



# Future-proof Battery Ready PV Solution--MID XH

SHENZHEN GROWATT NEW ENERGY CO.,LTD

**G**ROWATT



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# 01

## System Introduction

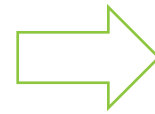
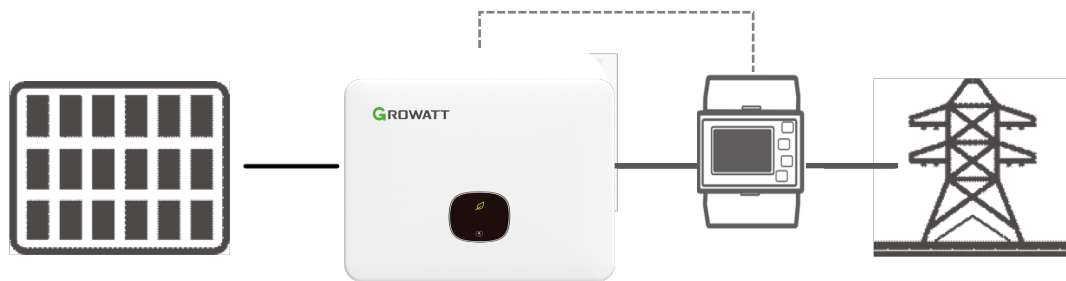


# Future-proof Battery Ready Solution

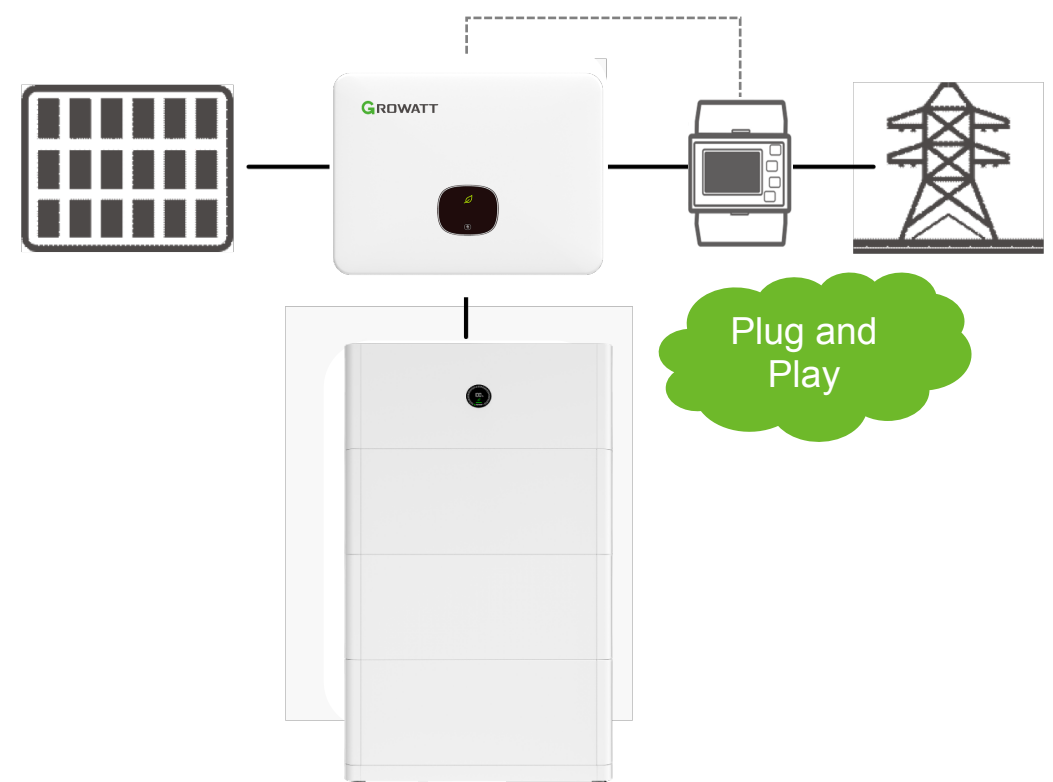


Future-proofed battery ready PV solution, easily to extend storage, which can reduce the initial investment and offer customers enough flexibility.

