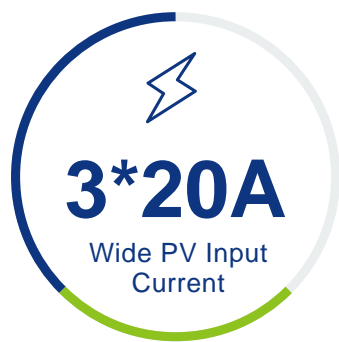


Inverter Single Phase Hybrid

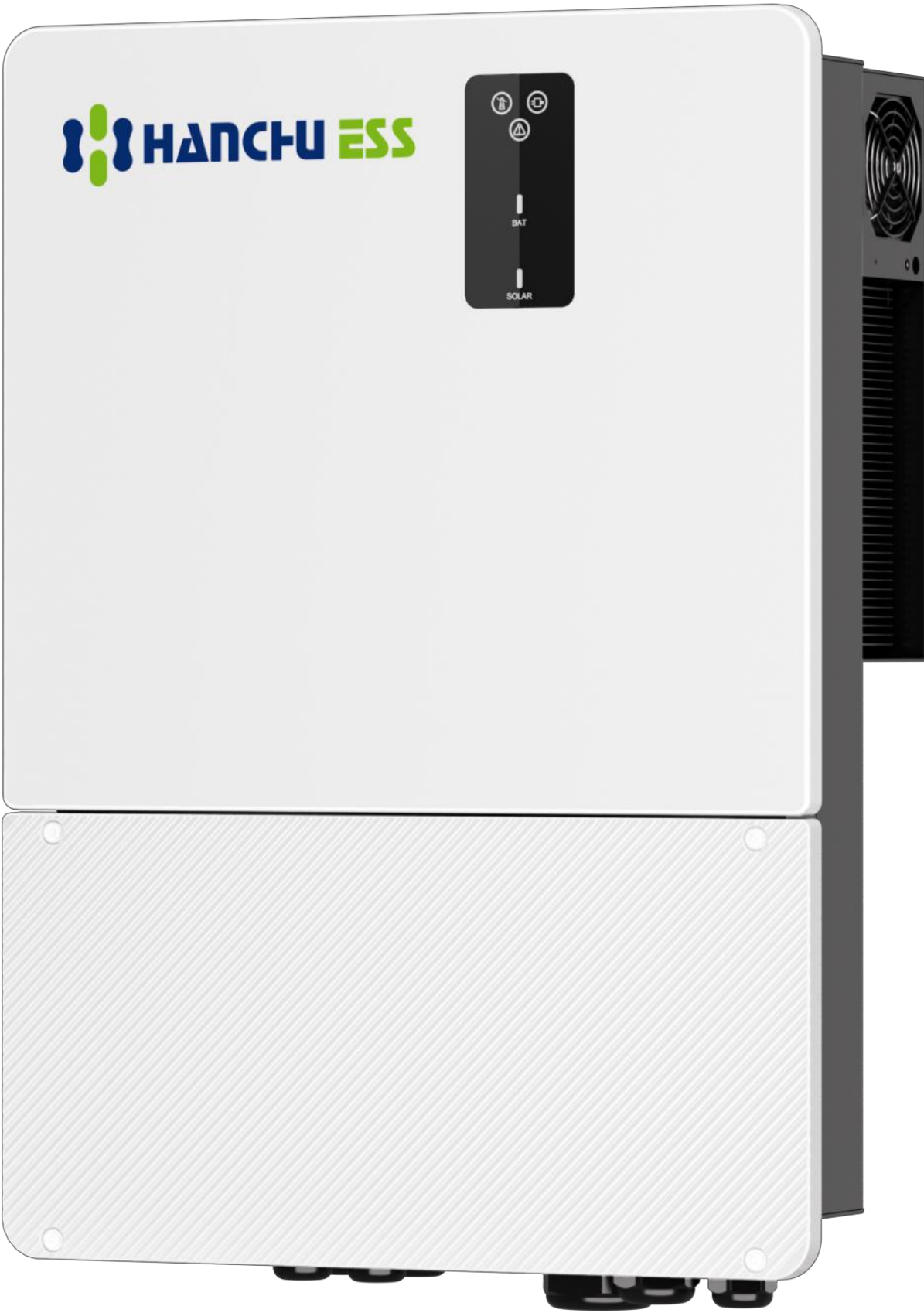
HESS-HY-S-7.0K/8.0K/10.0K



Technical Parameter



| | |
|--|---------------------------------|
| Model | HESS-HY-S-7.0K/8.0K/10.0K |
| MPP voltage range / rated input voltag | 40V to 530V / 380V |
| No. of independent MPP trackers / strings per MPPT | 3 / 1 |
| Max. input current per MPP tracker | 20A |
| Battery voltage range | 40-60V |
| Max. charging current / Max. discharging current | 165A 190A 210A |
| Rated AC Output apparent power | 7000VA 8000VA 10000VA |
| Rated EPS Output apparent power | 7000VA 8000VA 10000VA |
| Max. switch time | <10ms |
| Weight | 34.5kg |
| Certifications | EN 61000/IEC 62109/EN 50549/G99 |



