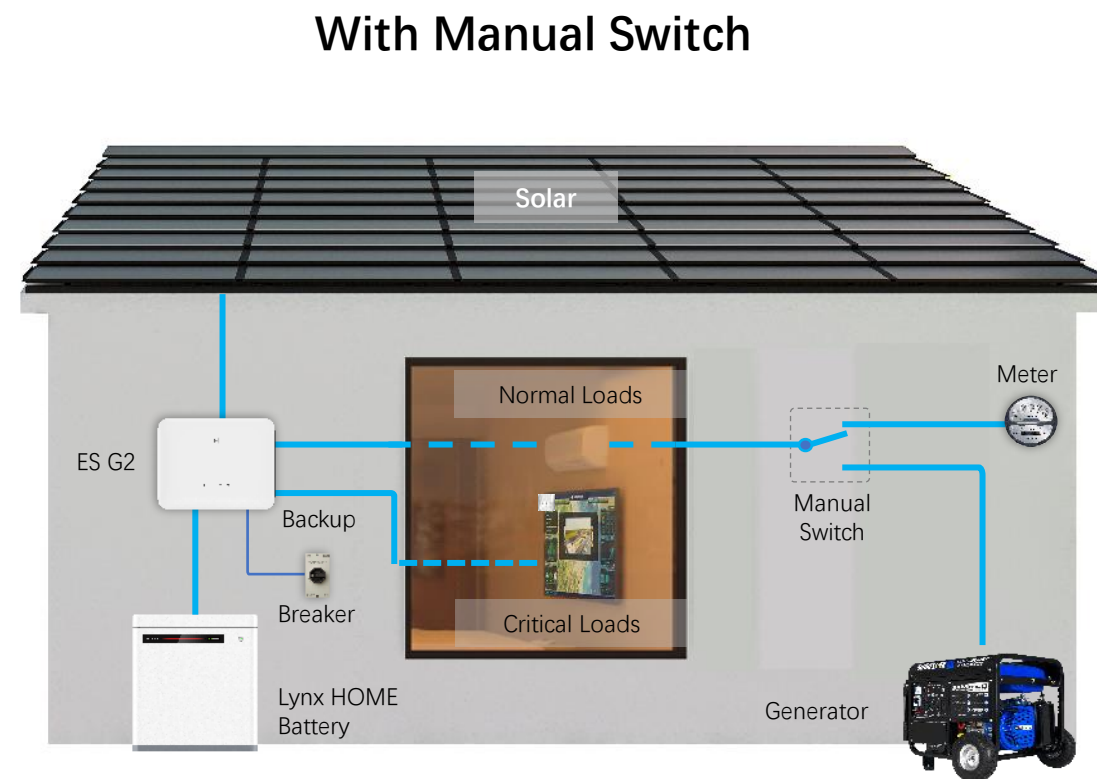
Work with GoodWe 1-P PV inverter according to a fixed curve.