Grid-Tied PV system

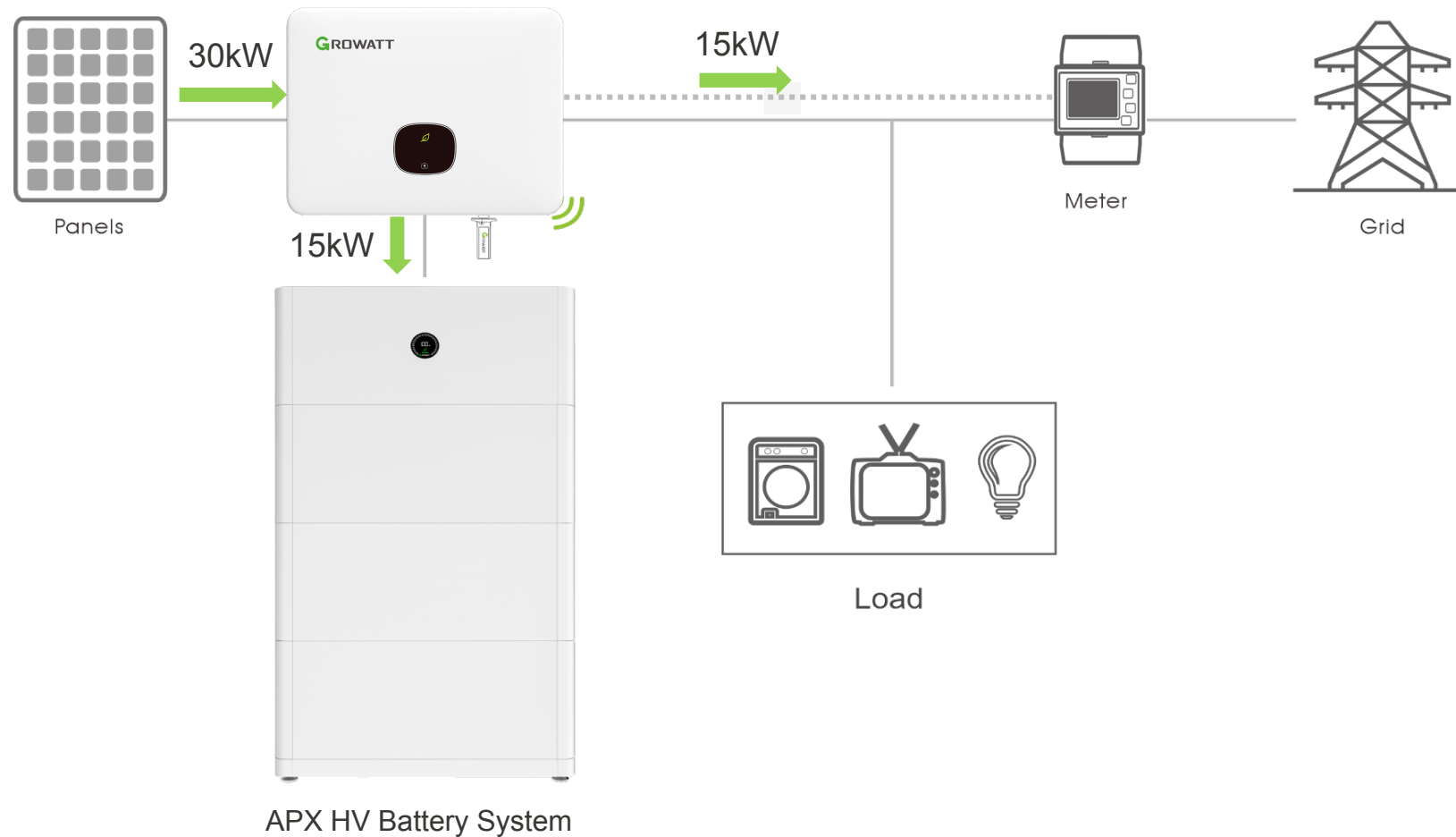


Easy to extend storage system



## 2\*Power Battery Ready

A MID 15KTL-XH inverter provides 15kW full power AC output plus 15kW full power battery charge