Technical Parameter

7kW / 8kW / 10kW

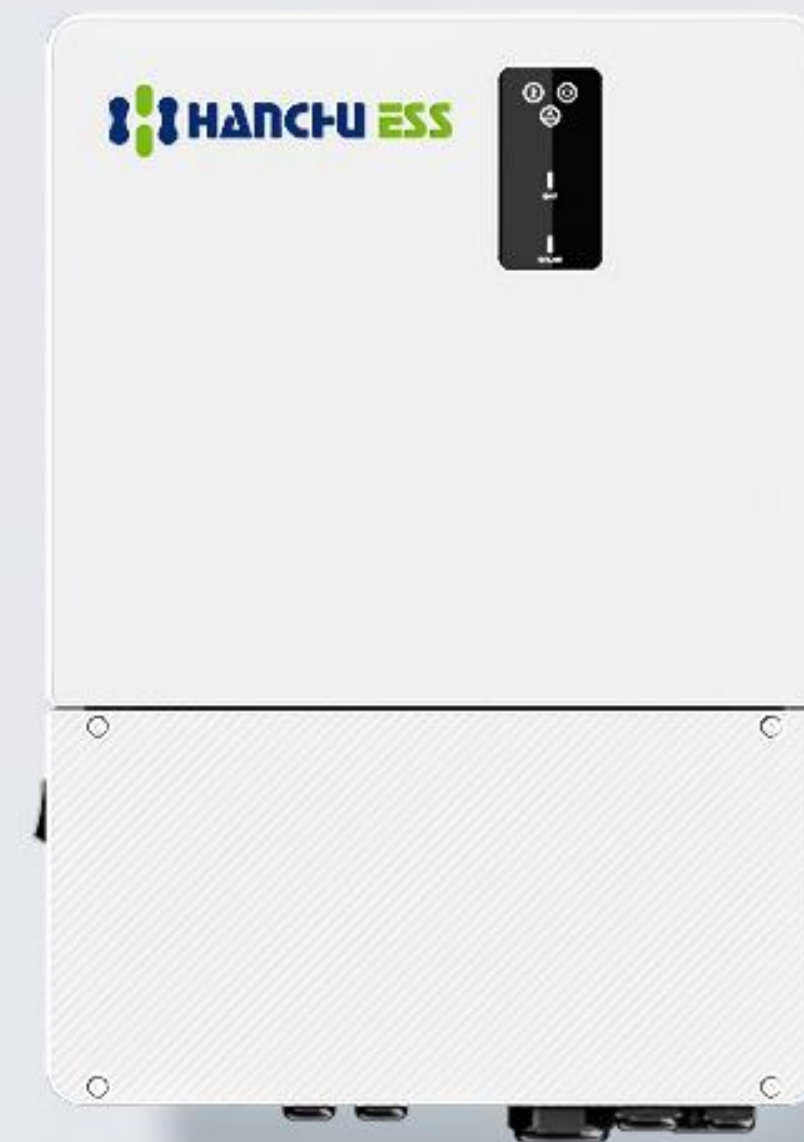
Single-phase Hybrid Inverter

Designed for high-power residential and small commercial applications, it supports safe and reliable low-voltage battery connection.

With 3 MPPTs and 200% DC oversizing, it maximizes rooftop solar generation.

Featuring 10ms on/off-grid switching and IP66 protection, it ensures stable power supply and higher self-consumption.

Innovate-enjoy | 



1



High Performance

2



Safe and Reliable

3



More Flexible

4



More intelligent

1



High Performance

High Performance

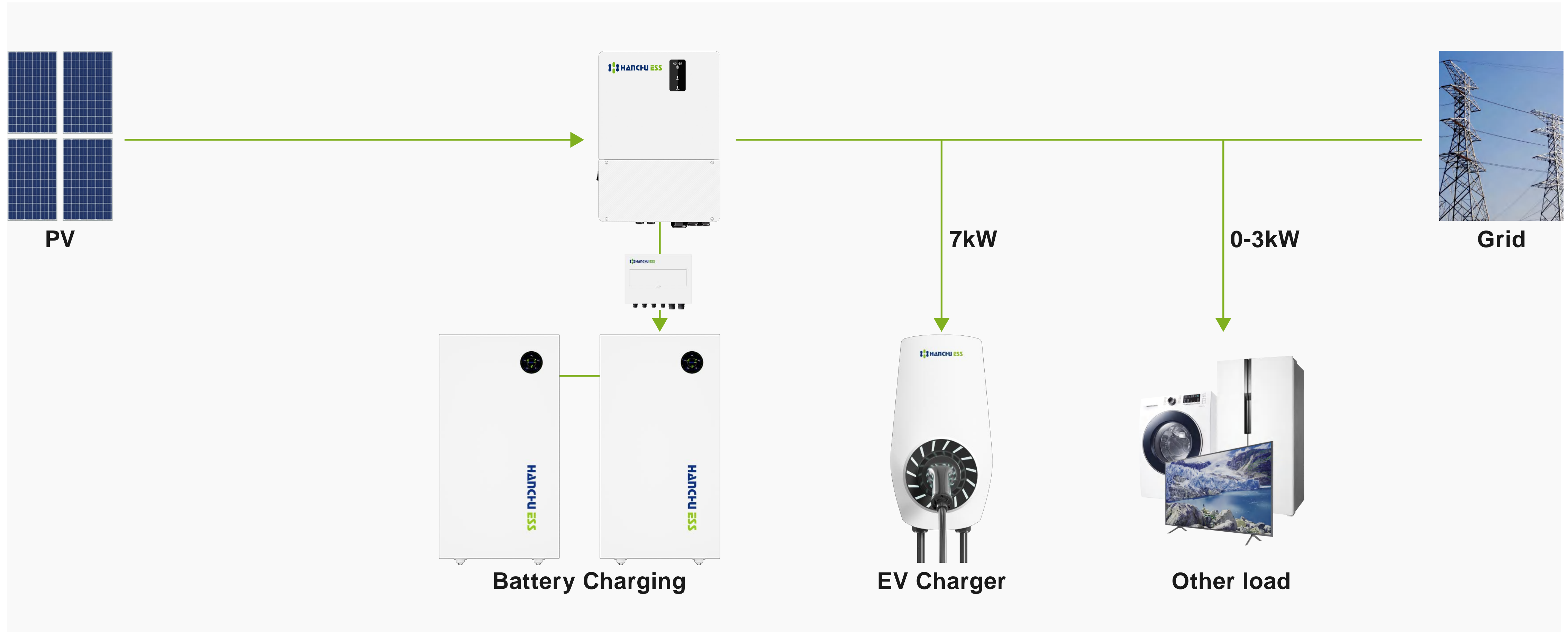
Innovate-enjoy |  HANCHU ESS

3 independent MPPT inputs

- 20A Input Current
- 100% Max Power per string
- Solving the challenge of irregular roof installations

High Performance

Innovate-enjoy | 



Support for higher-power loads

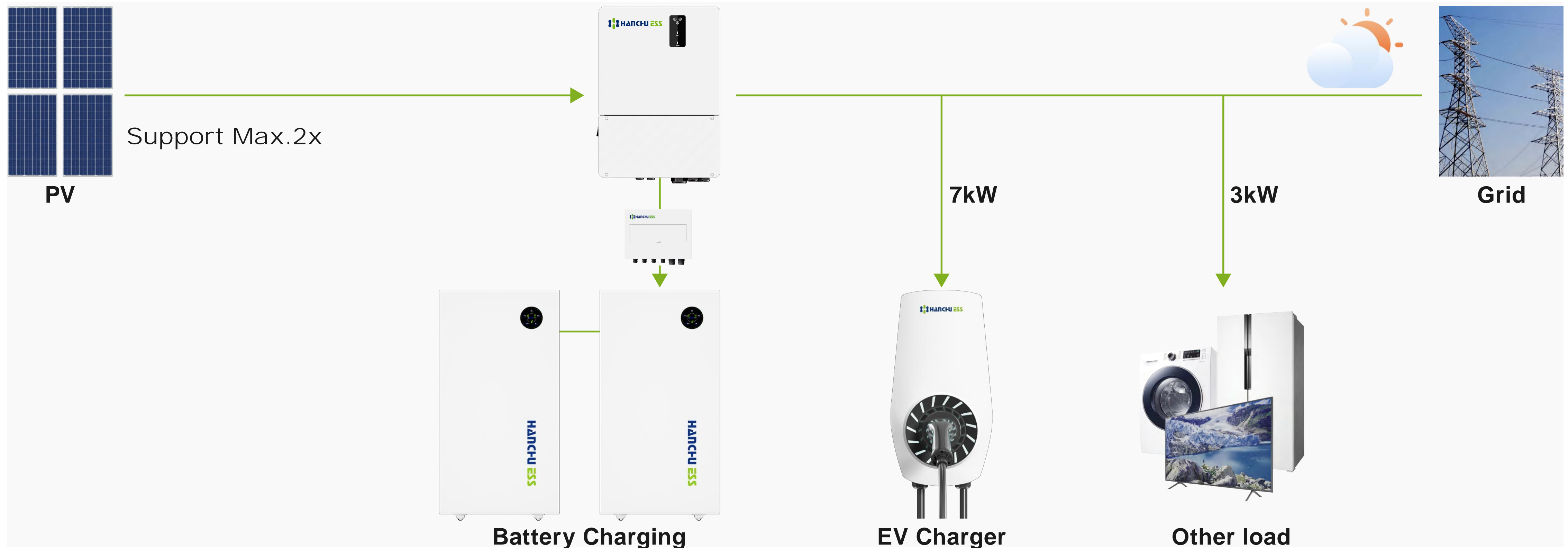
Higher-power loads can now run on more clean energy.