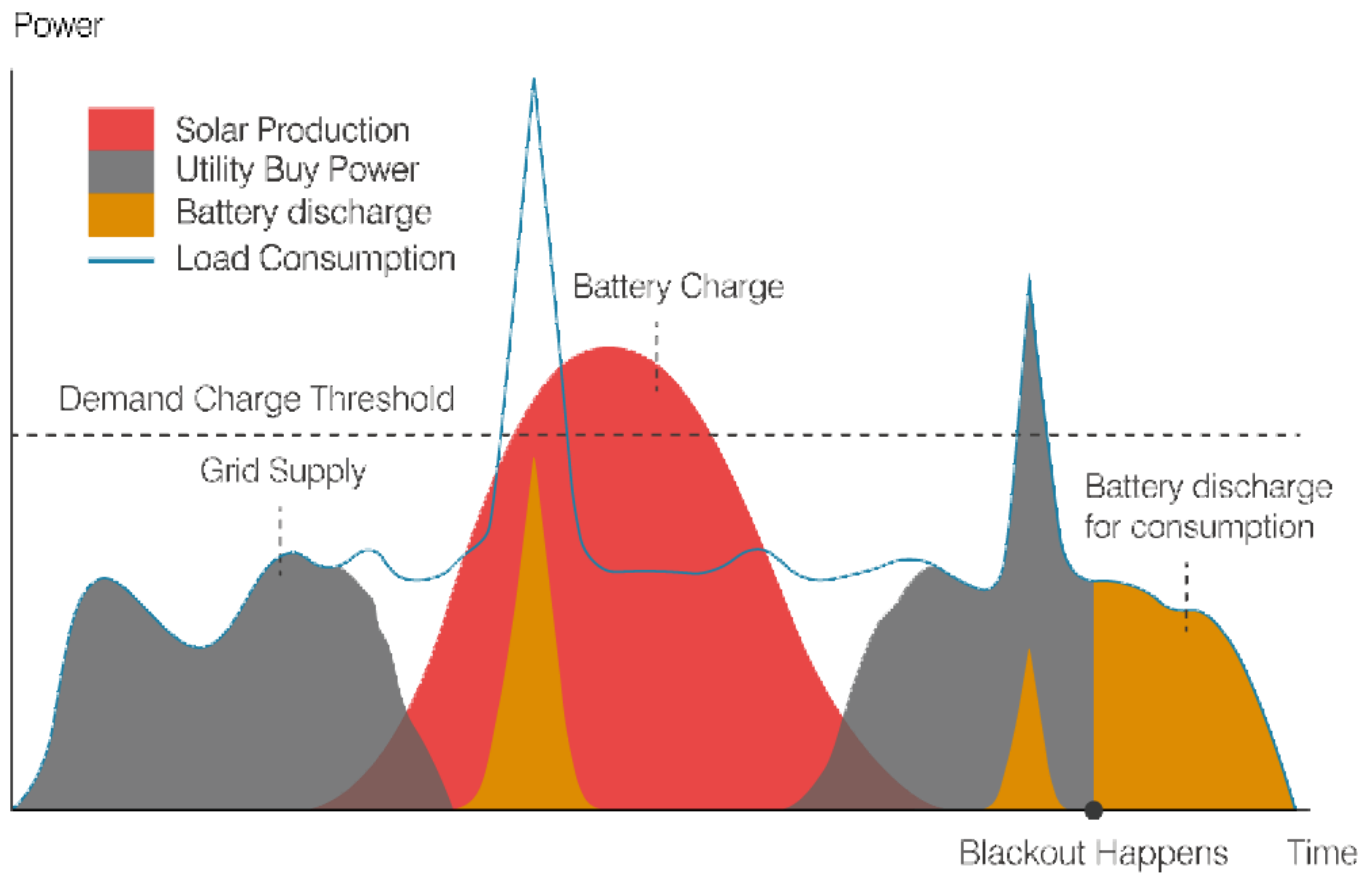
Generator Integration



With Auto-detection Switch



Operation Modes



Self-Consumption

Maximize self-use of solar and save electricity bill

Time of Use

Set charge/discharge time to maximize battery benefits according to FiTOU electricity prices

