

**SUNGROW**

# Home Energy Solution

Clean power for your home

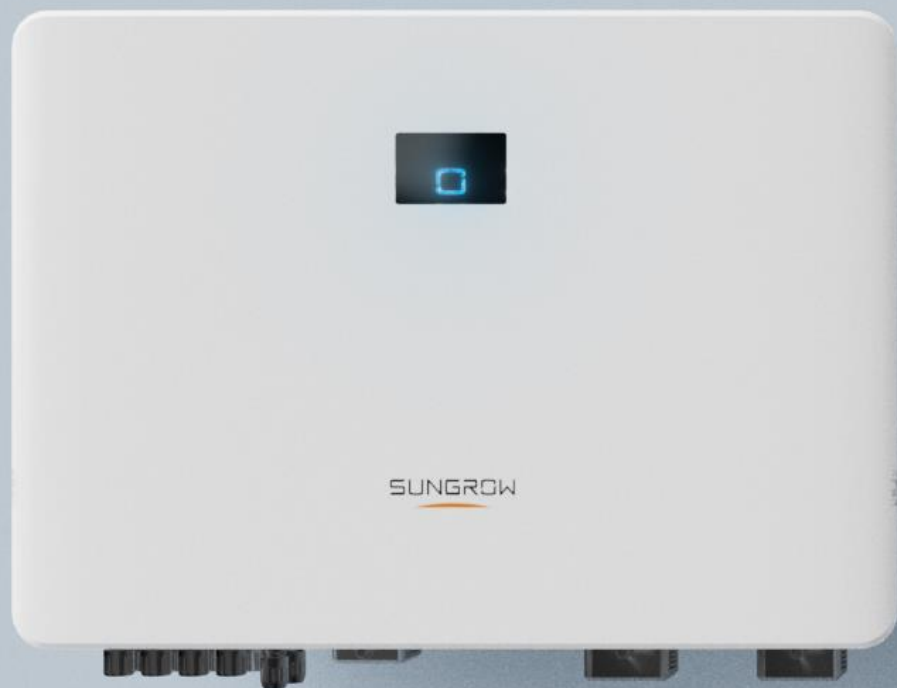


# Whole-Home Backup Power

Power, Everywhere  
Power, Anytime

Choose **SUNGROW**

Choose **A One-stop Solution**



SH3.0/4.0/5.0/6.0/8.0/10RS

Power Everywhere

Whole-home backup power

3-10kW

Single inverter

3-20kW

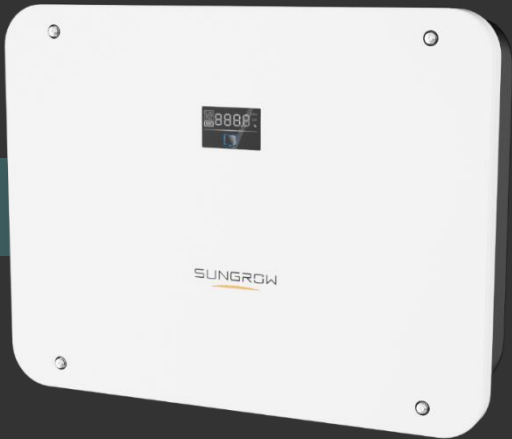
Parallel operation



New members are joining

# Stronger Core Of The System 2.0

SH15/20/25T



10kW **↑ 25kW**

SHT Max AC input/output power

SBR064-256 × 2



25.6kWh **↑ 51.2kWh**

Y connector + SBR Battery Max energy (usable)

30A **↑ 50A**

Charging and discharging current

# SBR096-192

## Power, Anytime

SH3.0/6.0/10RS supports SBR096~192

# 9.6-76.8kWh

The SUNGROW battery SBR is expandable to power your appliance even when a long outage period