High Performance

Innovate-enjoy | 

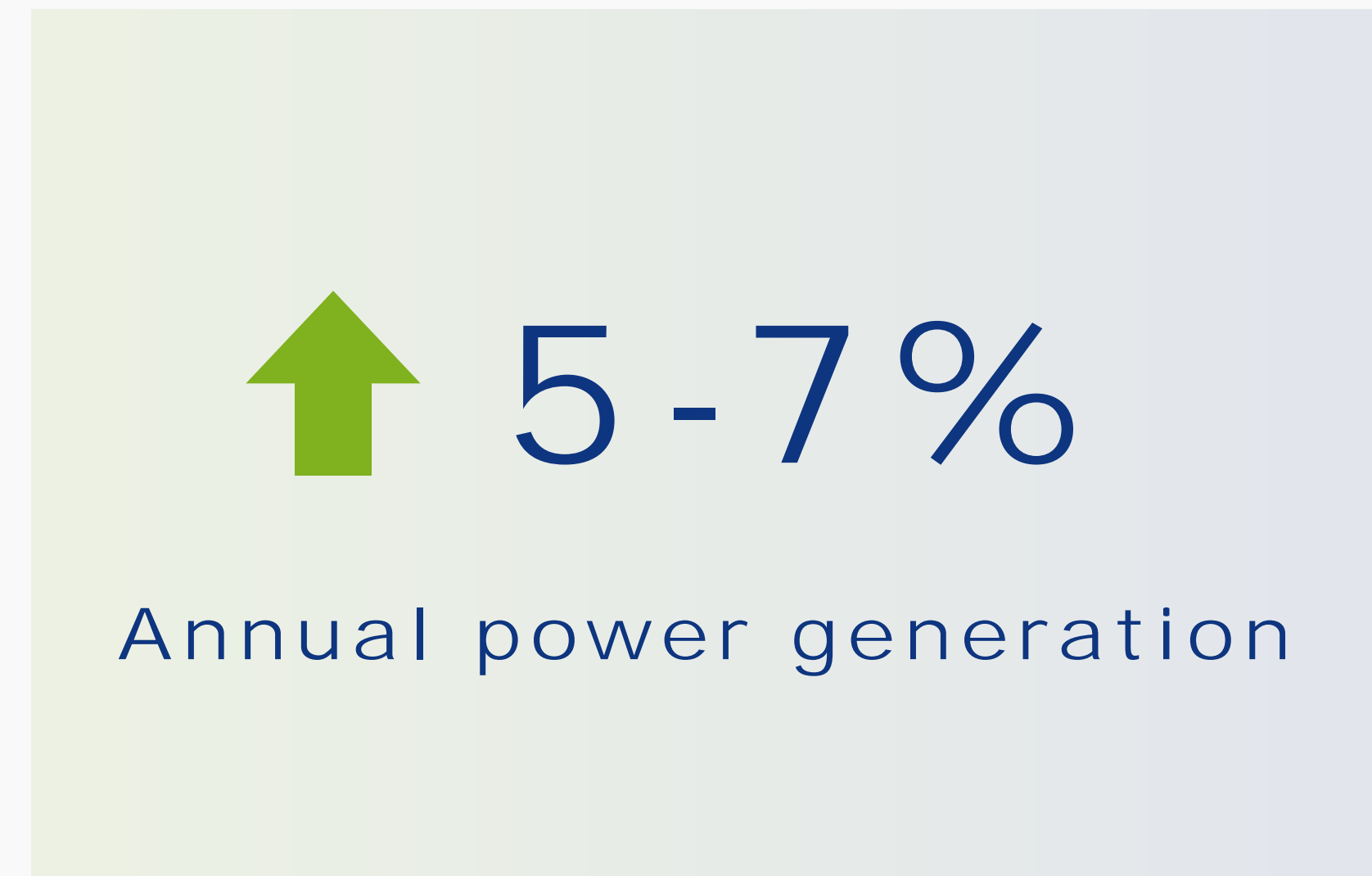
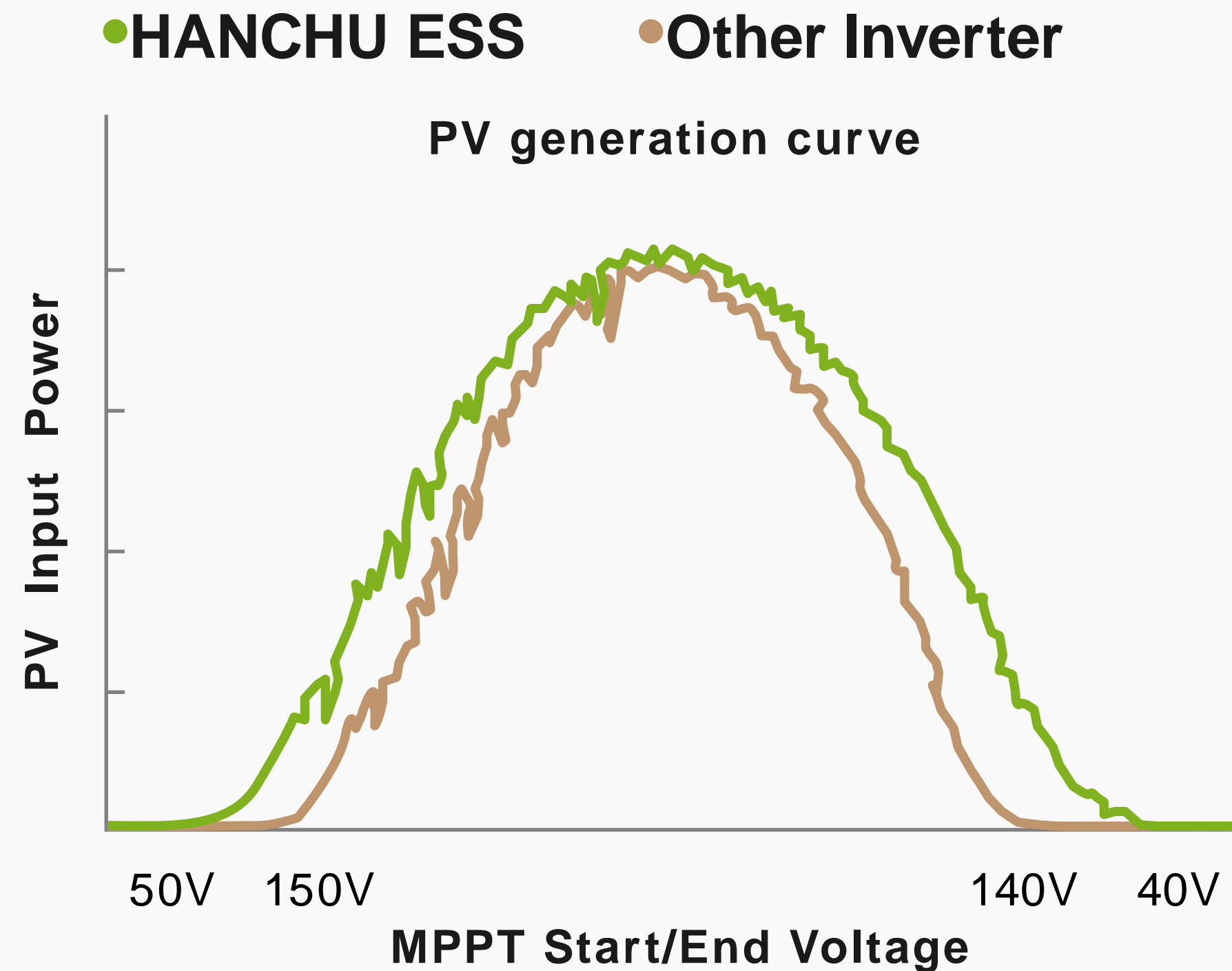
Maximized Energy Output