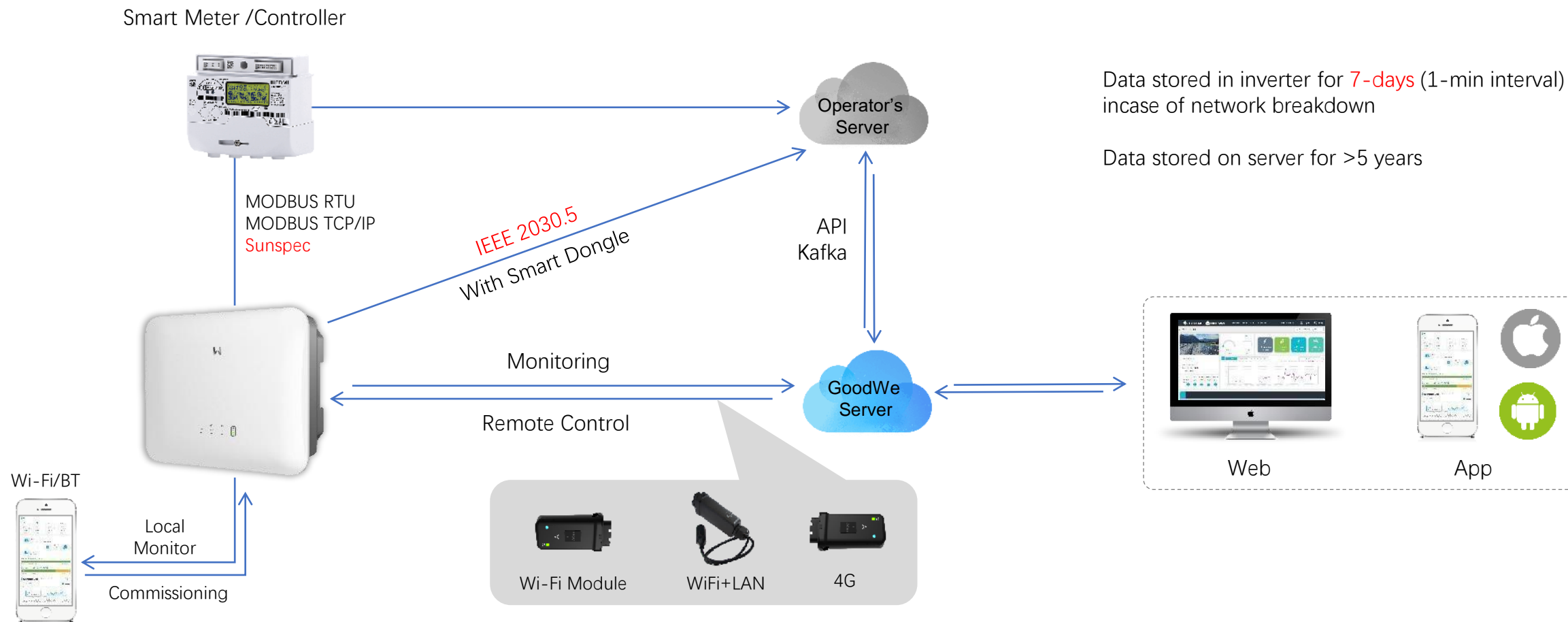
Outage Support

Battery power could be reserved usage during outage

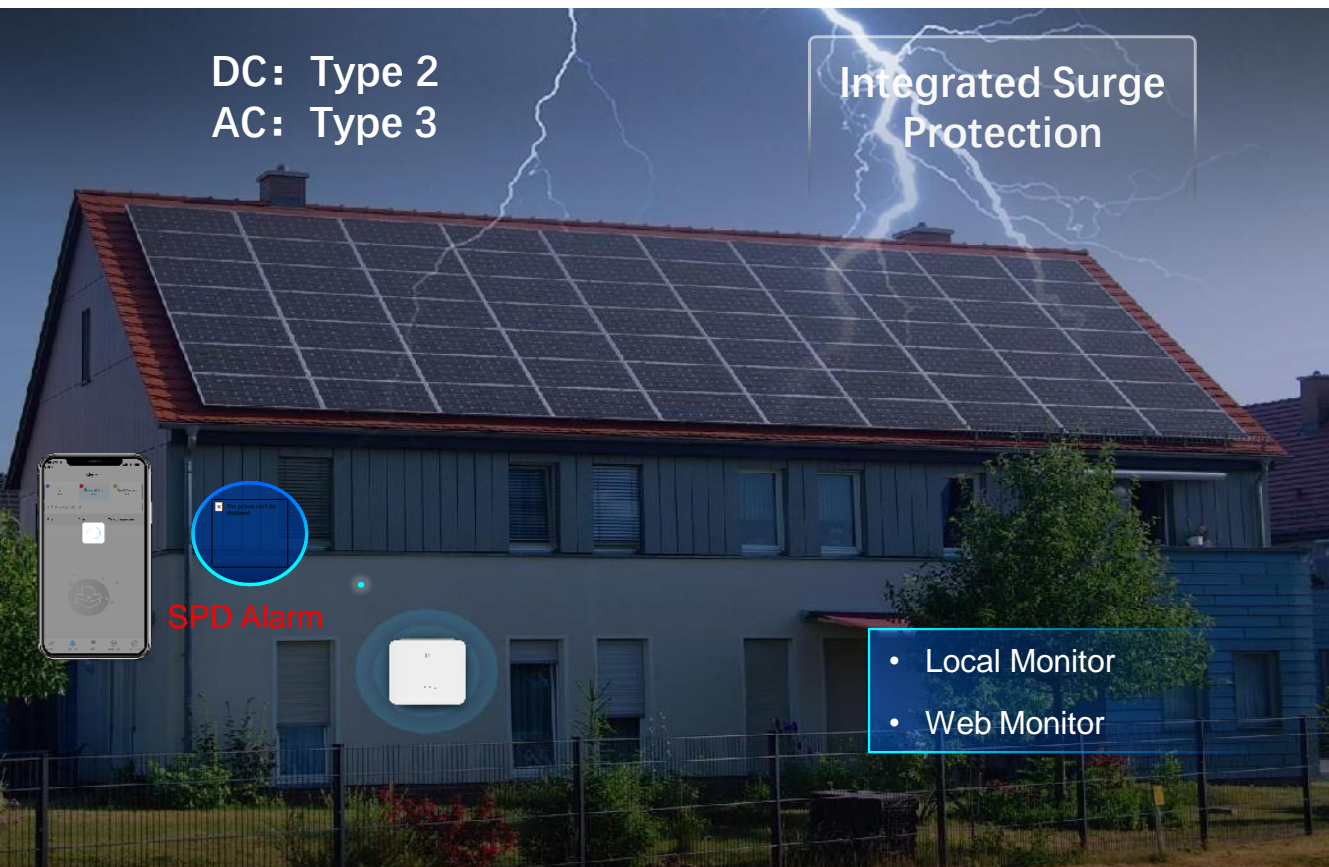
Peak-shaving (New)

To fit in demand charge strategy or to control the max line current at service point

