

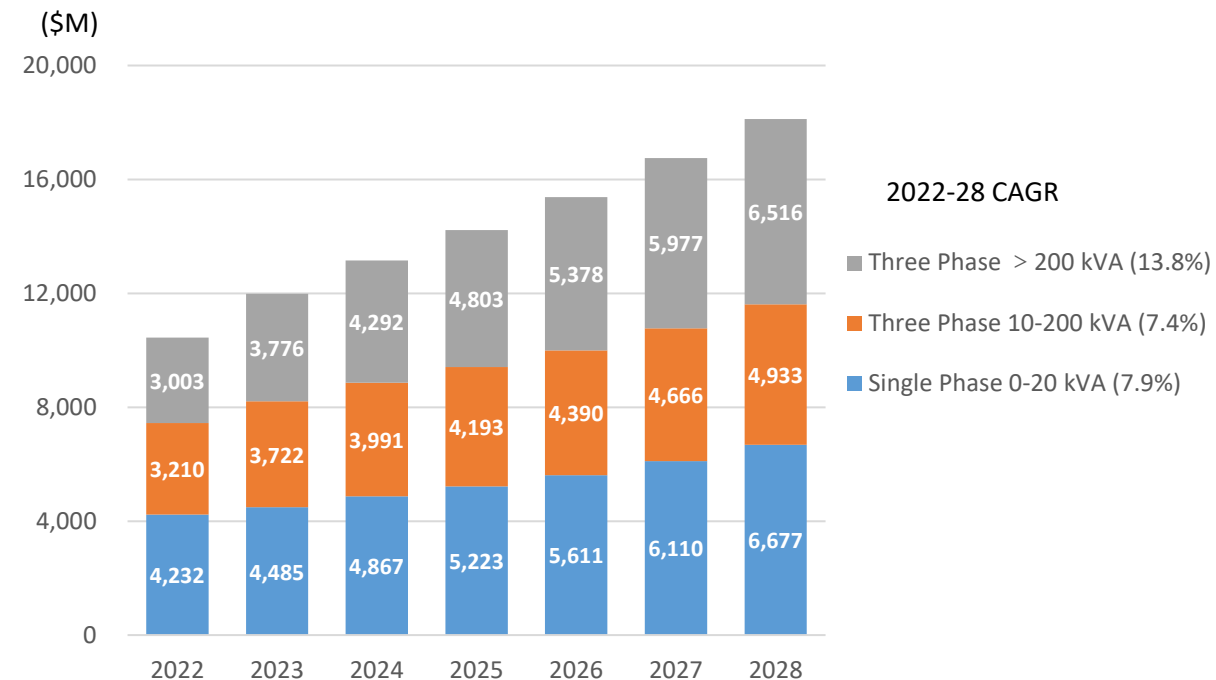


Gripower Max 40-200K

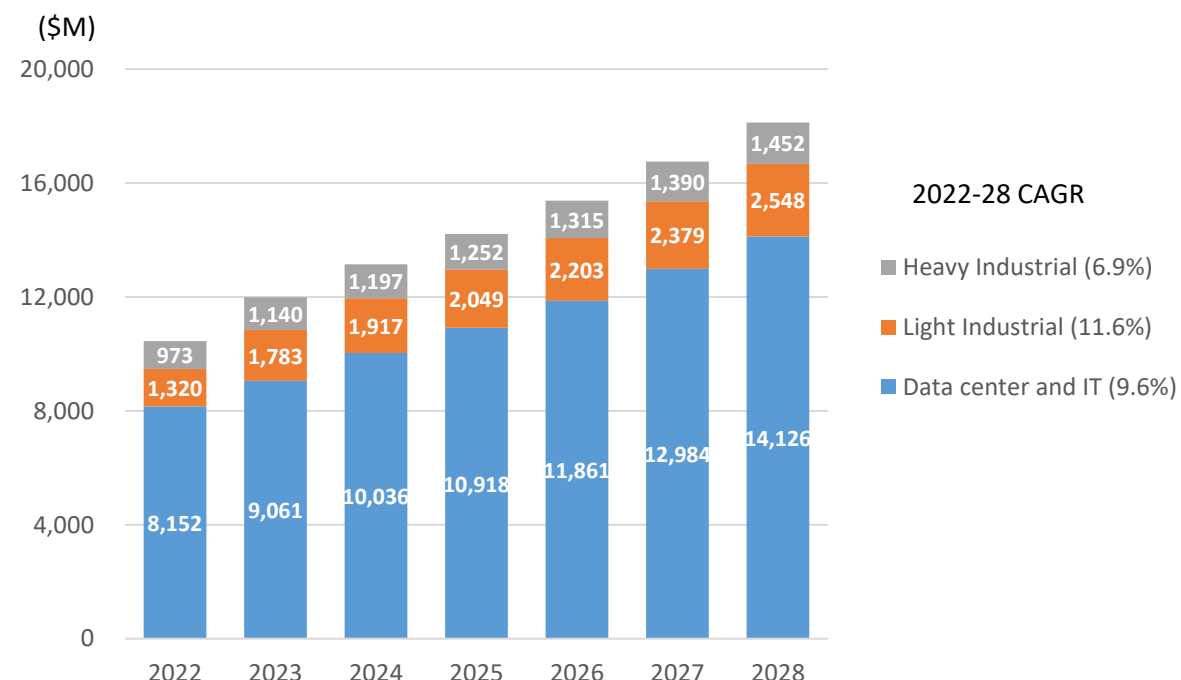


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UPS market overview



UPS hardware market by rating (Source: Omdia)



UPS hardware market by application (Source: Omdia)

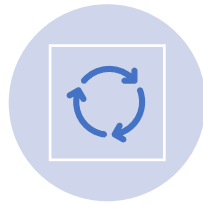
- 3 phase UPS market is around 1.5 times of 1 phase UPS.
- 3 phase 10-200kVA range is over 75% of 1 phase UPS size.
- Data center and IT is key targeting market.

3 phase UPS Trends

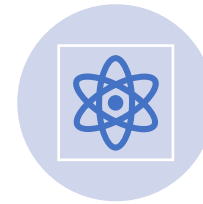
Rapid development of AI and the increase in the demand for large and very large data centers with high computing power, the market for ultra-high-power machines will continue to increase in the next three years.



High efficiency, green, energy saving



Smaller, lighter, **space-saving, easy to deploy**



High power density, Large UPS or large UPS mower module applications acceleration



Intelligent: real-time monitoring and intelligent management



Energy storage: LFP coming, Sodium-Ion