Maximise power generation even under weak sunlight and frequent UK cloudy conditions.



200% DC:AC ratio

The entire series supports 200% DC to AC overload



Extended generation: **1 hour earlier start-up, 1 hour later shutdown.**

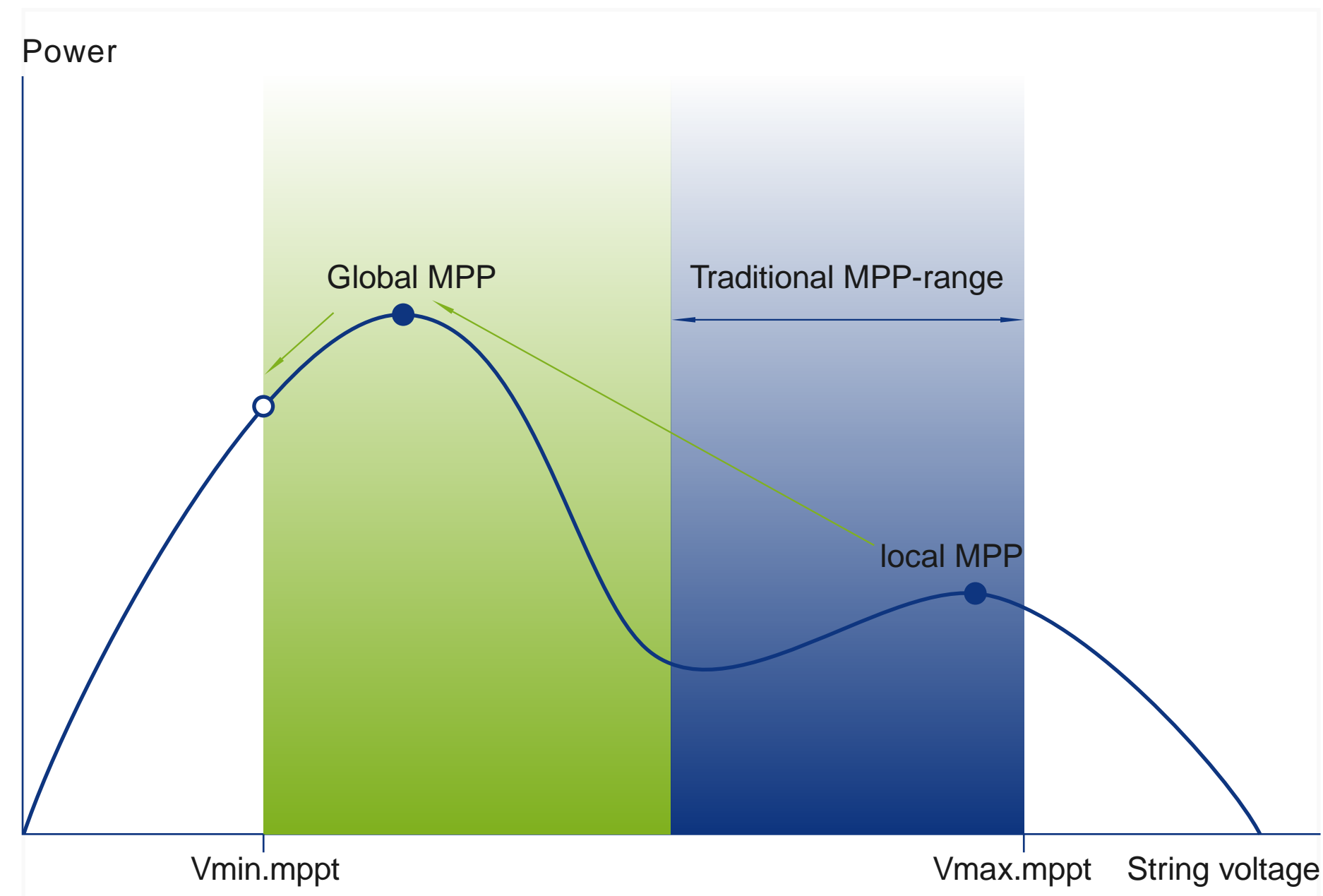
Lower startup voltage to 50V: **The solar panel can start to generate power at the lowest voltage of 50V.**

Blackout Transfer : **10ms**



Never feel the power blackout

10ms Seamless Grid to Backup Switching



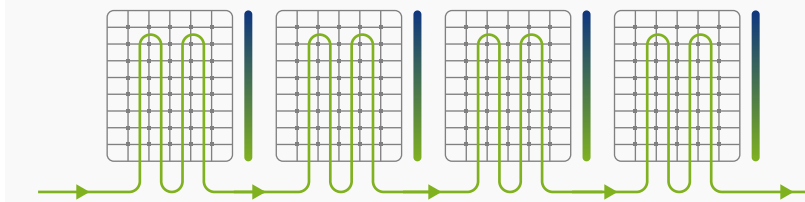
Full sun

Max power: 1600 W

All four panels receive full sun delivering the maximum power.

(40 V x 10 A) (40 V x 10 A) (40 V x 10 A) (40 V x 10 A)
400W 400W 400W 400W

1600 W



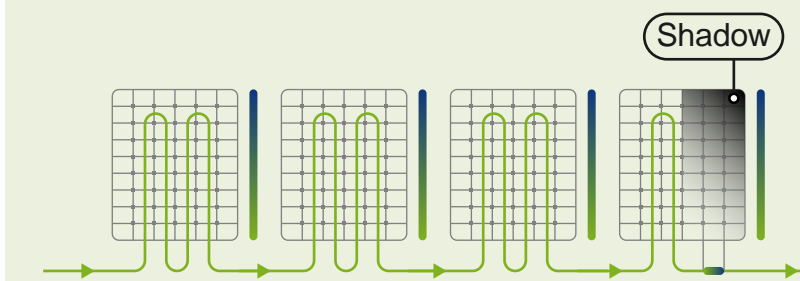
Partially shaded with shadow scan

Optimized power: 1400 W

One panel is partially shaded / shadow scan adjusts the string voltage to maintain max current / Only the shaded panel delivers 50% power, the rest, maximum yields.