# System Composition

Three phase battery ready energy storage system



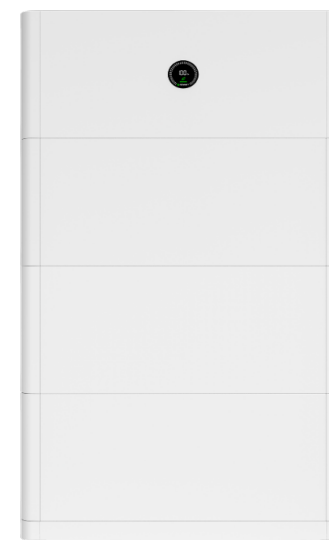
MID 11-20KTL3-XH



Monitoring



Smart Meter



APX HV Battery

Not support Backup function at the begining

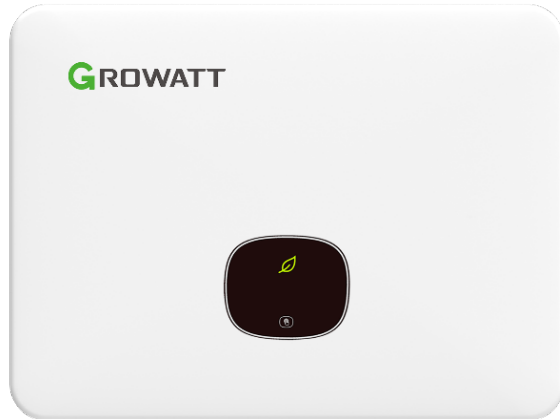
# 02

Battery Ready Inverter



## Inverter Models

Inverter power range from 11kW to 20kW (25K 30K will be ready later)