A new generation of Modular UPS that brings robust design, easy service and low TCO for highest levels of critical power protection.



80kVA Frame



200kVA Frame

- Operation temperature 0-40°C without derating.
- Compliance with CE , RoHS
- 40K of each power module, [Output PF 1.0](#)
- Three-Level topology. Double conversion efficiency up to [96%](#), ECO mode efficiency up to 99%
- [Hot-swappable design](#), Easy service with MTTR<5min.
- [7" Color touch screen](#), user-friendly interface.
- Compatible with [lead-acid and lithium-ion](#) batteries
- [Integrated Modbus RTU communication and dry contact interfaces](#)
- Cold Start function.
- [Optimized battery management function](#) (OBM)
- Smart [easy capability test](#) (ECT)
- Up to 4 units in parallel. Common battery supported.

- Main input/ Bypass/ Output/ MBS switches



80kVA Frame

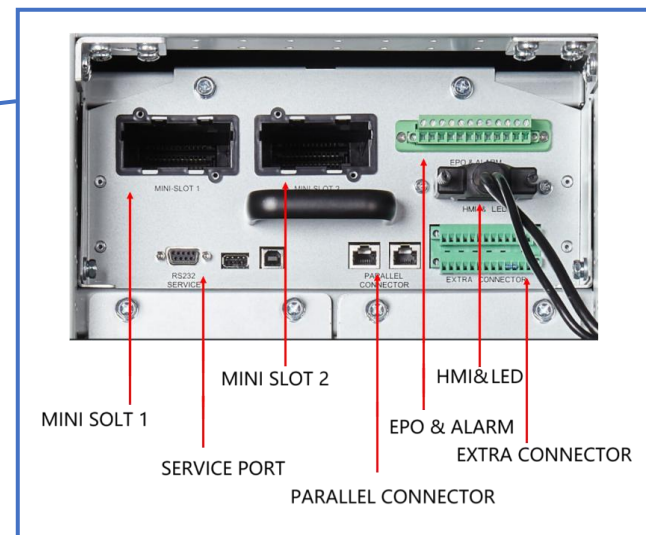


Switch

Cable entry



40kW UPM

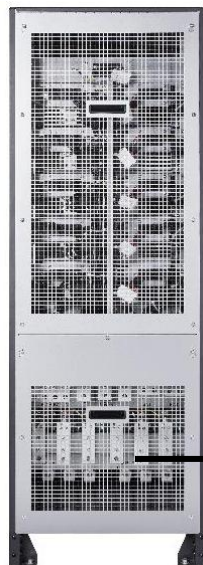


Model	80kVA/80kW Frame w/o UPM	40KW UPM
Weight (kg)	74	33
Dimension (mm)	327*1035*1010(W*D*H)	470*800*130