Communication System



Safety Solution



Lightning Protection

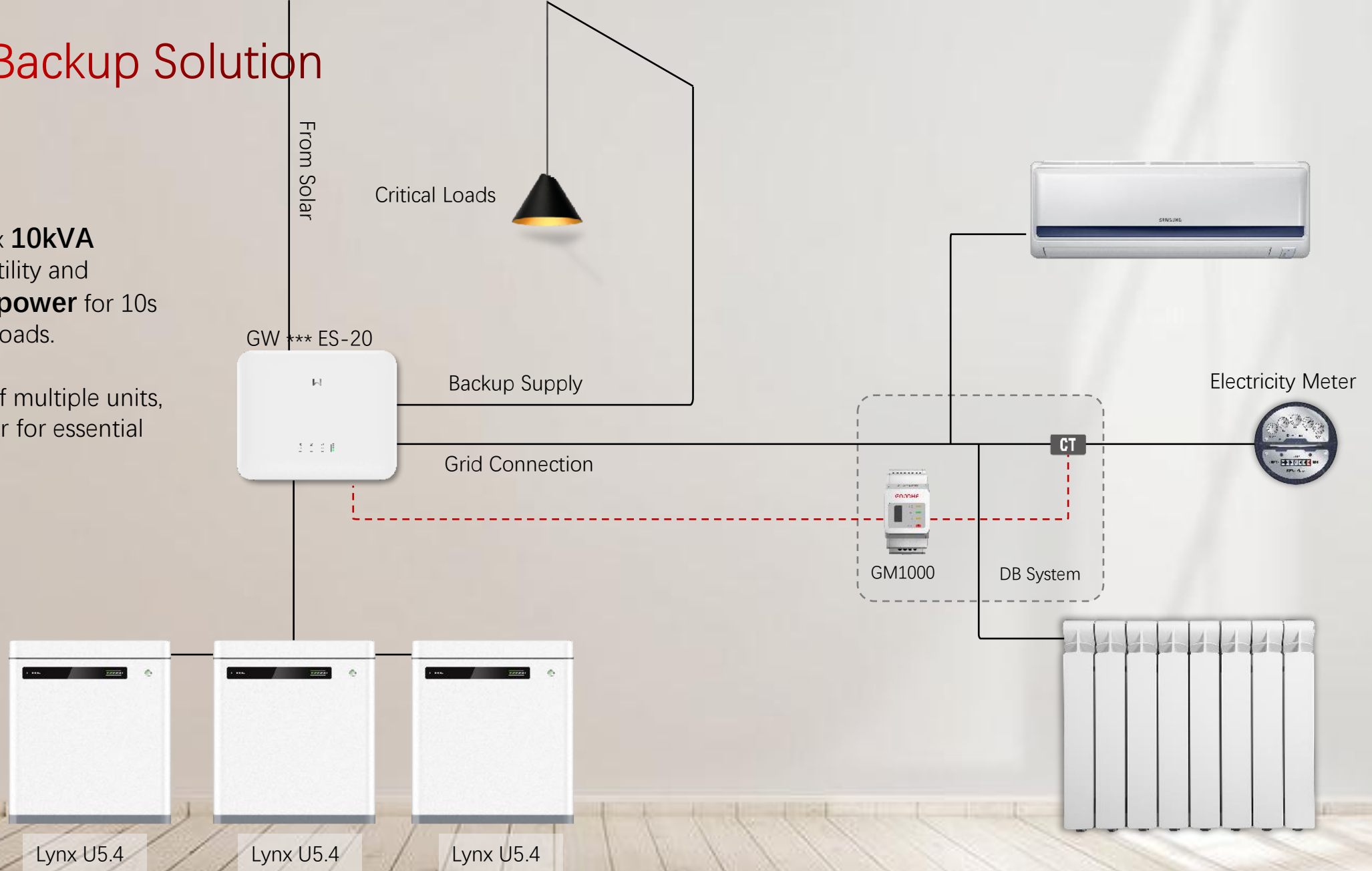


Electric Arc Protection

Essential Backup Solution

Backup support max **10kVA** consumption with utility and **double nominal power** for 10s to withstand heavy loads.