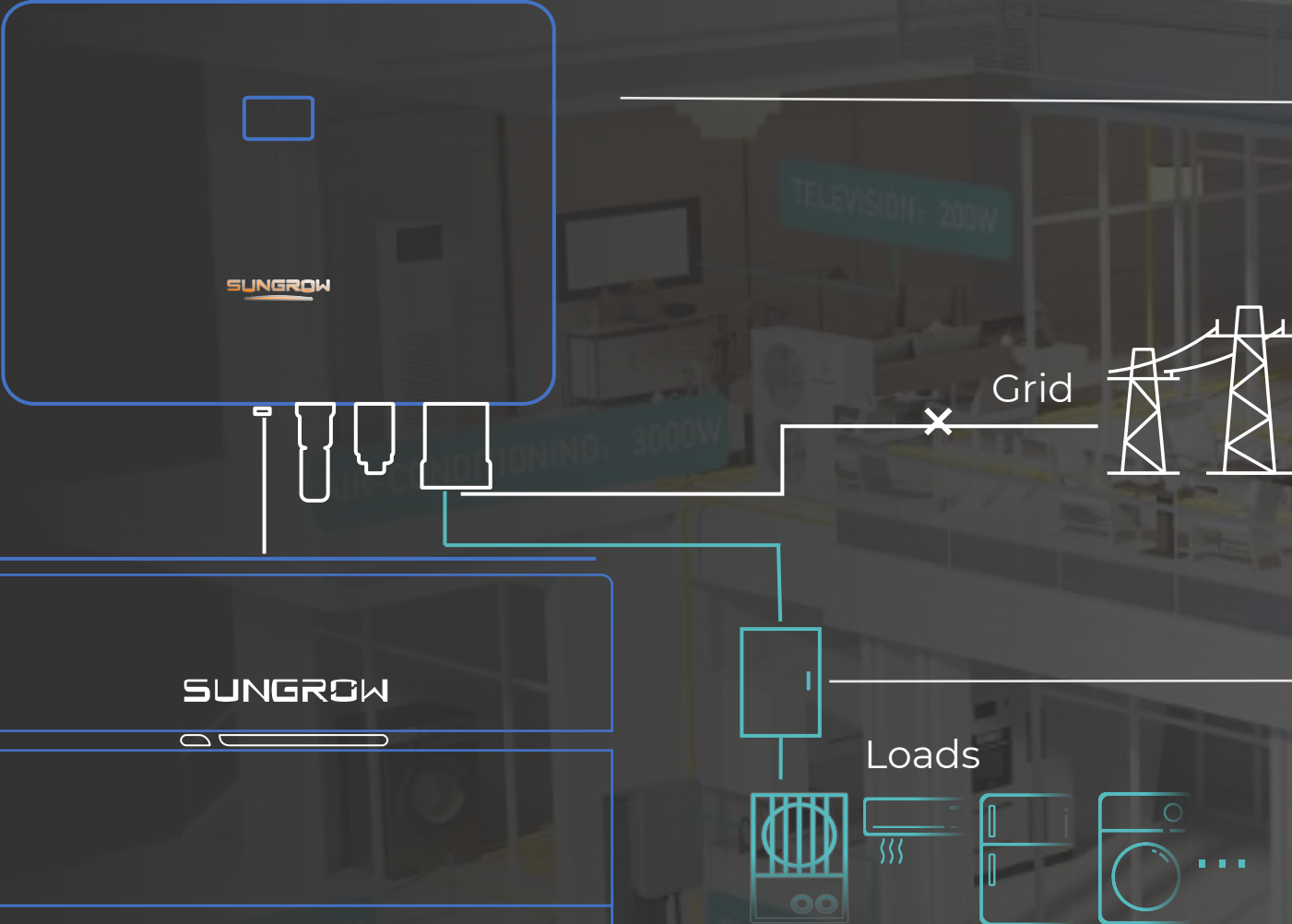


01

## Experience power freedom

Seamless switch | Fast charge | Efficient power generation

# Full Backup : Full Energy Independence / Lower Electricity Cost



**Built-in 63A Bypass**

Easier Installation

**Seamless Switching <10ms**

More comfortable electricity usage

**No Change Distribution Box**

Reduce the need for manual operation

**Overload Capacity (10S)**

Capable of withstanding impulse current loads

FULL HOUSE <43kVA

# Seamless Switching 0 Influence with <10ms Switch

## Smart off-grid switching algorithm:

AC power supply monitoring by the inverter.

Hence, in the event of **grid failure**, the system will **switch to backup power** automatically and seamlessly **within milliseconds**.

## Protect your home appliances

When grid recovery. Inverter will close the switch and give power for home appliances from grid after the grid power become stable.





**Solar Ready**  
**Large Current Panel**  
for  
**More Power**

**40-560V**

Working Range

Earlier Start, Later Stop

**200%**

DC/AC Ratio

Powering & Charging

**16A**

MPPT Current

2-4 MPPT, 2-4 DC string

**PID**

Zero

Reduce panel degradation

# Optimize Roof Usage With Optimizer

## 25 Panels

Per string

Support different power panel

## 20%

Space increase

Support different angle panel



\*The number depends on roof conditions and is generally between 20-30%



# High Yield: Global MPP scanning

2%

System yield increased by

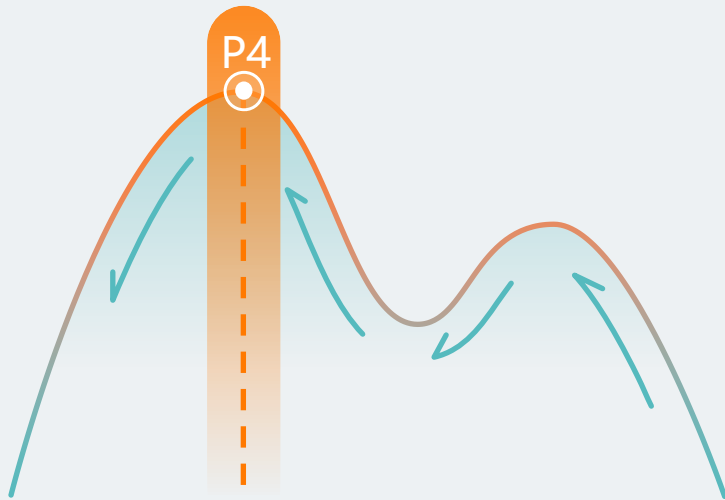
## SUNGROW GLOBAL SCANNING

Full-curve scanning allows for precise tracking of the maximum power point (P4), which therefore ensures the optimal power generation performance at all times.

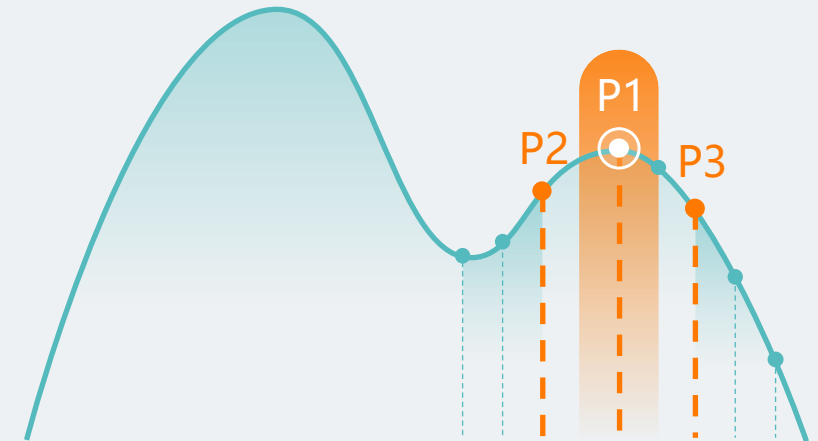


## TRADITIONAL SCHEME LOCAL TRACKING

For local tracking adopted by the traditional scheme, local peak power point (P1) may be misidentified as the global peak, thus exerting an impact on system power generation.