(40 V x 10 A) (40 V x 10 A) (40 V x 10 A) (20 V x 10 A)
400W 400W 400W 200W

1400 W



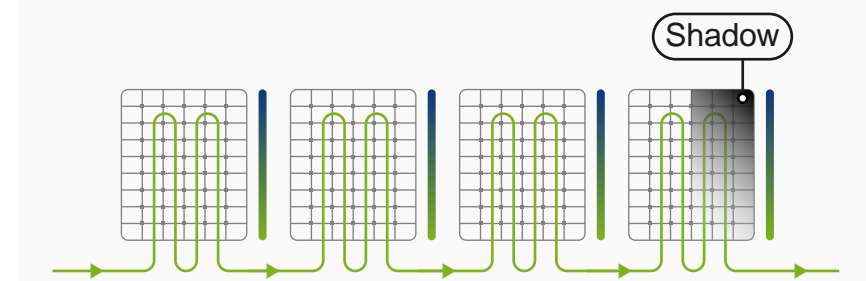
Partially shaded without shadow scan

Low power: 800 W

One panel without shadow scan is partially shaded / An affected string without shadow scan reduces current by up to 50% / All panels deliver reduced power.

(20 V x 10 A) (20 V x 10 A) (20 V x 10 A) (20 V x 10 A)
200W 200W 200W 200W

800 W



Shadow Scan

- High technology with global scanning.
- No extra cost.
- Optimize the power generation of multi-shadow scenarios.

2



Safe and Reliable

Safe and Reliable

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IP66

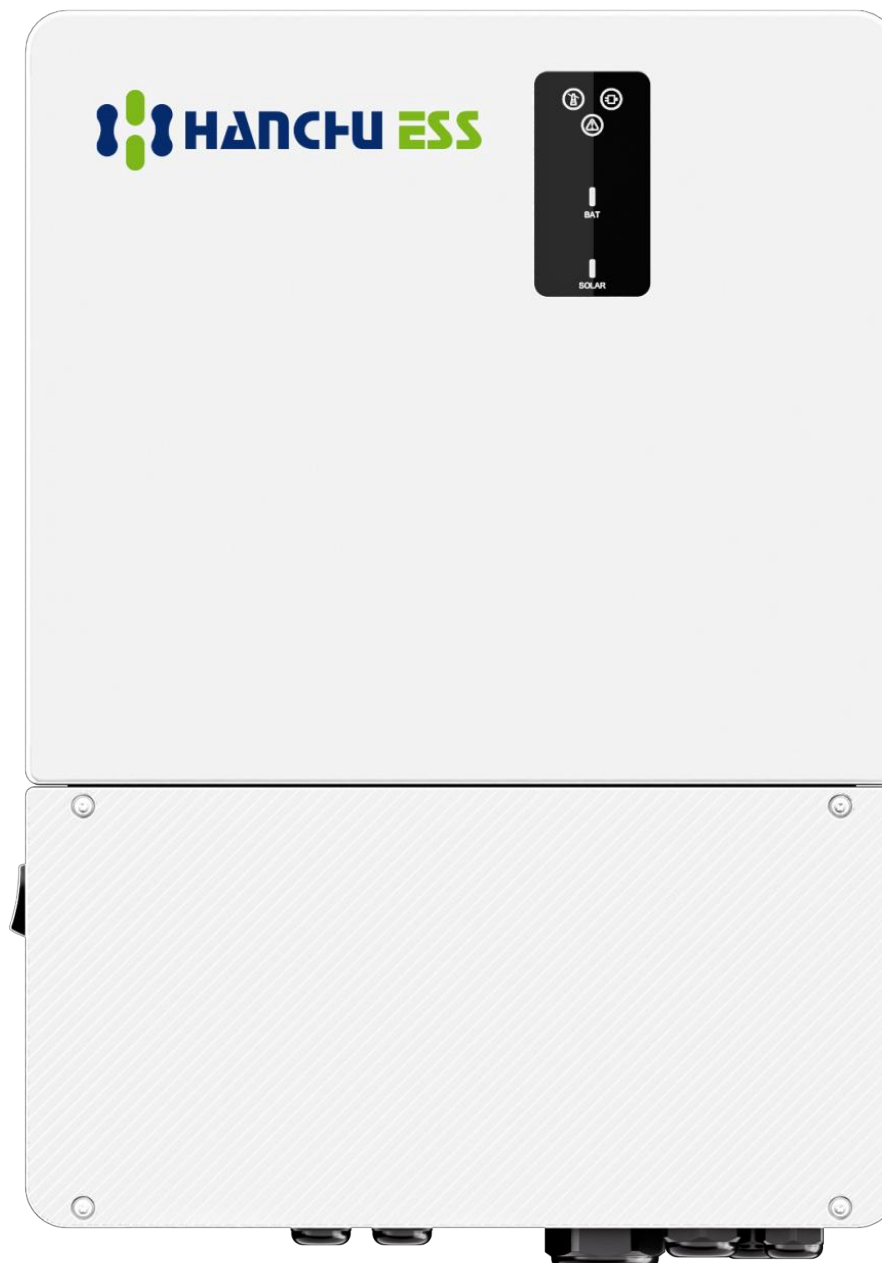
IP:Ingress Protection

6:Totally protected against dust

6:Water resistant against powerful jets



High degree of protection for outdoor application.



- Surge protection
- Insulation resistance detection
- PV string input reverse polarity protection
- Ground fault monitoring
- Residual current monitoring unit
- AC short circuit protection
- Anti-islanding protection

Seven layers of protection

Safeguarding your home and equipment at every level.