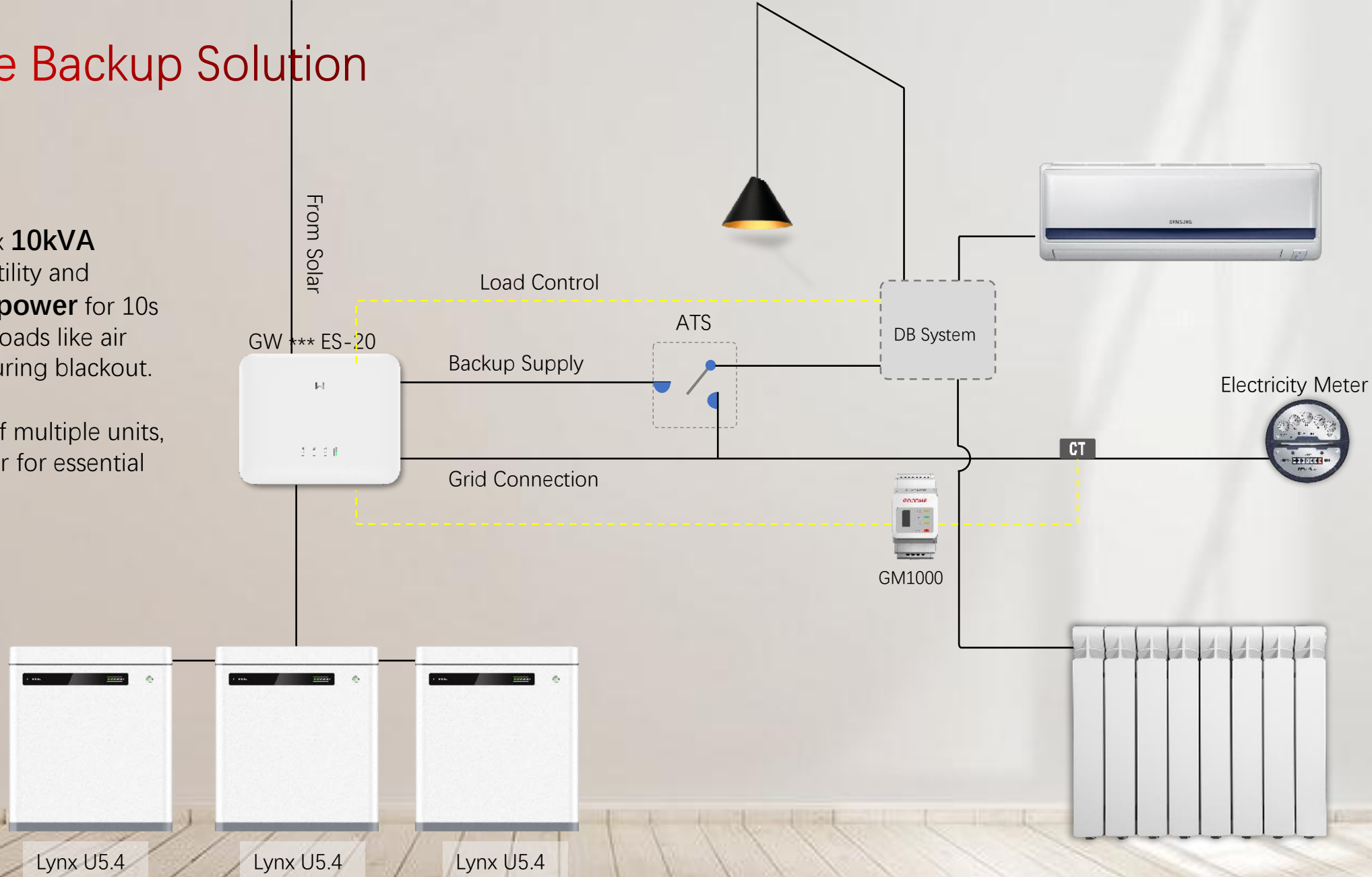
With **Paralleling** of multiple units, power supply is safer for essential loads.