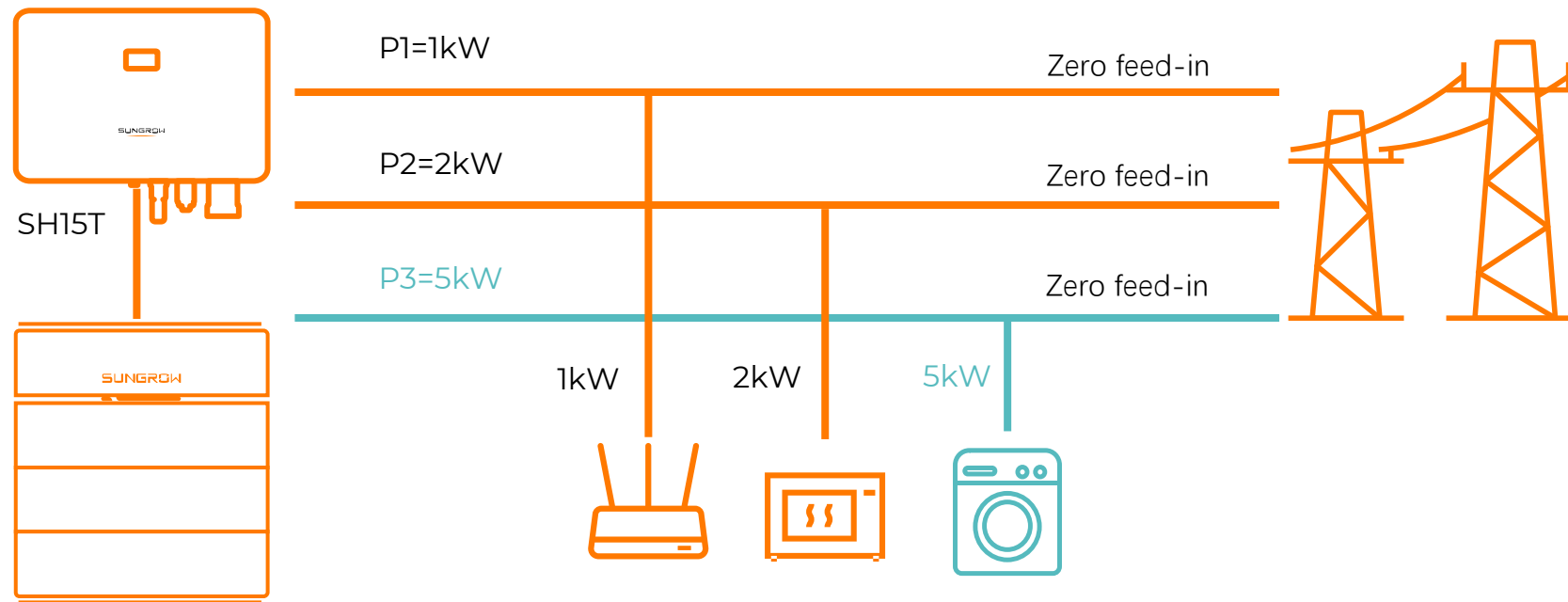
VS



# Unbalanced AC Output

Phase by phase self-consumption and feed-in limitation

Maximizes renewable use and grid independence



02

## Safety and durability

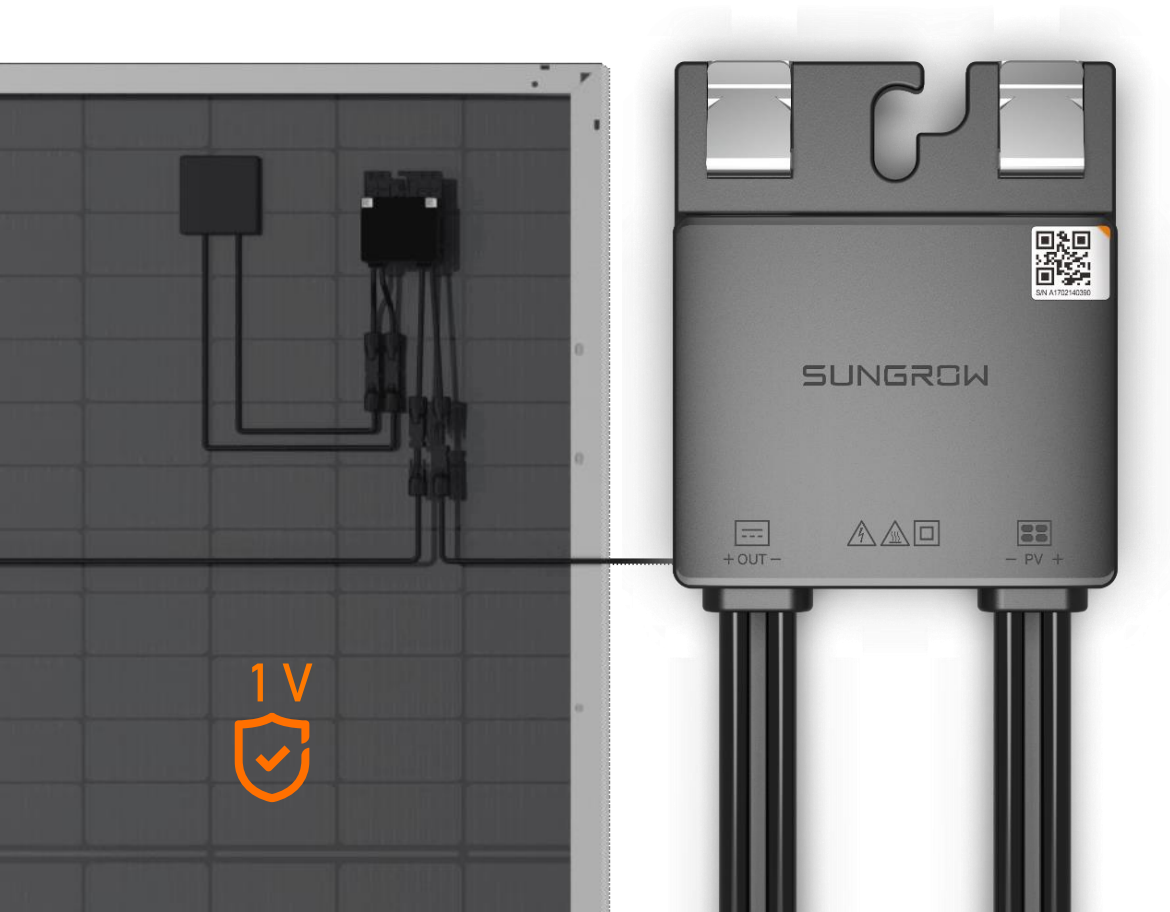
Fire protection | Lightning protection | TUV & NRT certificate

# Dual Fire Protection AFCI 0.2s Shutdown

## Built-in AFCI

200ms rapid shutdown when system errors occur and support up to 200m.

# Dual Fire Protection Optimizer Module level shutdown



## Module-level shutdown

Cut-off AC power/External switch/Auto shutdown

## 20s to 1V

Detect and shutdown when system errors occur

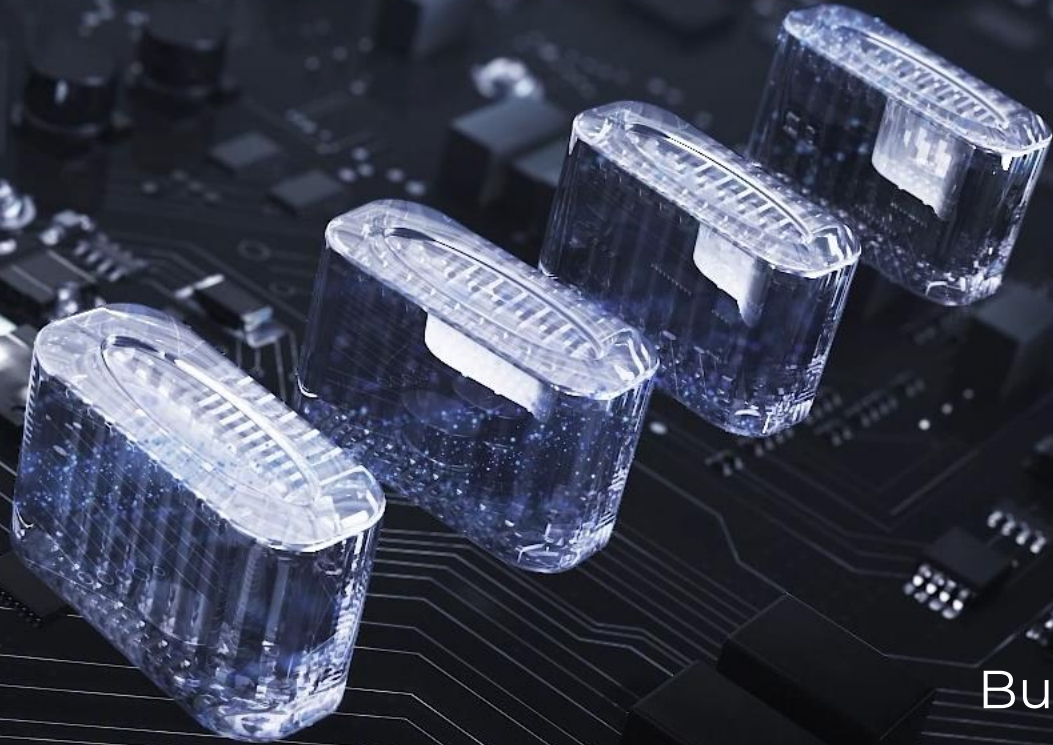
## Firefighter friendly

Lower voltage to 1V per module, so firefighters can help



# Lightning Protection

## Built-in Lightning Protection



Built-in Type II DC&AC SPD

20KA

Discharge Capacity

8 & 20  $\mu$ S

Waveform

# Durable Quality Handle Outdoor Environments

## Water & Dust Resistant

IP55+ protection, Handles the outdoor environment easily.