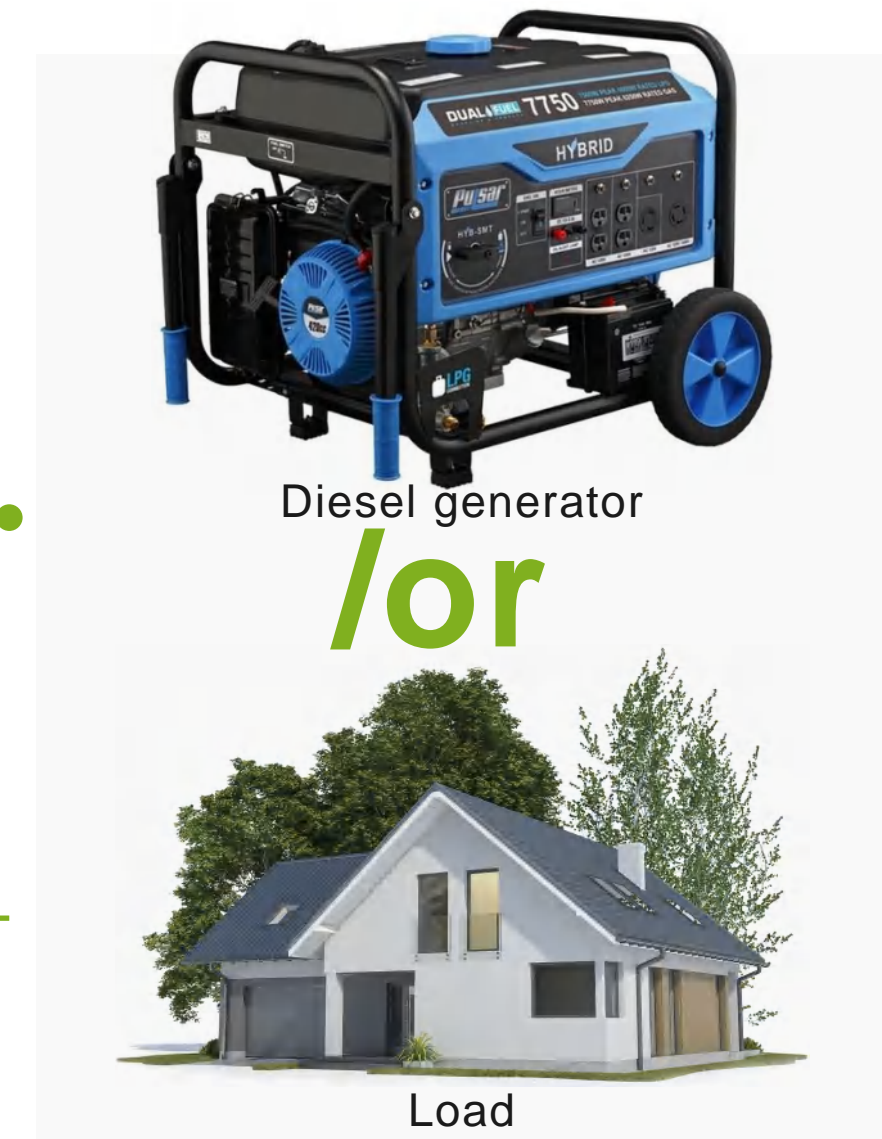
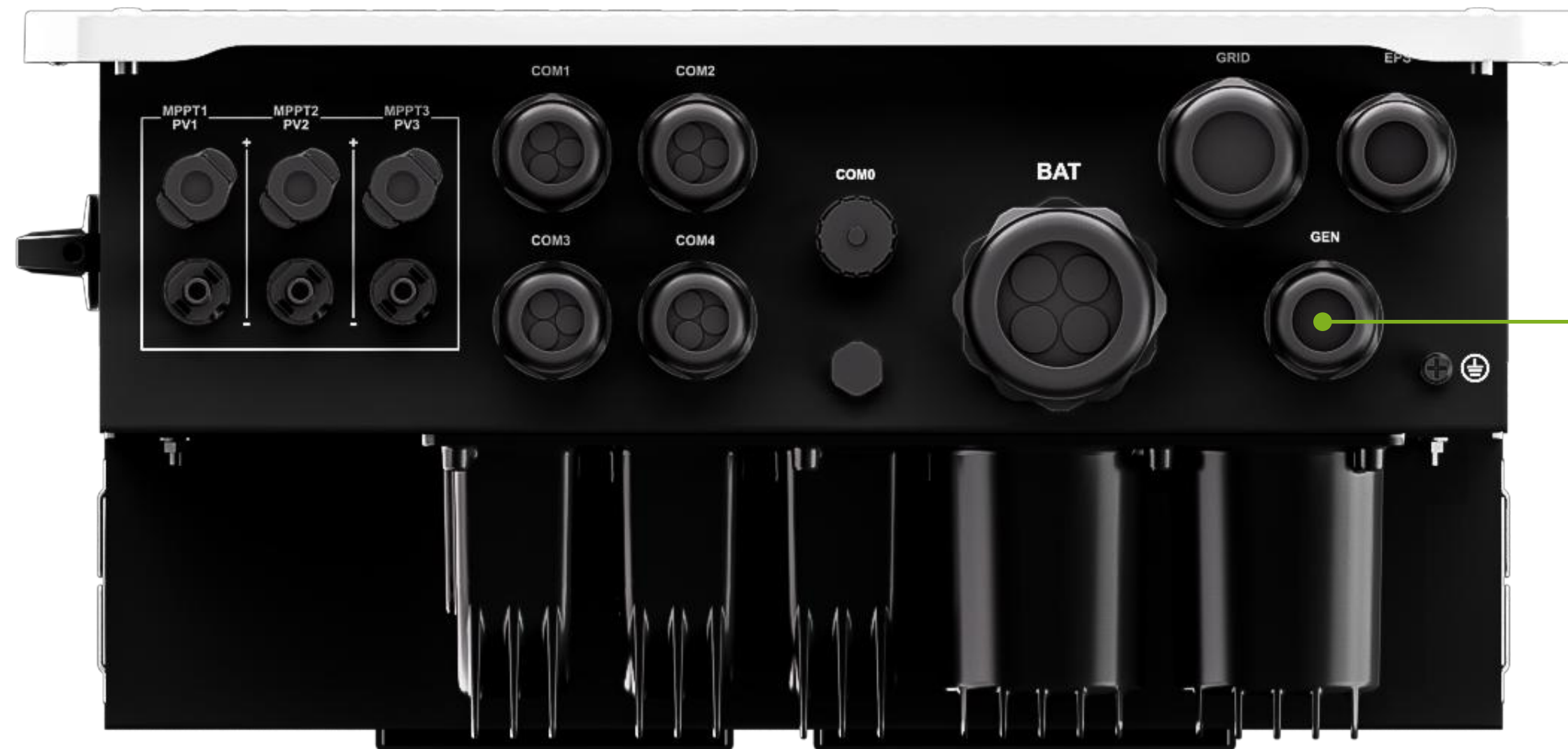
3