- Main input/ Bypass/ Output/ MBS switches



200kVA Frame

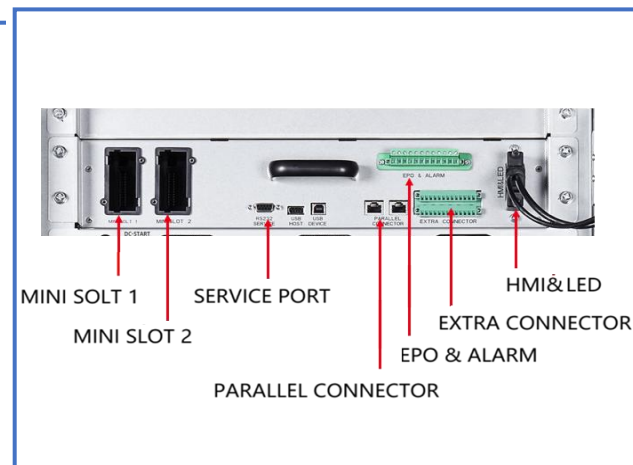


Cable entry



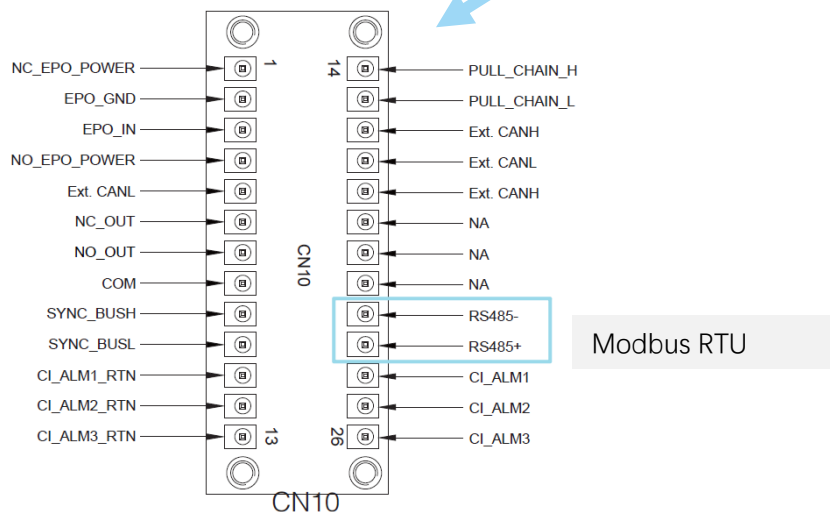
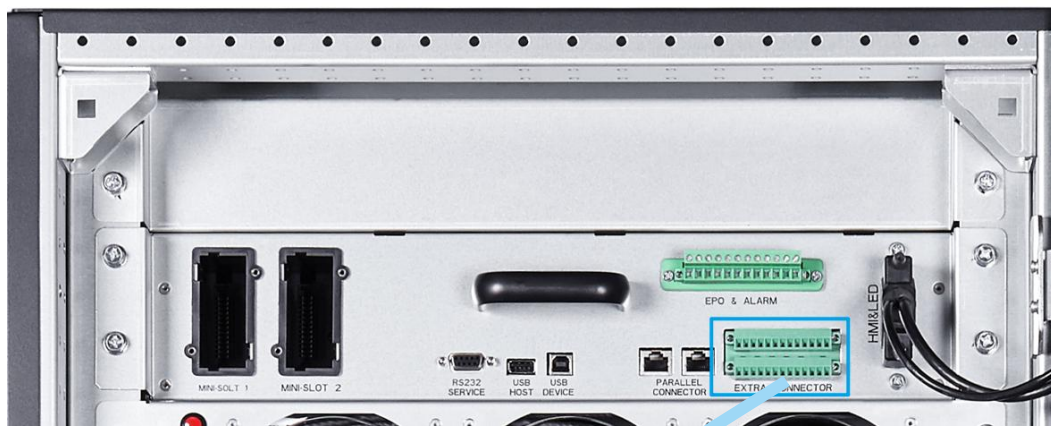
40kW UPM

Switch



Model	200kVA/200kW Frame w/o UPM	40KW UPM
Weight (kg)	347	33
Dimension (mm)	553*950*1603 (W*D*H)	470*800*130

● Various Communication



Integrated Modbus RTU communication and don't need extra Modbus card.