Full House Backup Solution

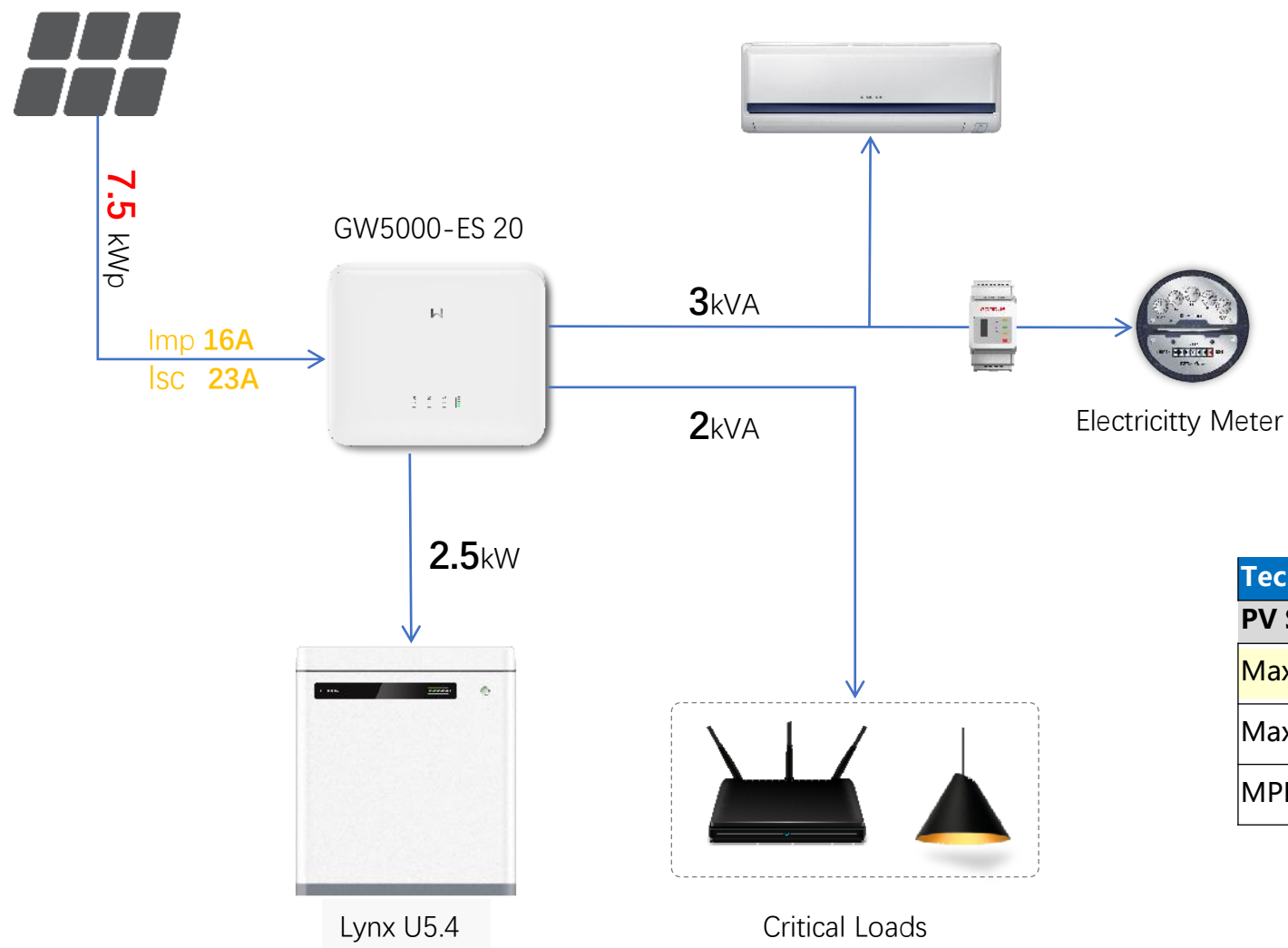
Backup support max **10kVA** consumption with utility and **double nominal power** for 10s to withstand heavy loads like air conditioner, even during blackout.

With **Paralleling** of multiple units, power supply is safer for essential loads.