MID 11-20KTL3-XH

MID 11KTL3-XH

MID 12KTL3-XH

MID 13KTL3-XH

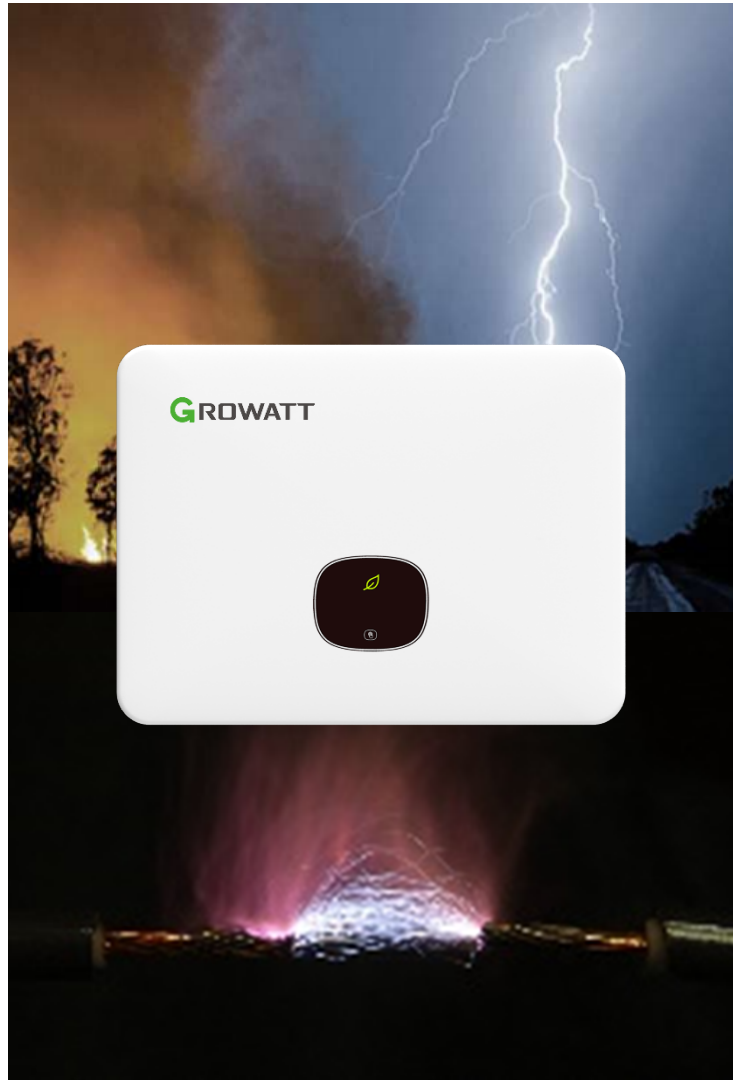
MID 15KTL3-XH

MID 17KTL3-XH

MID 20KTL3-XH

## Main Specifications

| Model                       | MID 11-20KTL3-XH |
|-----------------------------|------------------|
| No. of MPPT                 | 2                |
| Max. Input current per MPPT | 32A              |
| MPPT voltage range          | 160-1000V        |
| DC/AC Ratio                 | 2.0              |
| Max. charge/discharge power | 15kW             |



Active Arcing Protection

Type II SPD on DC & AC side