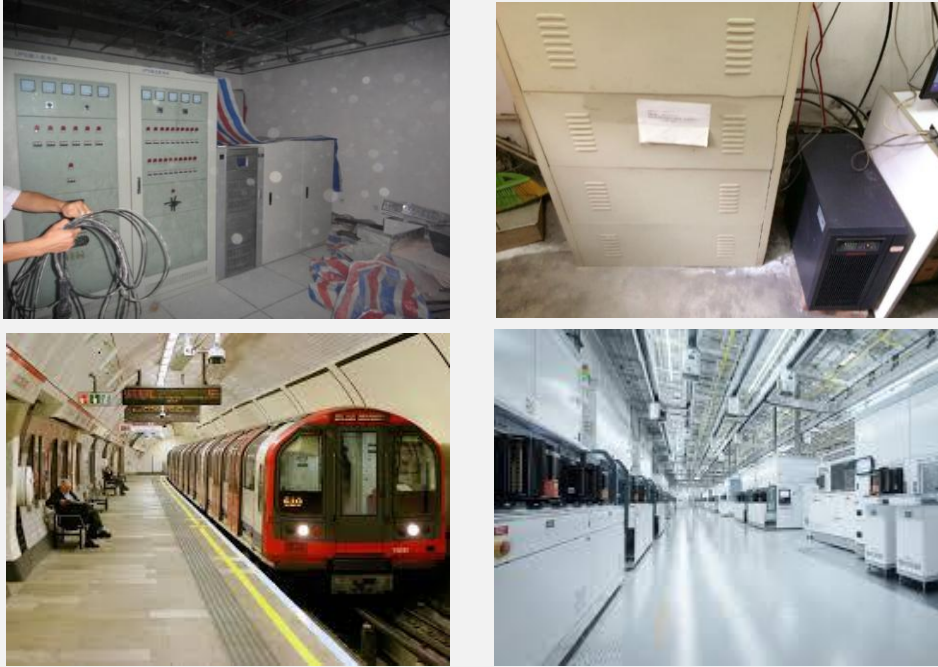
Follow information can be provided:

1. UPS output power
2. UPS status
3. Input/Output 3-phase voltage, current and power.
4. Bypass 3-phase voltage, current and power.
5. Input/Bypass input output total power, Frequency and power factor.
6. Battery Status.
7. Battery Positive/Negative voltage, Current and total Battery voltage.
8. Battery capacity, BTR
9. System Alarms (Warning)

2 Mini slot used for NMC G2/AS400 card (optional)

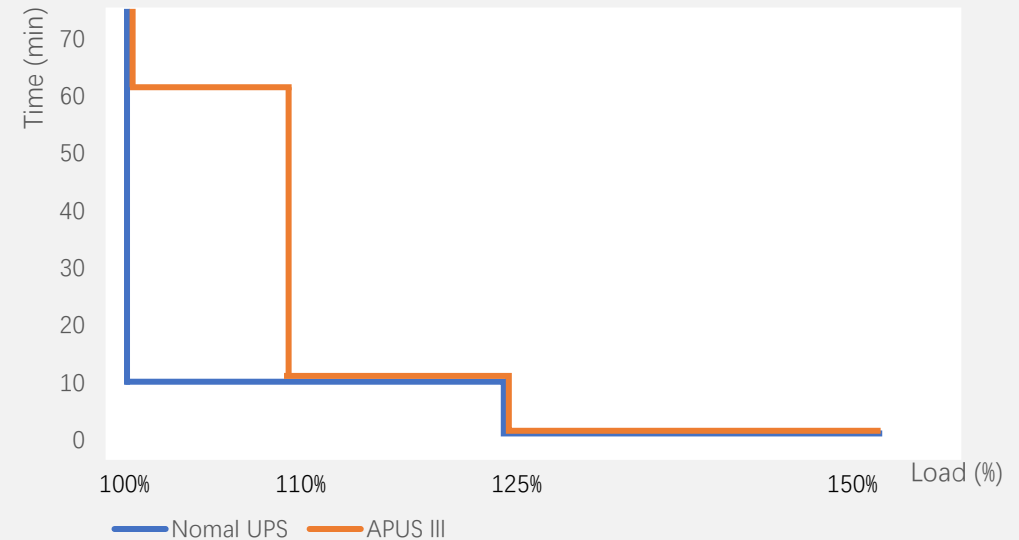
3 Key features---- Higher Reliability

- Applicable to various application



- Dust pollution exists during installation and in the working environment.
- **All PCBA conformal coating** and equipped with standard filter reduces the risk of internal short circuits;
- Improve reliability in highly dusty environments.