Features - PV Oversizing

More than the capacity you paid



Maximized Usage of the Oversized Solar Capacity

ES G2 inverter support max **$1.5 \cdot P_n$** PV overload ability, which means the access power will charge battery.

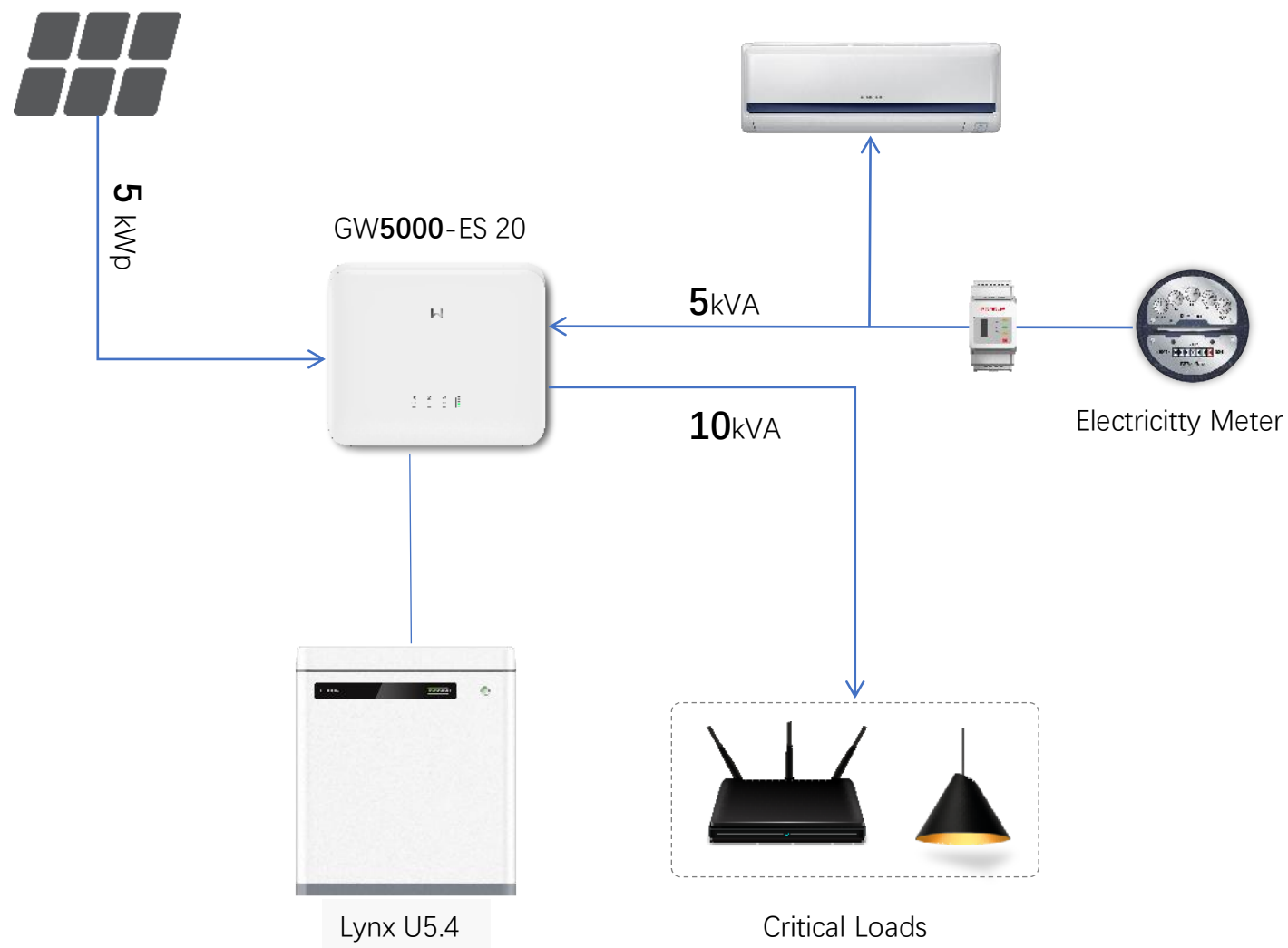
Suitable for large solar Panels (16A/String)