## Corrosion Resistant

C5 anti-corrosion design, handle coastal & farming environments easily.

## Easy to Install

# SBH Stackable & Modular Design



**Plug & Play installation**  
no wiring is required

Switch and wiring terminals are integrated into the module; no additional installation steps are required.

# 0 Accident

## N+1 Energy Protection

Battery number = BMS number = N



Inverter number = EMS number = 1

**N+1**  
Battery number (n)  
+  
Inverter number (1)



03

## Better Experience

Excellent design | Great service | Remote O&M

Suitable for **indoor,**  
**Quite and Neat**

**Wire-less**

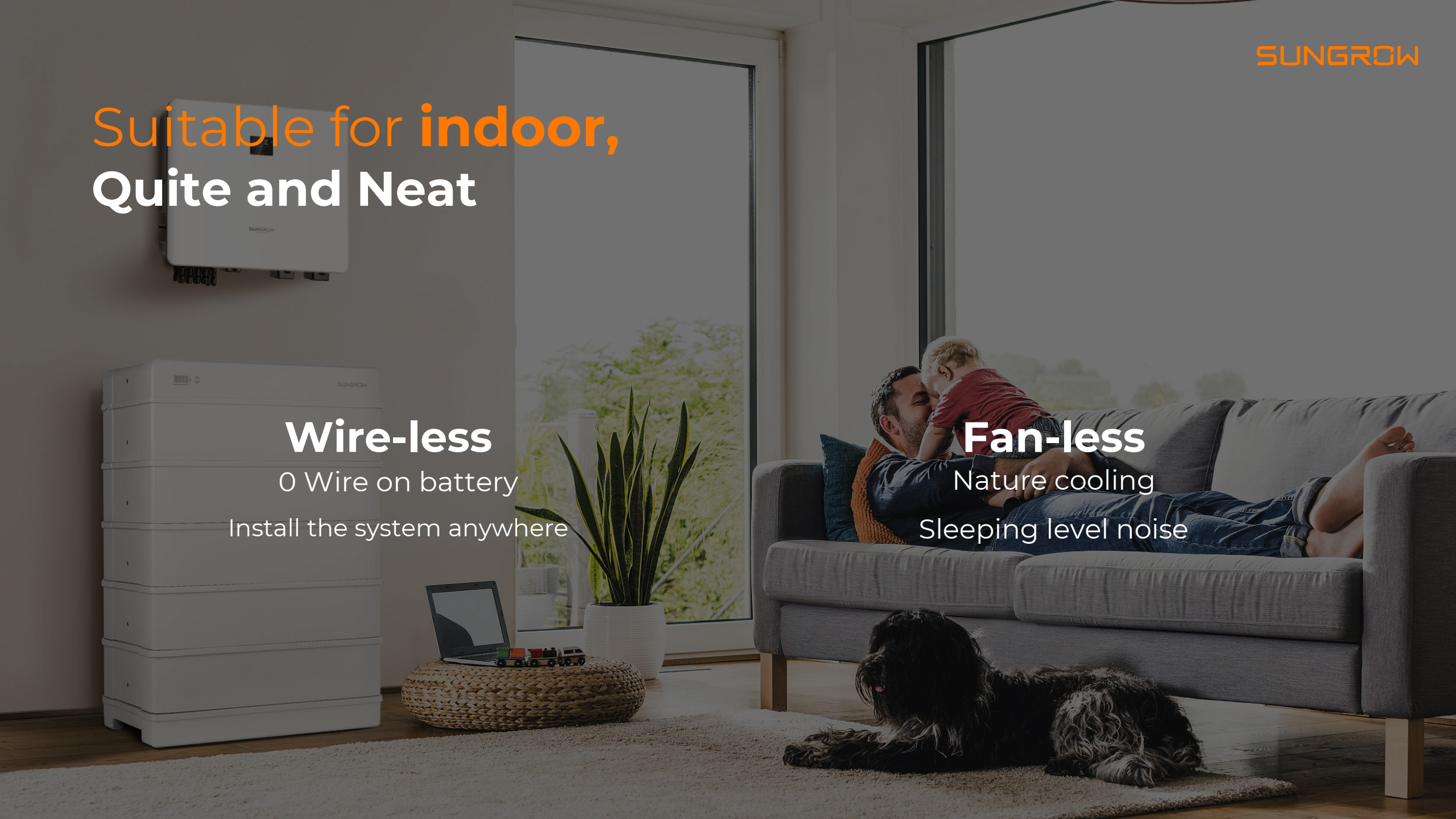
0 Wire on battery

Install the system anywhere

**Fan-less**

Nature cooling

Sleeping level noise



# Sungrow Care

## Quick and Easy RMA process

### 10-Year Warranty:

For both inverter and battery with >6000 cycles, 100% DOD

### Replacement only:

We don't repair but replace

# Online Support Provides in time service

## 24/7 WhatsApp service

Provides in-time service whenever you need it

## 48h maintenance

Countrywide coverage for rapid maintenance throughout South Africa

## Online Tutorial

Online tutorial video helps maintenance easier. Meet **Sungrow\_SA** on YouTube



# Easy installation

## System set up in 30 minutes

### Compact Modular Design

**Less wire** and **humanized handle**.

Save space, easy to carry, and install.

### Saving Installation Cost

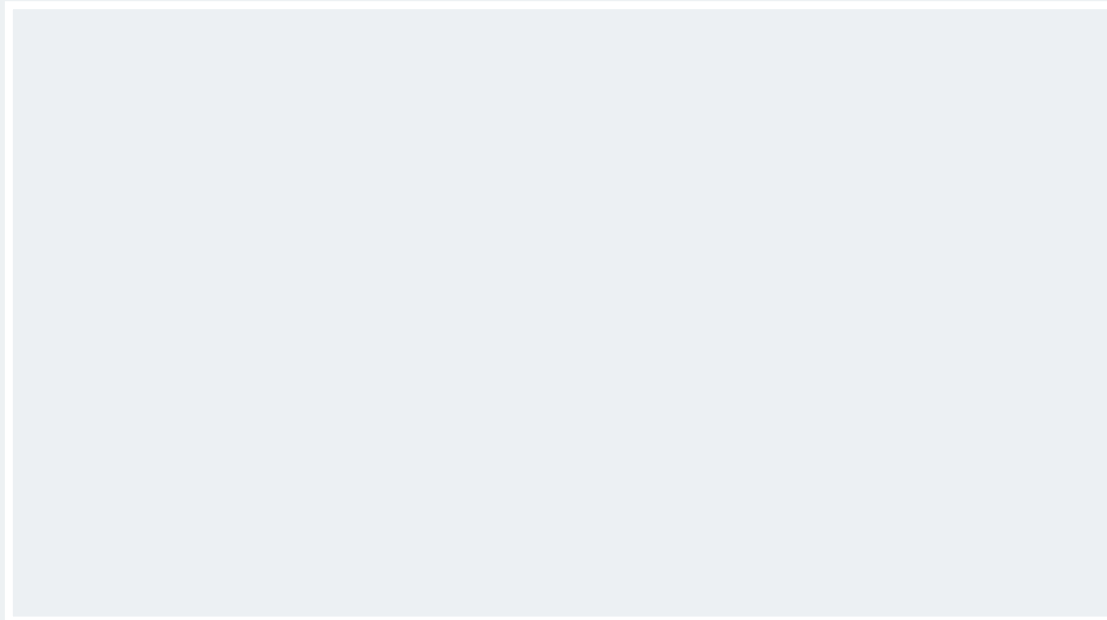
**Built-in battery circuit breaker, fuse & SPD.**