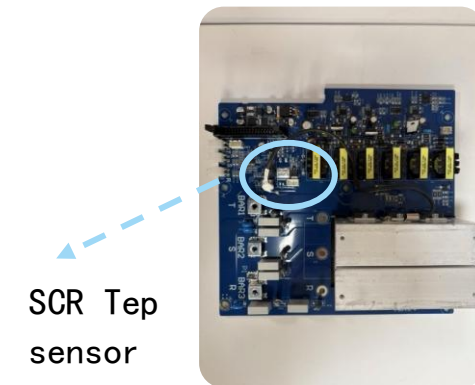
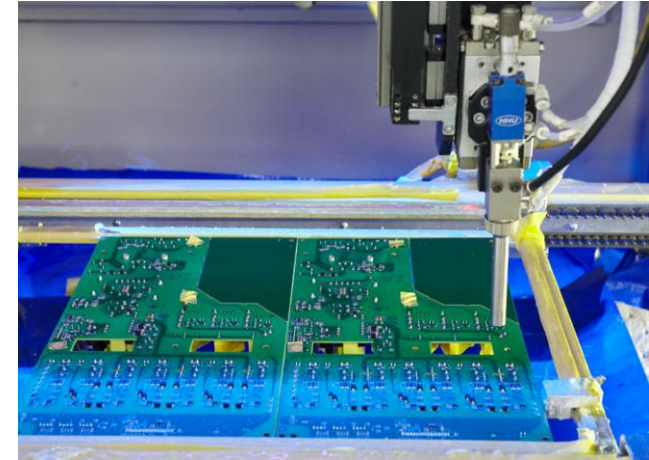
- High overload capacity



- **100-110% overload, 60min** transfer to bypass mode;
- Higher overload capacity reduces the risk of transfer to bypass due to rush power.

3 Key features---- Higher Reliability

- **PCBA conformal coating:**
 - Programmable on demand, precision coating
 - Rapid drying with UV lamps
 - UV light inspection
- **Bypass temperature monitoring:**
 - Real-time monitoring of bypass temperature for rapid identification of faulty components.
 - SCR Over Temperature Warning (95°C)
 - SCR Over Temperature Trip (105°C)
- **Integrated parallel operation capability, no parallel card required:**
 - Standard synchronous CAN communication built into UPS, ensuring safety and reliability.