Technical Data	GW5000-ES-20	GW6000-ES-20
PV String Input Data		
Max. Input Power (W)*2	7,500	9,000
Max. Input Voltage (V)	600	600
MPPT Operating Voltage Range (V)	60~550	60~550

Features - Backup Overloading

More than the capacity you paid

GOODWE
Smart Energy Innovator



Less Limited for Whole-Home Backup Usage

ES G2 inverter support max **double nominal power** output with grid available.

And **2*np for 10s** output without utility

Compatible Batteries



Function	GoodWe Lynx U	LG RESU LV	BYD Box Flex Lite	Pylontech Force L1/L2	Dyness Powerbox
Operation Data	Yes	Yes	Yes	Yes	Yes
Paralleling	Up to 32.4kWh	Up to 24kWh	Up to 320kWh	Up to 24kWh	Up to 38kWh
BMS Update	Yes	Yes	No	No	No
Throughput Energy	Yes	No	No	No	No

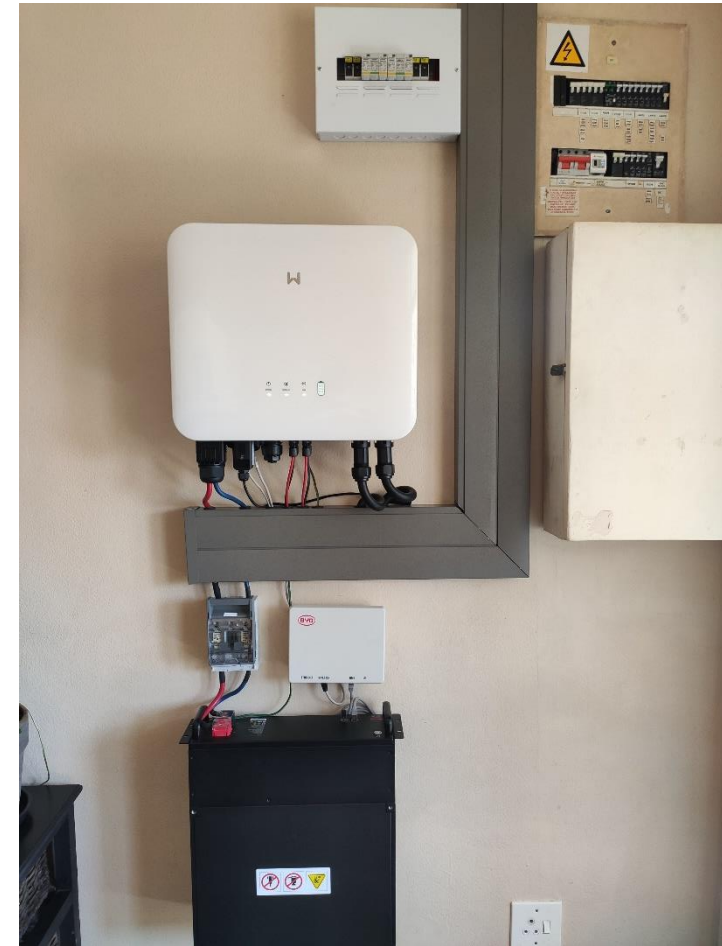
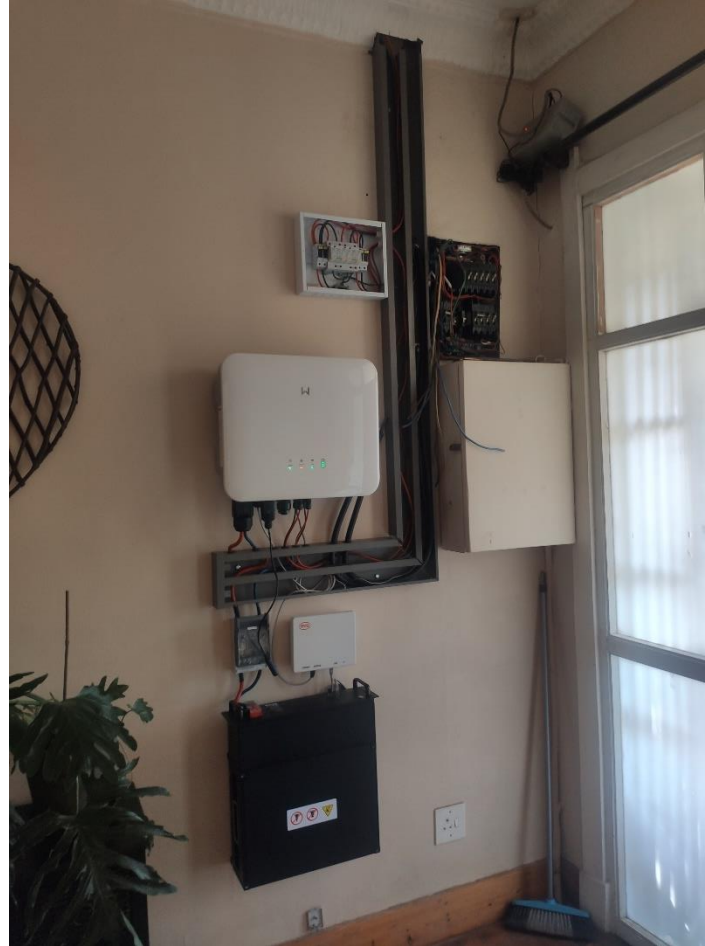
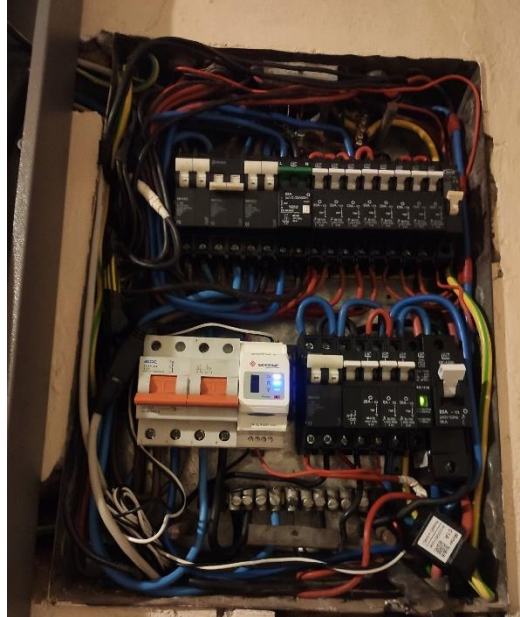
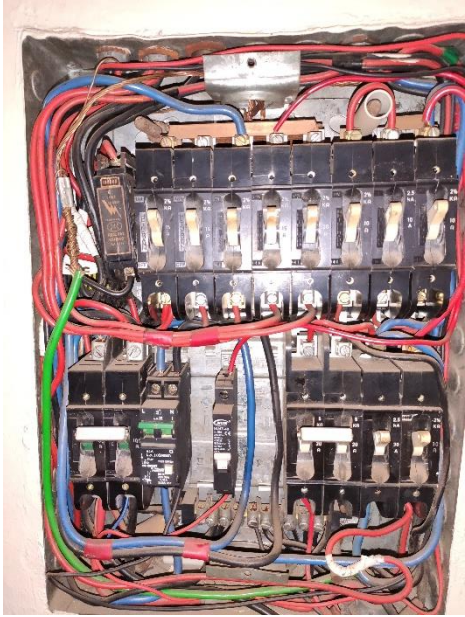
Compatible Batteries



Function	Solar MD SS	Freedom Won	Blue Nova	WECO	UZ Energy
Operation Data	Yes	Yes	Yes	Yes	Yes
Paralleling	Up to 22,2kWh	Up to 80kWh	Up to 46,8KWh	Up to 79,5kWh	Up to 80kWh
BMS Update	No	No	No	No	No
Throughput Energy	No	No	No	No	No

Firsthand Experience installing the ES G2 6KW

GOODWE
Smart Energy Innovator





THANK YOU
sales.africa@goodwe.com