Integrated DC Switch

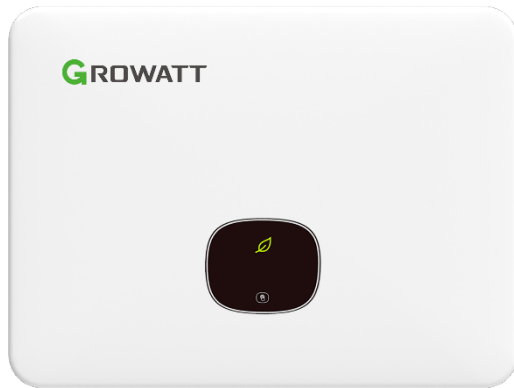
Reserve DC polarity protection

# 03

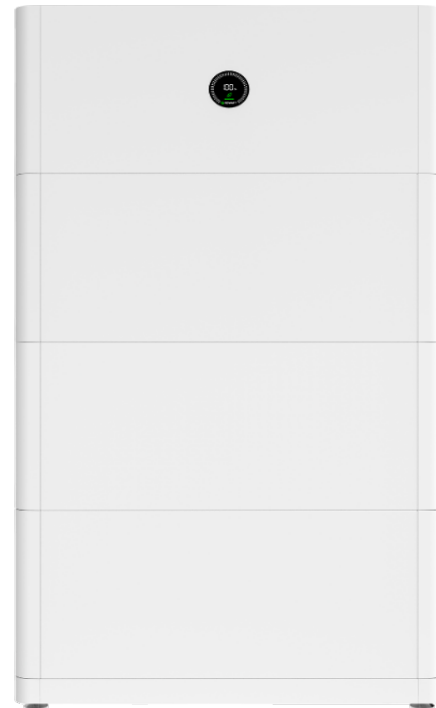
Compatible Battery



*Note: APX Battery works with MID XH inverters*



MID 11-20KTL3-XH



APX HV Battery System  
(APX98034-P2+APX 5.0P-B1)

### Flexible Option

Inverter Power: 11-20kW  
Battery: 5~30kWh

### Battery Characteristic

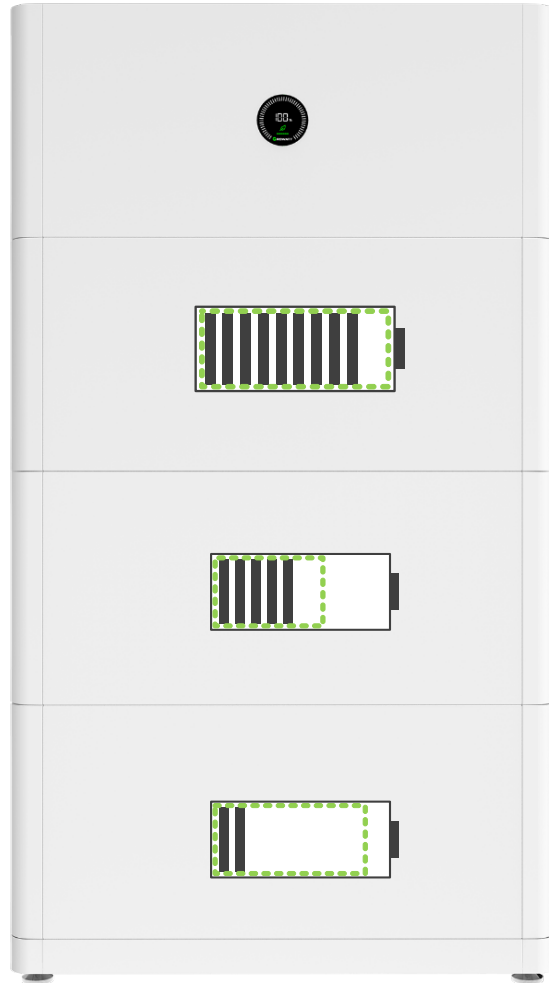
- LFP Battery Cell
- Module level energy optimization
- Old and new battery modules can be mixed-use at any time
- Max. 15kW charger and discharge power