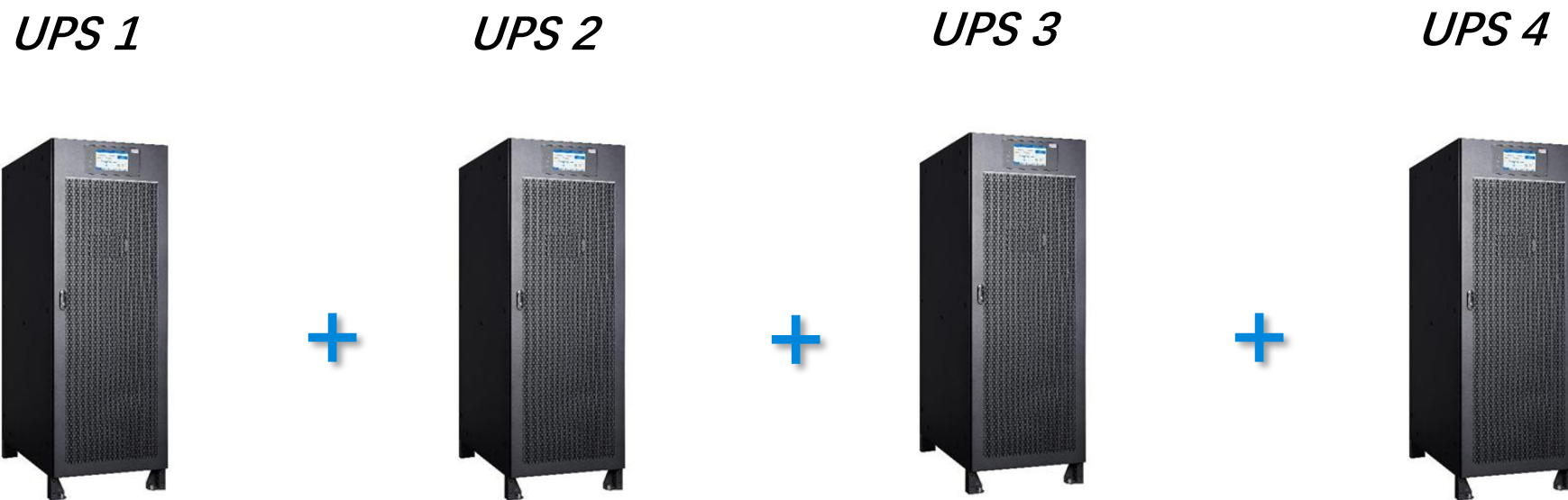


Bypass PCBA temperature monitoring

3 Key features---- Higher Reliability

- **Optimized Parallel Technology**

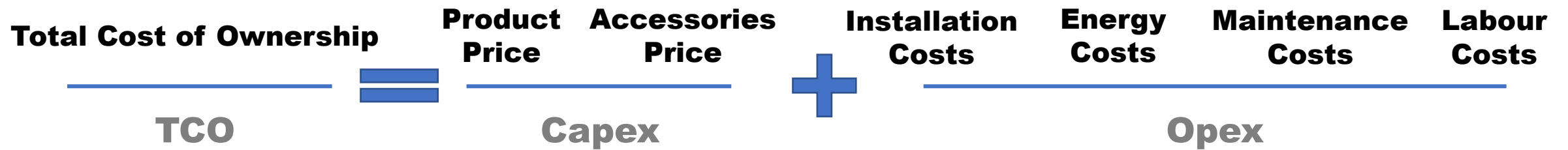
with no Master-slave in the parallel system, eliminates single point of failure, enhances reliability.



Up to 800kW

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- What is the real cost of a UPS System



- TCO: Total Cost of Ownership,
- Capex: Capital Expenditure
- Opex: Operational Expenditure.

- Lower TCO - Capex

PF 1.0 to Save initial investment.



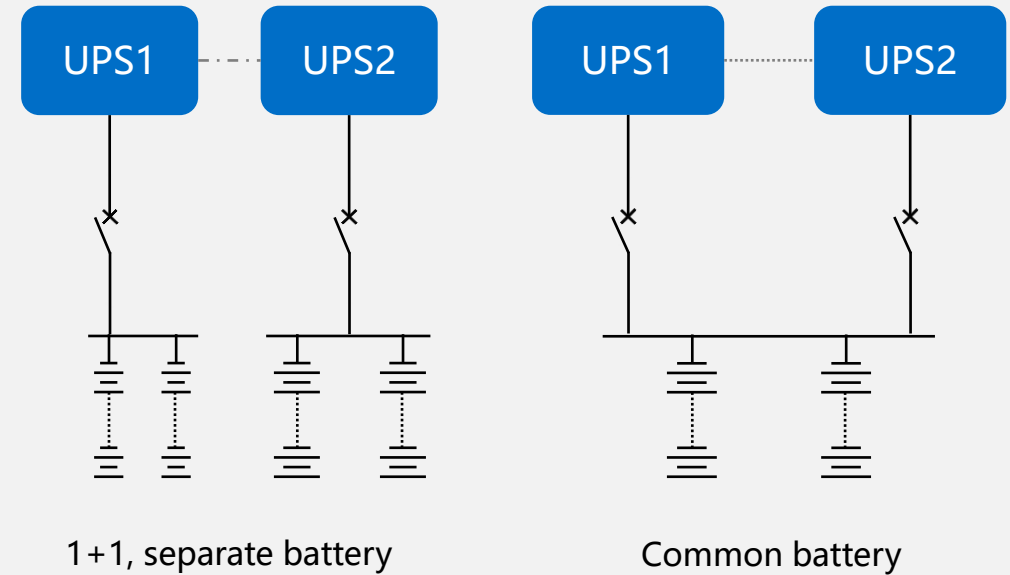
PF 1.0 Vs PF 0.9
10% more output active power

Up to 50% footprint space saving.