Guarantee safety and increase installation efficiency.



# Flexible set-up for easy replacement and expansion

Expand and replace at any time according to family needs



## Expanding as needed

Up to 8 modules per unit

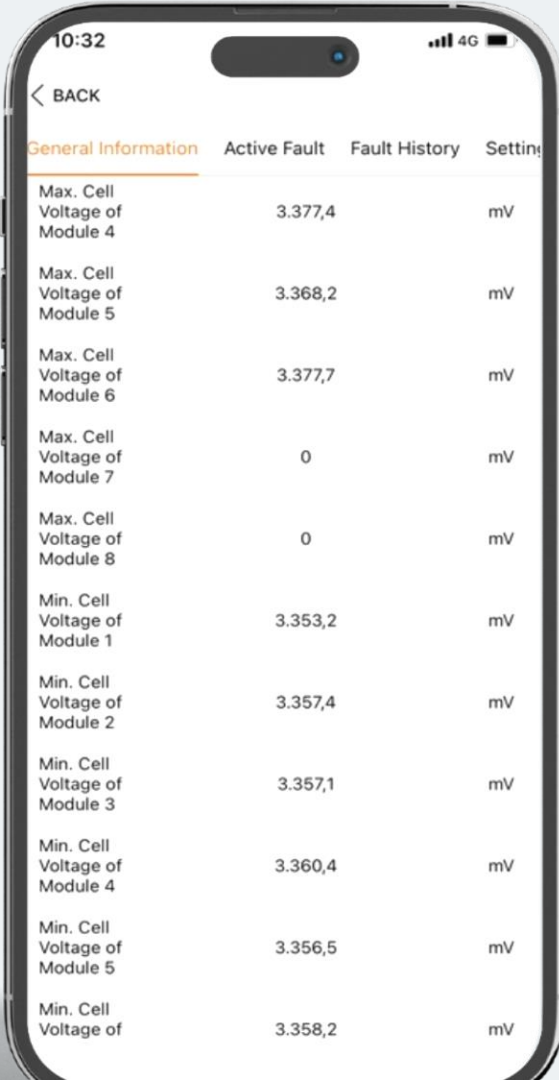


## Easy to replace

In the event of one single module getting damaged

# Refined Battery Management

## Real Time Monitoring of Battery Operation Status



10:32 4G

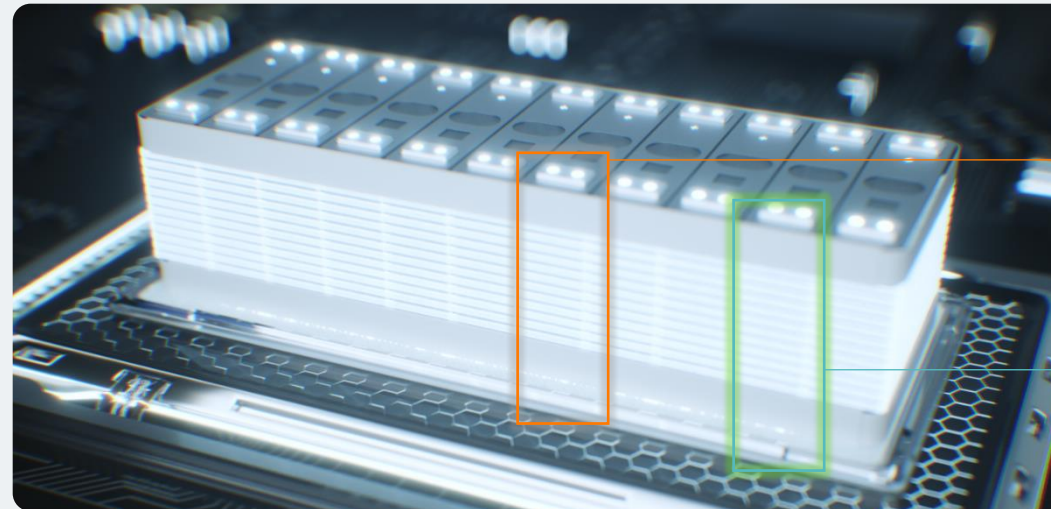
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General Information Active Fault Fault History Settings

Max. Cell Voltage of Module 4	3.377,4	mV
Max. Cell Voltage of Module 5	3.368,2	mV
Max. Cell Voltage of Module 6	3.377,7	mV
Max. Cell Voltage of Module 7	0	mV
Max. Cell Voltage of Module 8	0	mV
Min. Cell Voltage of Module 1	3.353,2	mV
Min. Cell Voltage of Module 2	3.357,4	mV
Min. Cell Voltage of Module 3	3.357,1	mV
Min. Cell Voltage of Module 4	3.360,4	mV
Min. Cell Voltage of Module 5	3.356,5	mV
Min. Cell Voltage of	3.358,2	mV

### Single Module Status

1. Display the maximum and minimum voltage of each module cell for easy detection of module status
2. Display the location of the faulty module for easy maintenance and replacement