## Battery Expansion

*Modular Design, More Flexible Expansion*



## More Usable Energy with Modular Energy Optimizer



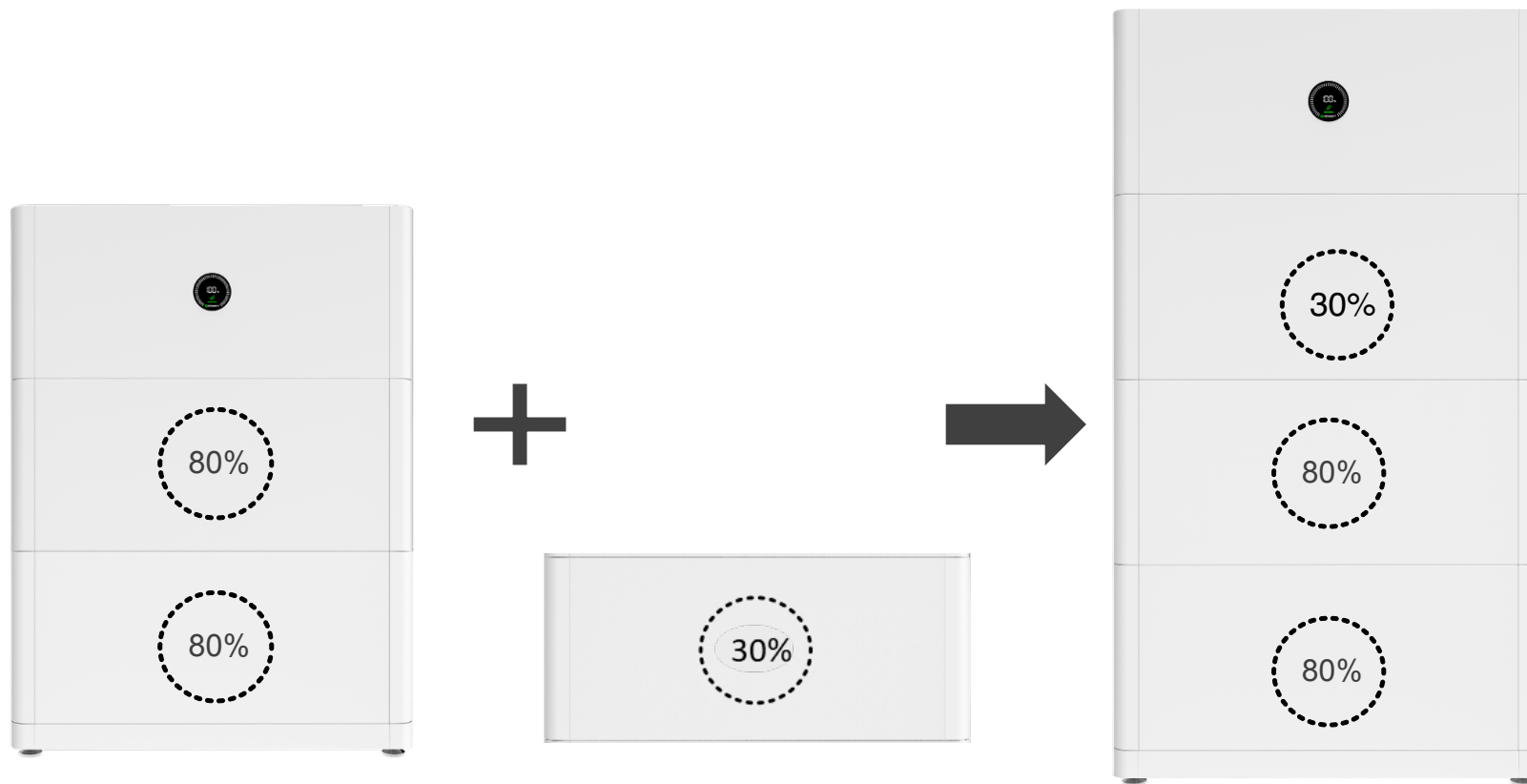
### Feature Values

- Each single battery module could be fully charged and used up independently.
- System capacity is no longer decided by the most shortage one
- Mix old and new battery at any time without recharge by automatic balancing

  
State of Health

  
SoC

*Deploy in stages to reduce initial investment  
Mix old and new battery in one system at any time*



Old Battery System

New Battery Pack

- ◆ No recharge work requirement
- ◆ No time limited between old and new battery
- ◆ The battery pack can be replaced directly for simple maintenance

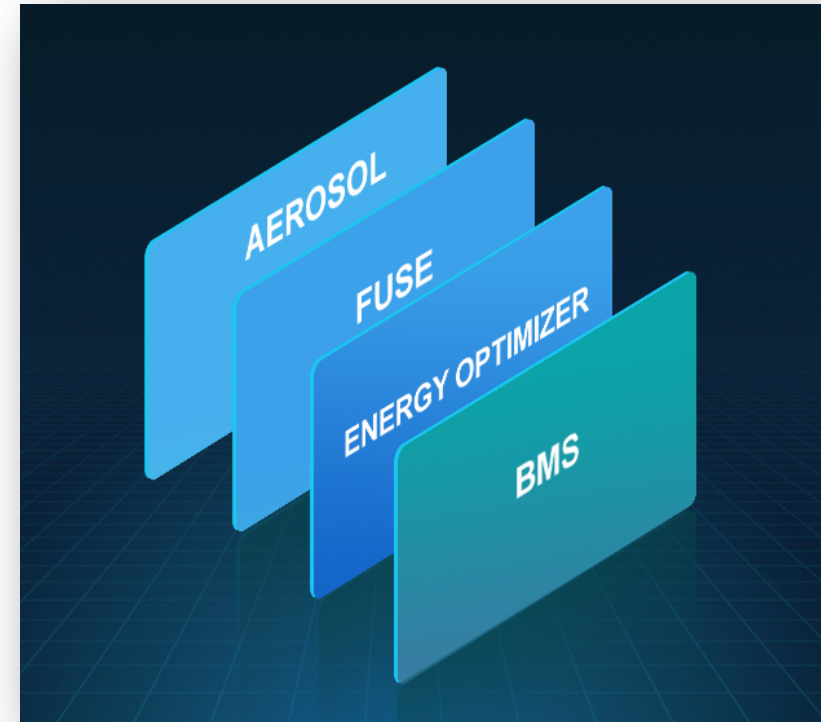
## Redundancy Design

In the event of a battery pack failure, the whole system will not be affected.



## Four Level Protection

Active protection by BMS and energy optimizer and passive protection by **Fuse and Aerosol**





### **Automatic Balancing**

Automatic balance technology in both battery packs and cells to achieve high consistency

### **Smart O&M**

Cloud platform for smart monitoring and maintenance, support remote FW upgrade

### **Battery Awaken**

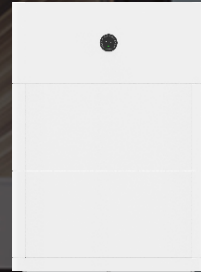
Battery modules support to be awakened by inverter automatically avoiding human intervention