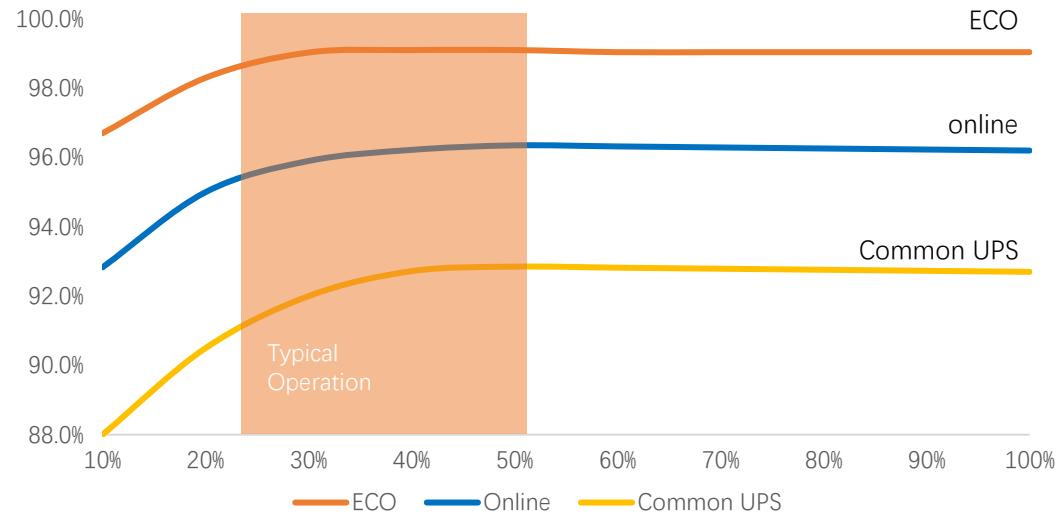
Smaller footprint
Up to 50% footprint saving compared to previous generation

Separate and common battery solutions are available



- Support separate battery solution and common battery solution.
- Saving 50% cost more by common battery solution.

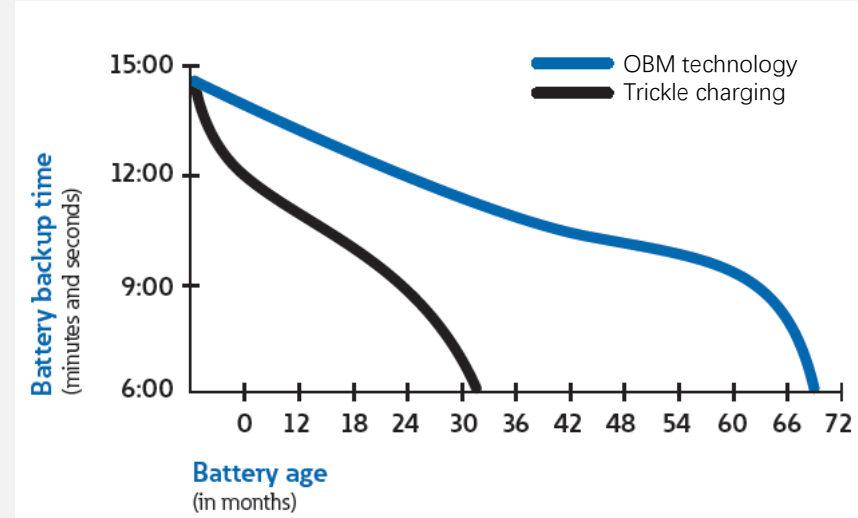
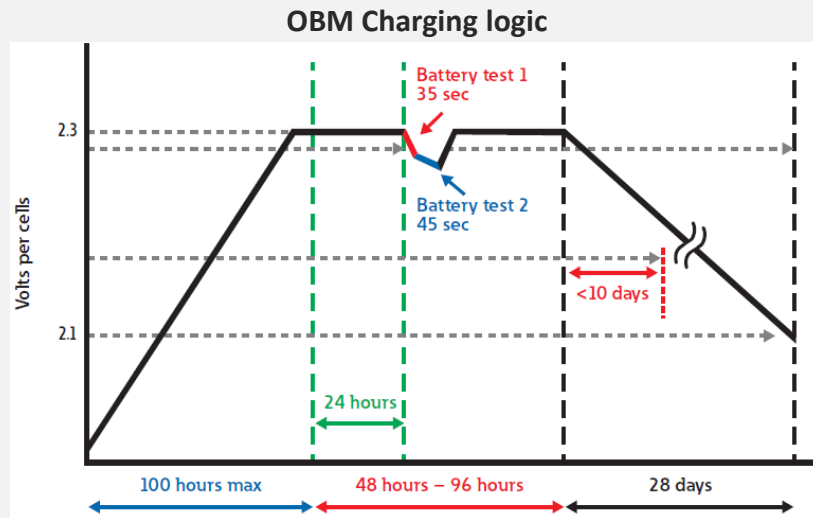
- Lower TCO - Opex



- Double conversion mode efficiency up to **96%**;
- ECO mode efficiency up to 99%, save running expense;
- Reducing **1880\$** electricity cost per year. (60% load and 0.2\$/kWh)



- Optimized Battery Management (OBM) reduce the Opex



- Most UPS is float charging the battery, this method **dries up the electrolyte and corrodes**.
- OBM brings the customer three-stage charging logic: CV/CC Charge, Float, and **Rest Mode**.
- OBM increases **50%** of service life compared with batteries that are constantly trickle charged.
- Significant reduce service labor and maintenance costs.