Max. Cell Voltage of Module 1 3.355,6 mV

Maximum Voltage

Minimum Voltage

Min. Cell Voltage of Module 1 3.353,2 mV

### Battery System Status

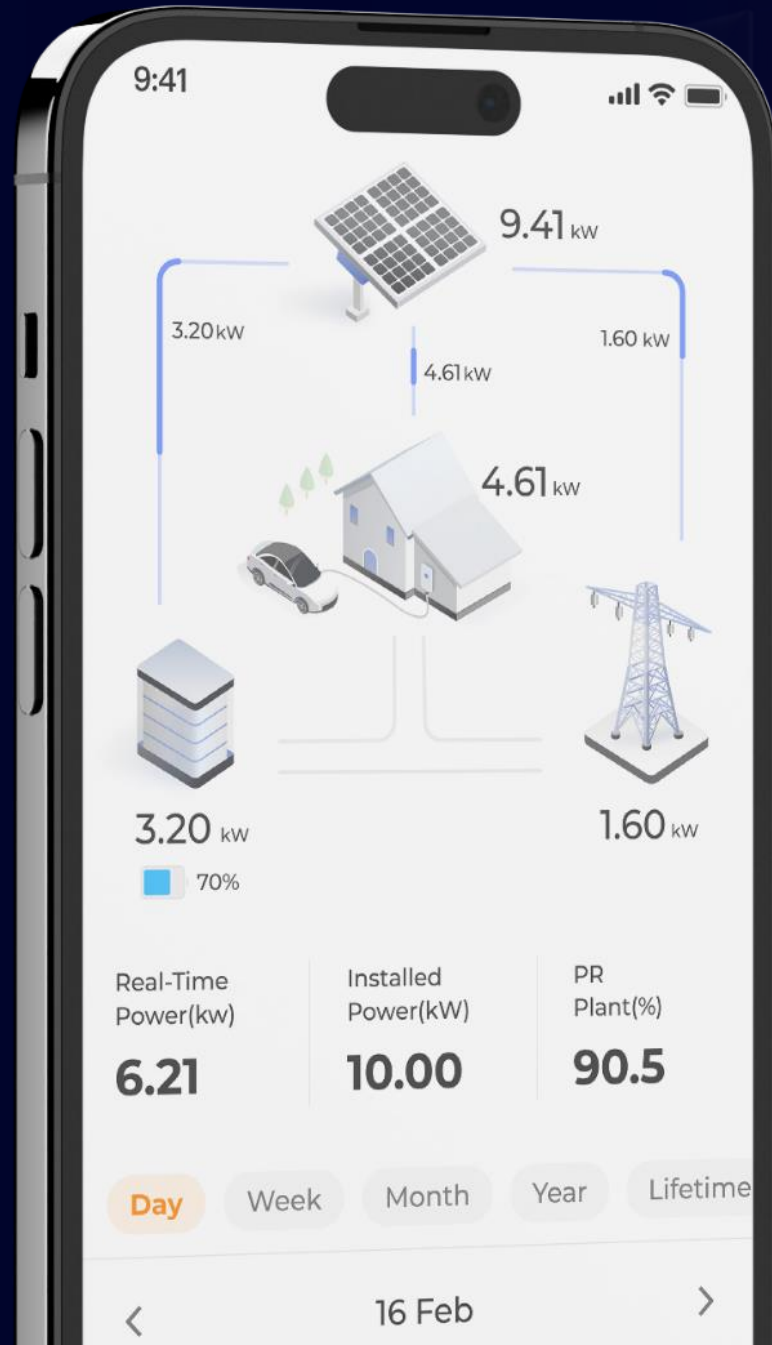
It can display parameters such as current / temperature / state of charge / battery health status / for easy detection of system status

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# Patented Plug & Play Design

Quick installation in 10 seconds, make installation more efficient

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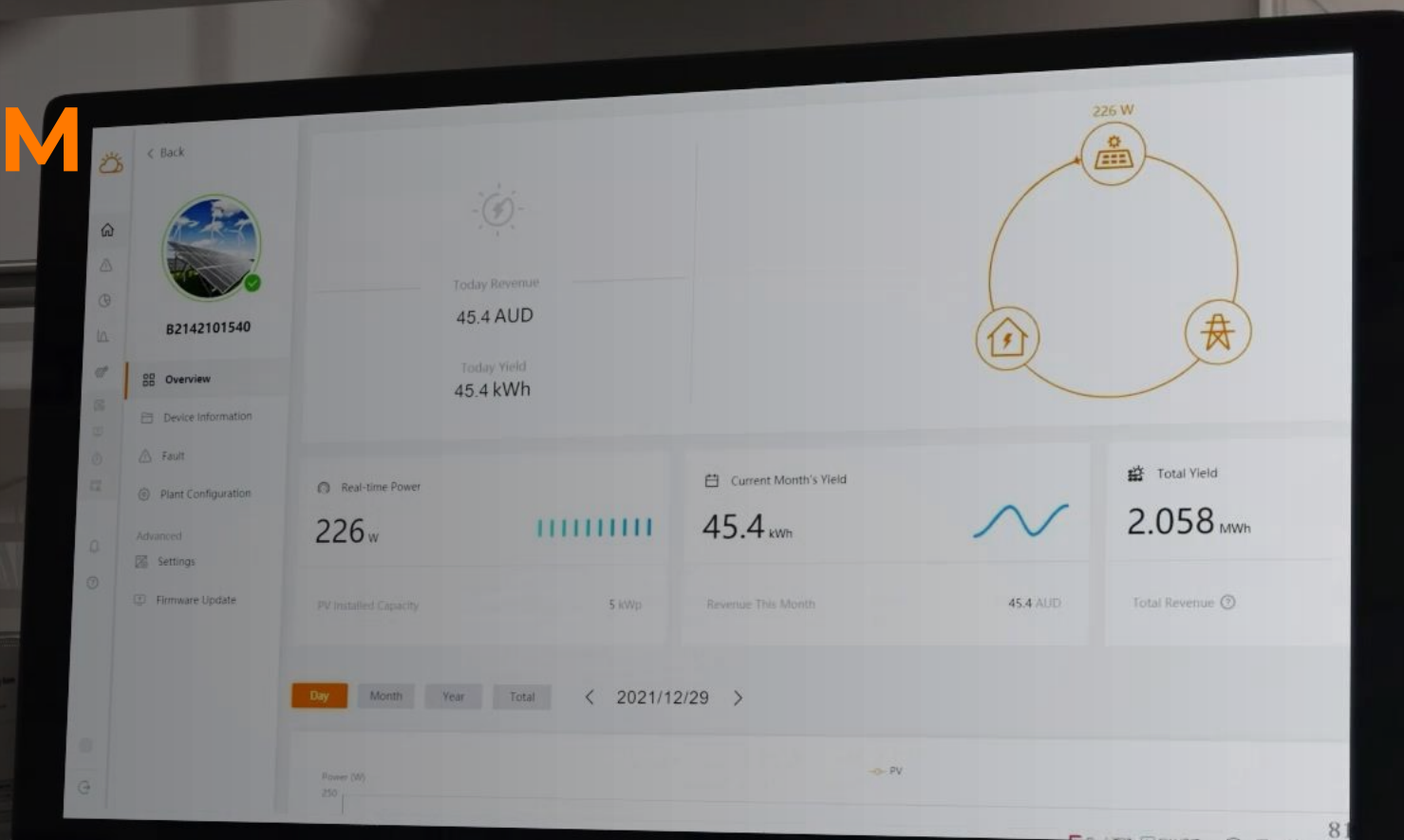
# Unifying the Power of the Cloud

PV, ESS, EV Charging, and optimizer.  
Upgrade and troubleshoot remotely.

24/7  
Monitoring

10s  
Data refresh

# Smart O&M



## Online I-V scanning

Locate faulty modules automatically.