# One-Fits-All

One Inverter



One Battery



One APP&Monitor



One Window



## One-Fits-All solution, easier business

- One inverter for both solar system and storage system
- One battery pack for three phase battery-ready inverters
- One APP and monitors for all monitoring
- One service window for supply and support

# 04

## System Benefits



## *Whole System Warranty*

### **Complete Equipment Supply**

Inverter, Lithium Battery, Backup Box, Meter and Monitoring

### **Whole System Guarantee**

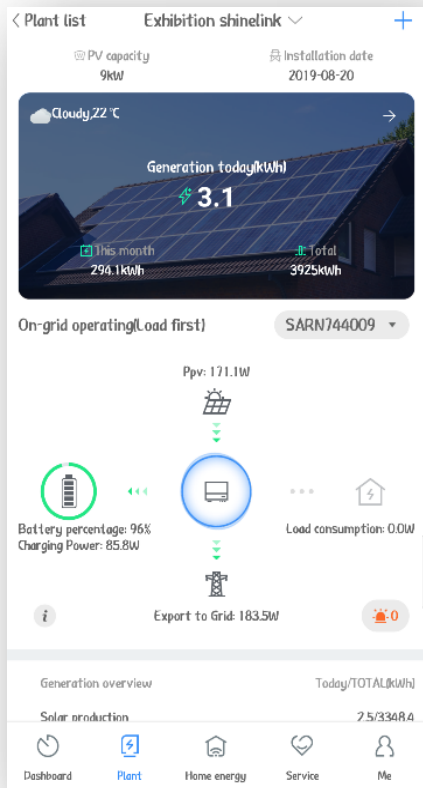
Guidance and help of the whole system,

Warranty for all devices

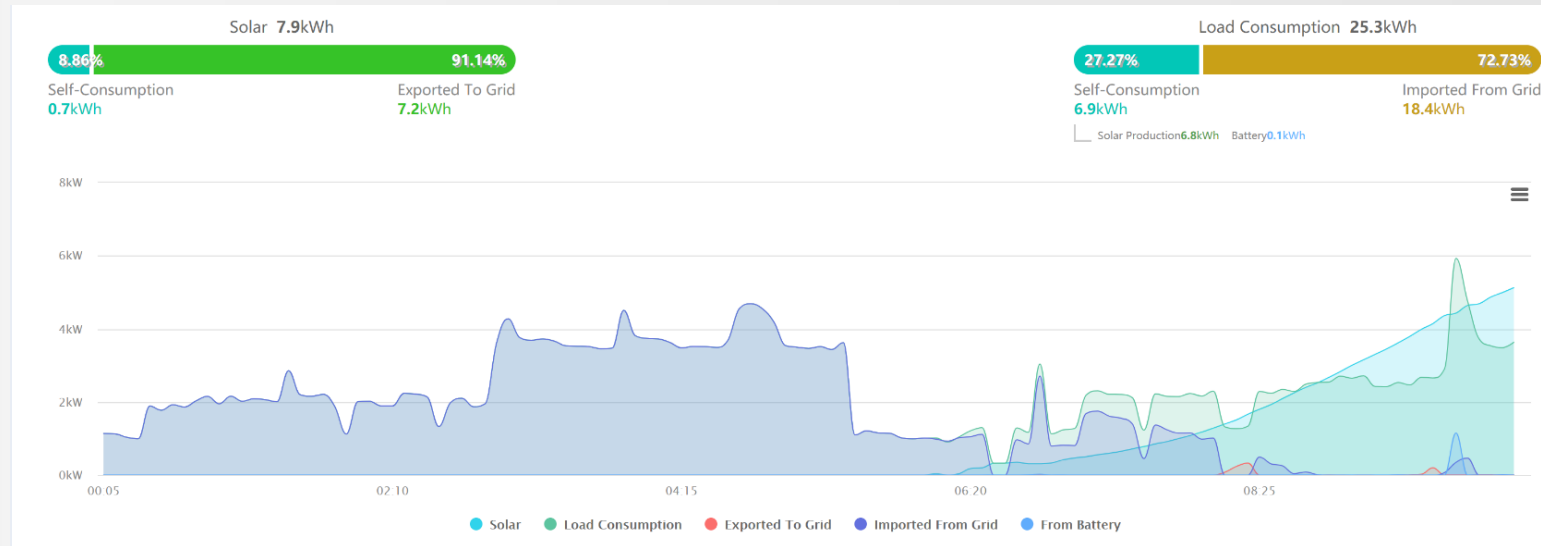
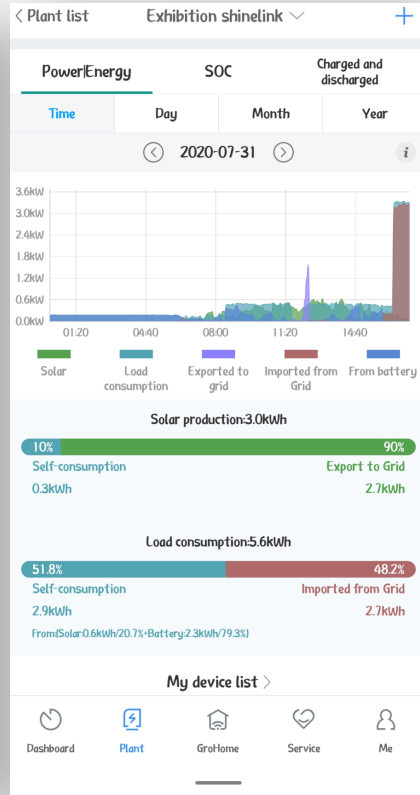
Professional and local service team