More Flexible

More Flexible

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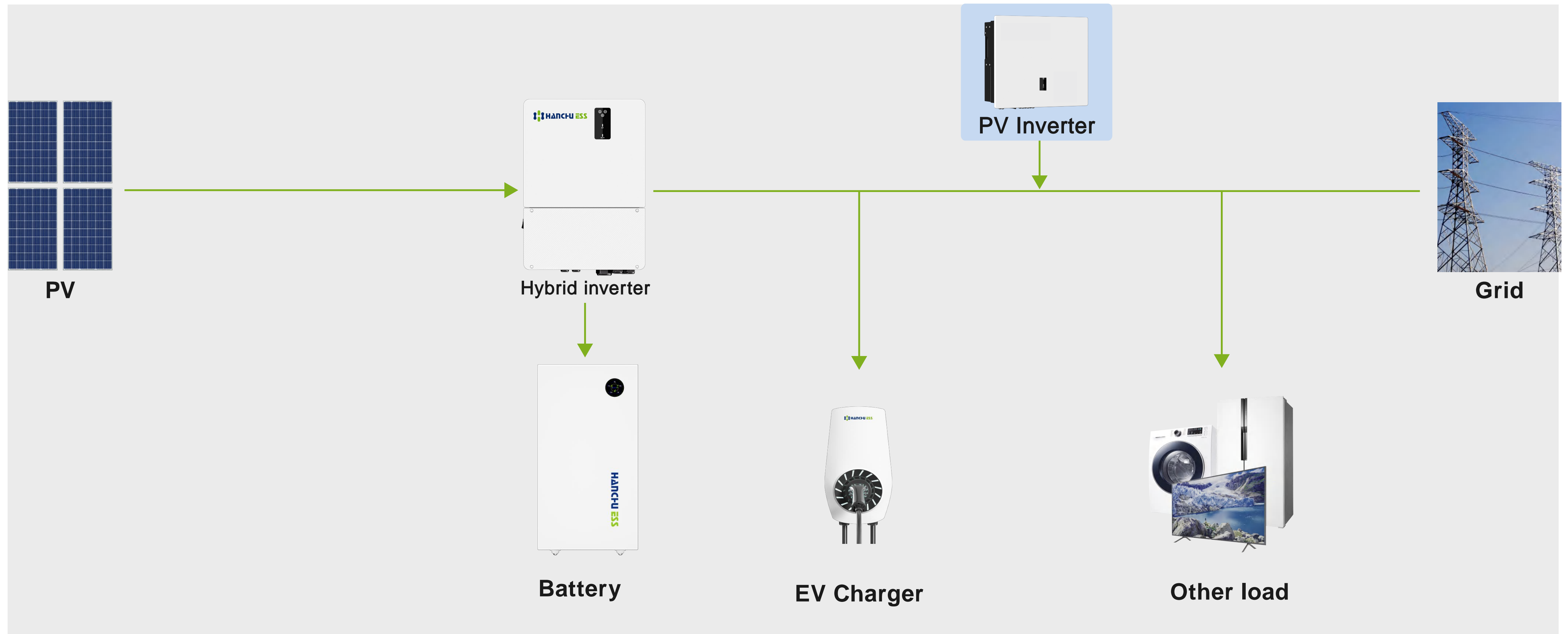
SOC Smart Management

Supporting diesel generator

We designed a dedicated genset port not only for diesel backup, but also to serve as a powerful load port. It can directly drive heavy loads and intelligently control start/stop based on SOC.

More Flexible

Innovate-enjoy | 



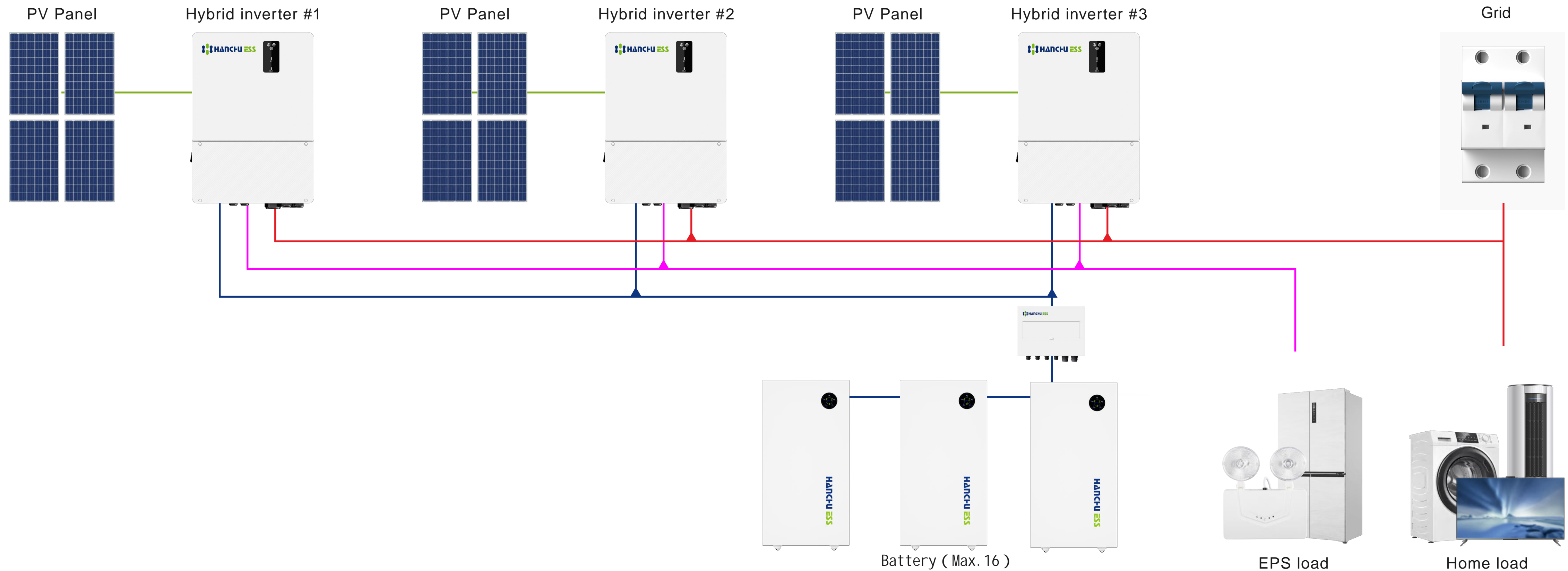
Compatible with PV inverters

Supports AC coupling to work with PV inverters for power generation.

More Flexible

Parallel work mode

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Parallel inverters Number: 3pcs

(expandable to 6 units in the future)

More Flexible

Quick approval, faster ROI

UK DNO Grid Connection Approval Comparison

| | 7kW model | Non-7kW models(eg,8kW-12kW) |
|----------------|----------------------------|--------------------------------|
| Current Limit | ≤32A | >32A |
| Approval Path | G99 Fast Track | Full G99 Application |
| Fee | Low | Often £400 |
| Timeframe | 2 weeks | up to 2 months |
| Benefit Impact | Quick approval, faster ROI | Delayed connection, lost gains |