>17

Faults  
detection

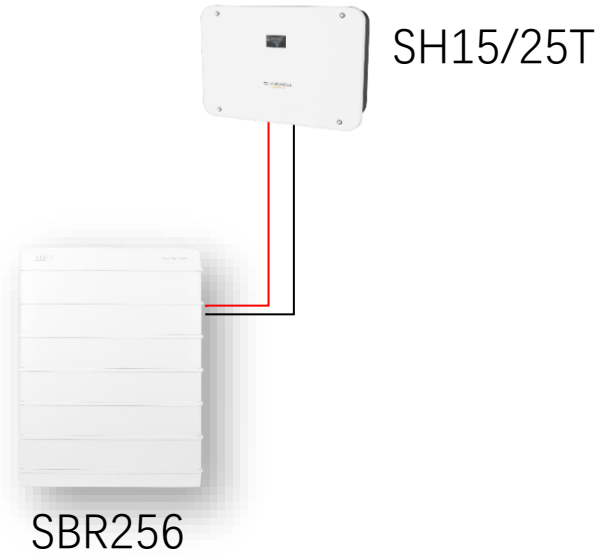
>95%

Scanning  
accuracy

**SUNGROW**

Clean power for all

# SHT + SBR



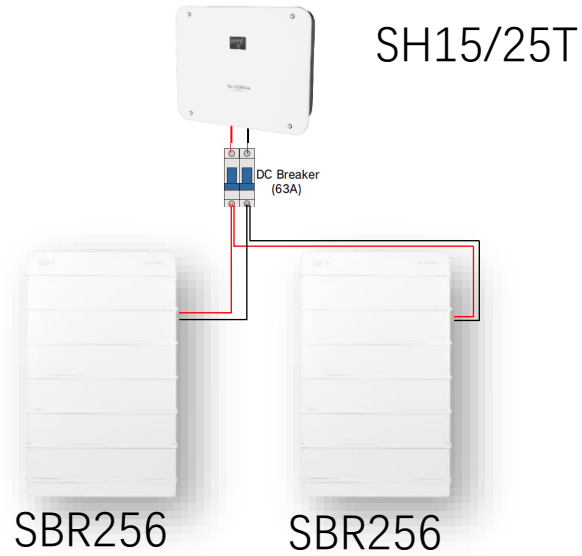
Products	SH15T	SH25T
SBR064	3.84 kw	3.84 kw
SBR096	5.76 kw	5.76 kw
SBR128	7.68 kw	7.68 kw
SBR160	9.6 kw	9.6 kw
SBR192	11.52 kw	11.52 kw
SBR224	13.44 kw	13.44 kw
SBR256	15 kw	15.36 kw

## Order list

Materials	Quantities
SHT	1
SBR	1



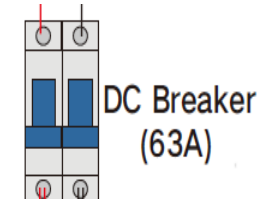
# SHT + 2 batteries parallel



Products	SH15T	SH25T
2×SBR064	6.4 kw	6.4 kw
2×SBR096	9.6 kw	9.6 kw
2×SBR128	12.8 kw	12.8 kw
2×SBR160	15 kw	16 kw
2×SBR192	15 kw	19.2 kw
2×SBR224	15 kw	22.4 kw
2×SBR256	15 kw	25 kw

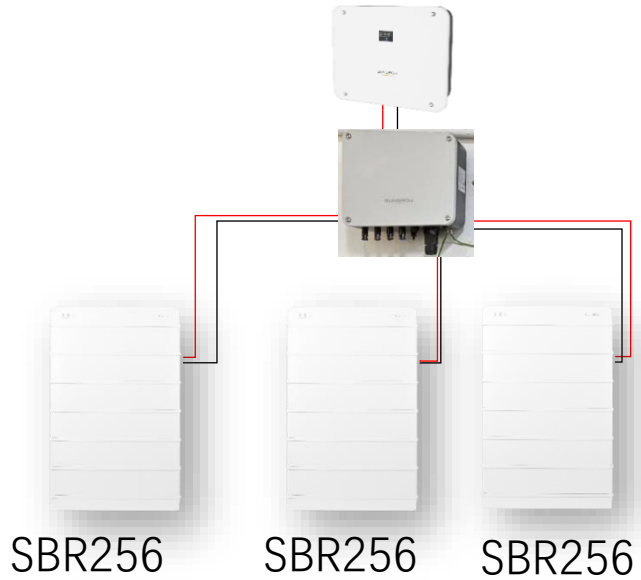
## Order list

Materials	Quantities
SHT	1
SBR	2
DC Breaker	1 (Provided by Installer)



DC Breaker(Provided by Installer)

# SHT + three batteries parallel



Products	SH15T	SH25T
3×SBR064	6.4 kw	6.4 kw
3×SBR096	9.6 kw	9.6 kw
3×SBR128	12.8 kw	12.8 kw
3×SBR160	15 kw	16 kw
3×SBR192	15 kw	19.2 kw
3×SBR224	15 kw	22.4 kw
3×SBR256	15 kw	25 kw

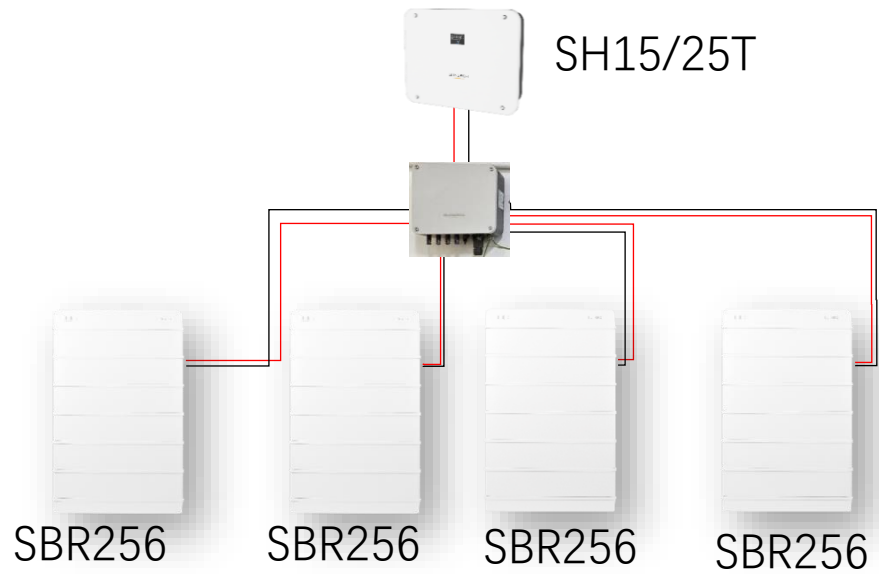
## Order list

Materials	Quantities
SHT	1
SBR	3
Battery Conjunction Box	1



Battery Conjunction Box

# SHT + four batteries parallel



Products	SH15T	SH25T
4×SBR064	6.4 kw	6.4 kw
4×SBR096	9.6 kw	9.6 kw
4×SBR128	12.8 kw	12.8 kw
4×SBR160	15 kw	16 kw
4×SBR192	15 kw	19.2 kw
4×SBR224	15 kw	22.4 kw
4×SBR256	15 kw	25 kw