Real-time data upload status. System states under observation.  
Frequent transfer of lost data after recovery



ShinePhone App

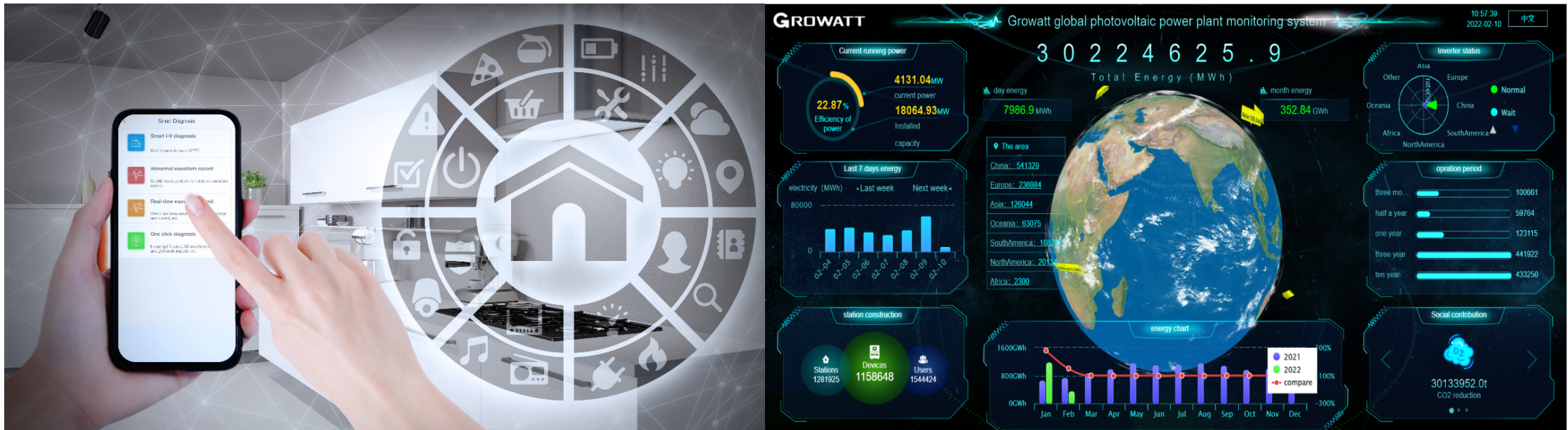


ShineServer

# Smart Maintenance



Fast and easy, saving cost and time, peace in mind.



Configuration via APP  
ShineWiFi-X+ShinePhone App

Online Smart Service  
Remote Firmware update  
Remote diagnose and configuration

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# THANKS

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