4



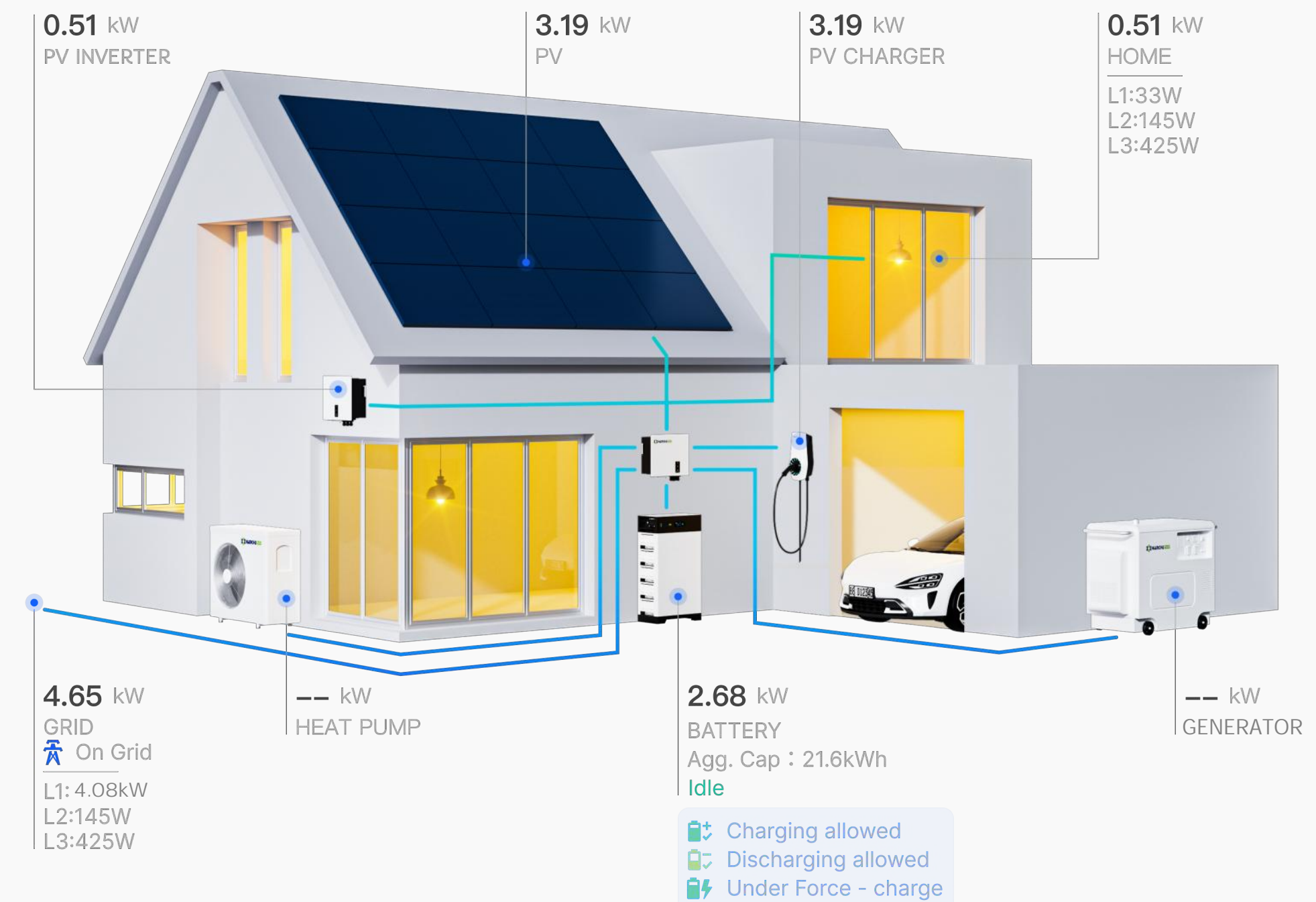
More intelligent

More intelligent

Innovate-enjoy | **HANCHU ESS**

Smart setup,
commissioning and monitoring

- 7*24h Real-time energy flow monitoring.
- Proactive O&M with timely fault detection.
- Flexible settings, supporting more mode switching, grid/off-grid discharge cut-off SOC, and more.
- Support Local/Remote upgrades for new features.

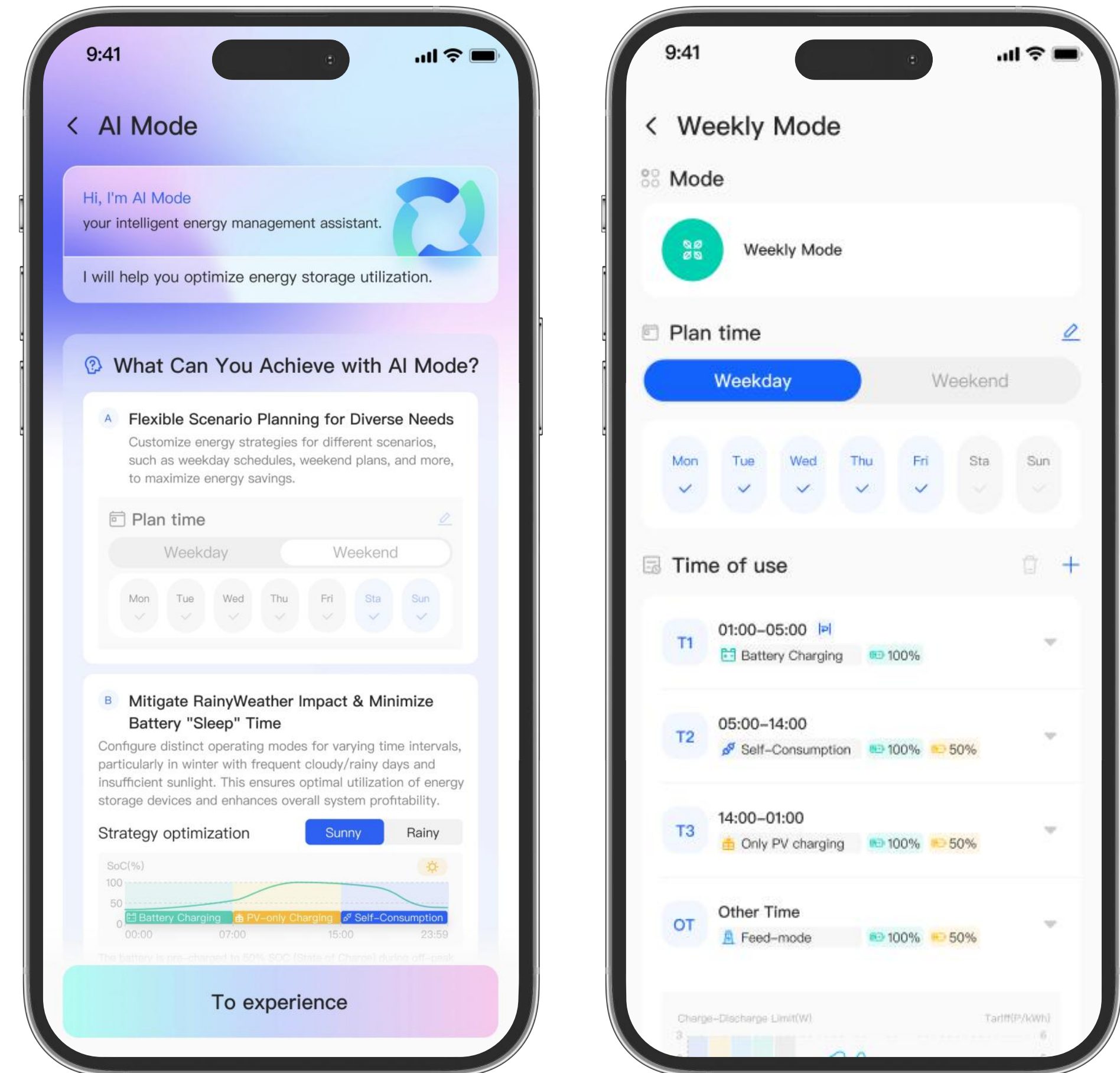


More intelligent

Innovate-enjoy | 

More flexible scenarios,
smarter strategies management

- Supports multiple modes to fit diverse scenarios.
 - ✓ self-consumption, backup power, user-defined, feed-in priority and based on SOC.
- Supports TOU strategies.
 - ✓ 8 charging/discharging periods.
 - ✓ dynamic pricing with peak-valley optimization.
 - ✓ Weather Optimize.
 - ✓ overload compensation.



THANK YOU !