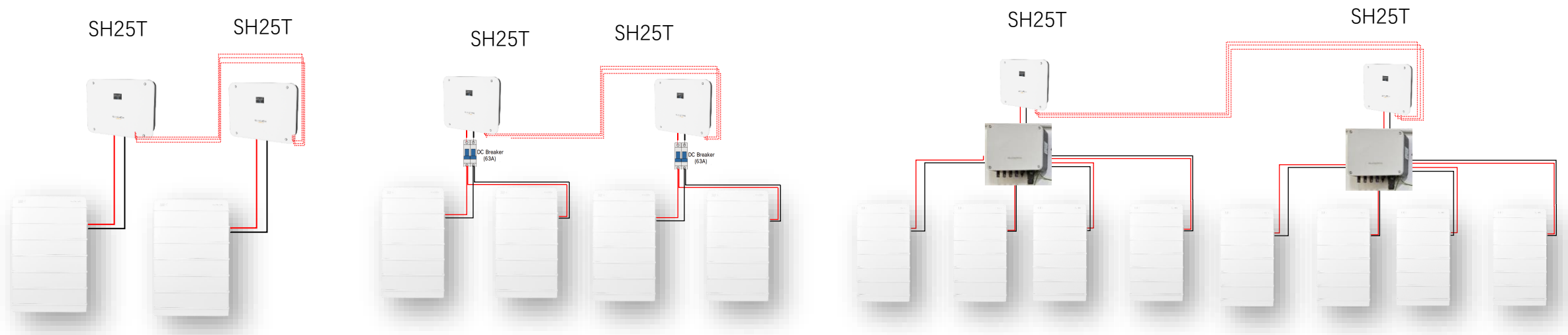
## Order list

Materials	Quantities
SHT	1
SBR	4
Battery Conjunction Box	1



Battery Conjunction Box

# 50kw Solution

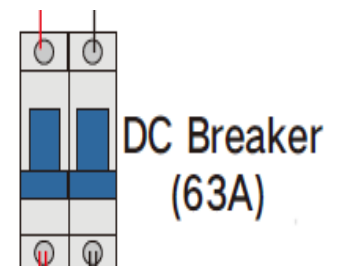


## Order list

Materials	Quantities			
	SH25T	SBR256	Battery Conjunction Box	DC Breaker(Provided by Installer)
SHT	2	2	2	2
SBR256	2	4	6	8
Battery Conjunction Box	0	0	2	2
DC Breaker(Provided by Installer)	0	2	0	0

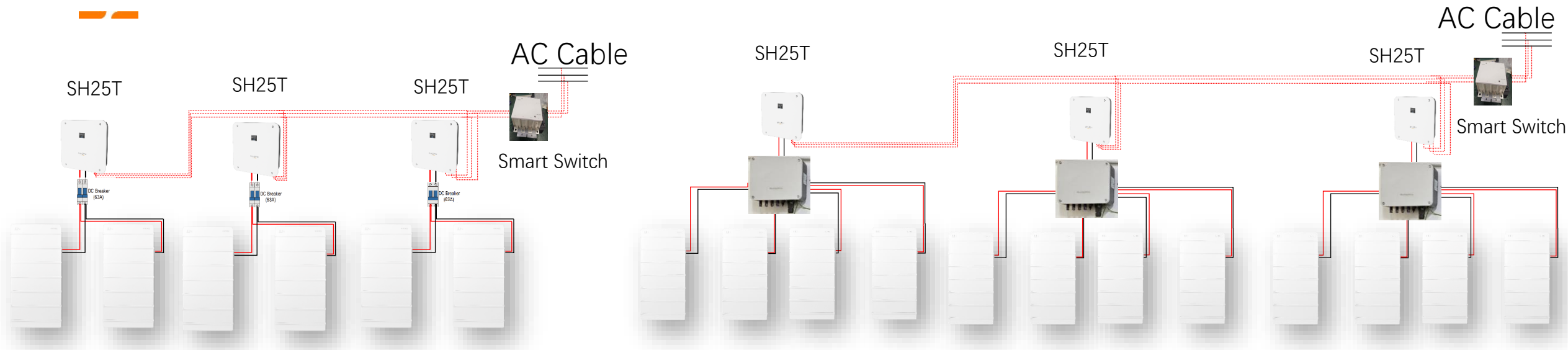


Battery Conjunction Box



DC Breaker(Provided by Installer)

# 75/100kw inverter parallel

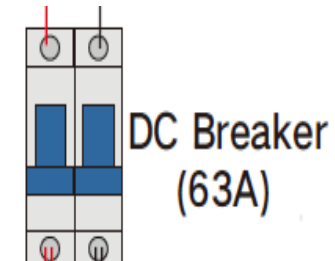


## Order list

Materials	Quantities							
	3				4			
SHT	3	6	9	12	4	8	12	16
SBR256	3	6	9	12	4	8	12	16
Battery Conjunction Box	0	0	3	3	0	0	4	4
DC Breaker(Provided by Installer)	0	3	0	0	0	4	0	0
Smart Switch	1							



Battery Conjunction Box



DC Breaker(Provided by Installer)



Smart Switch

# SHxxT BACKUP POWER

*BACKUP POWER IN OFF-GRID MODE (no PV)*

Products	SH15T	SH25T
SBR064	3.84 kw	3.84 kw
SBR096	5.76 kw	5.76 kw
SBR128	7.68 kw	7.68 kw
SBR160	9.6 kw	9.6 kw
SBR192	11.52 kw	11.52 kw
SBR224	13.44 kw	13.44 kw
SBR256	15 kw	15.36 kw
Products	SH15T	SH25T
2×SBR064	6.4 kw	6.4 kw
2×SBR096	9.6 kw	9.6 kw
2×SBR128	12.8 kw	12.8 kw
2×SBR160	15 kw	16 kw
2×SBR192	15 kw	19.2 kw
2×SBR224	15 kw	22.4 kw
2×SBR256	15 kw	25 kw
Products	SH15T	SH25T
3 or 4×SBR064	6.4 kw	6.4 kw
3 or 4×SBR096	9.6 kw	9.6 kw
3 or 4×SBR128	12.8 kw	12.8 kw
3 or 4×SBR160	15 kw	16 kw
3 or 4×SBR192	15 kw	19.2 kw
3 or 4×SBR224	15 kw	22.4 kw
3 or 4×SBR256	15 kw	25 kw

# SHT order list



	SHT	SBR256	DC Breaker(Provided by Installer)	Battery Conjunction Box	Smart Switch
Single SHT	1	1	0	0	0
		2	1	0	0
		3	0	1	0
		4	0	1	0
SH25T two inverter parallel	2	2	0	0	0
		4	2	0	
		6	0	2	
		8	0	2	
SH25T three/four inverter parallel	3	3	0	0	1
		6	3	0	
		9	0	3	
		12	0	3	
	4	4	0	0	
		8	4	0	
		12	0	4	
		16	0	4	