Key features---- Smart & Easy management

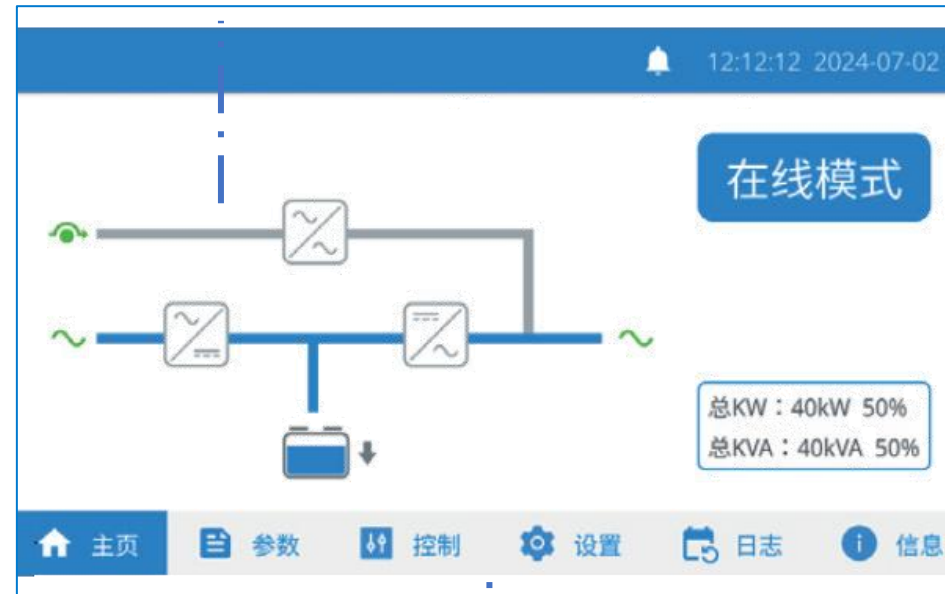
- 7-inch color touchable LCD
- Up to 10 languages for various application
- Inclined HMI design for user-friendly operation

Indicator: operating status



Energy Flow Chart:

Direction of power flow



Meters

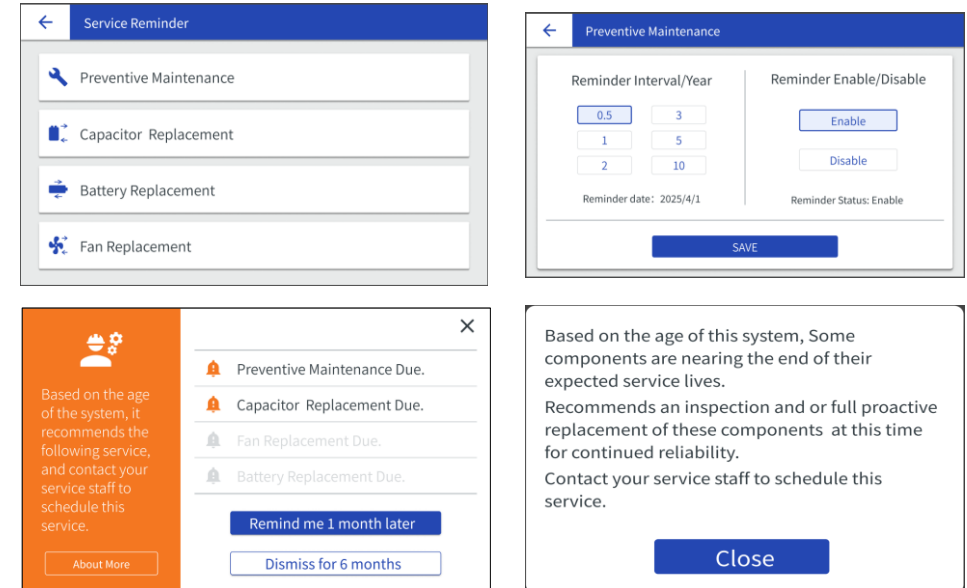
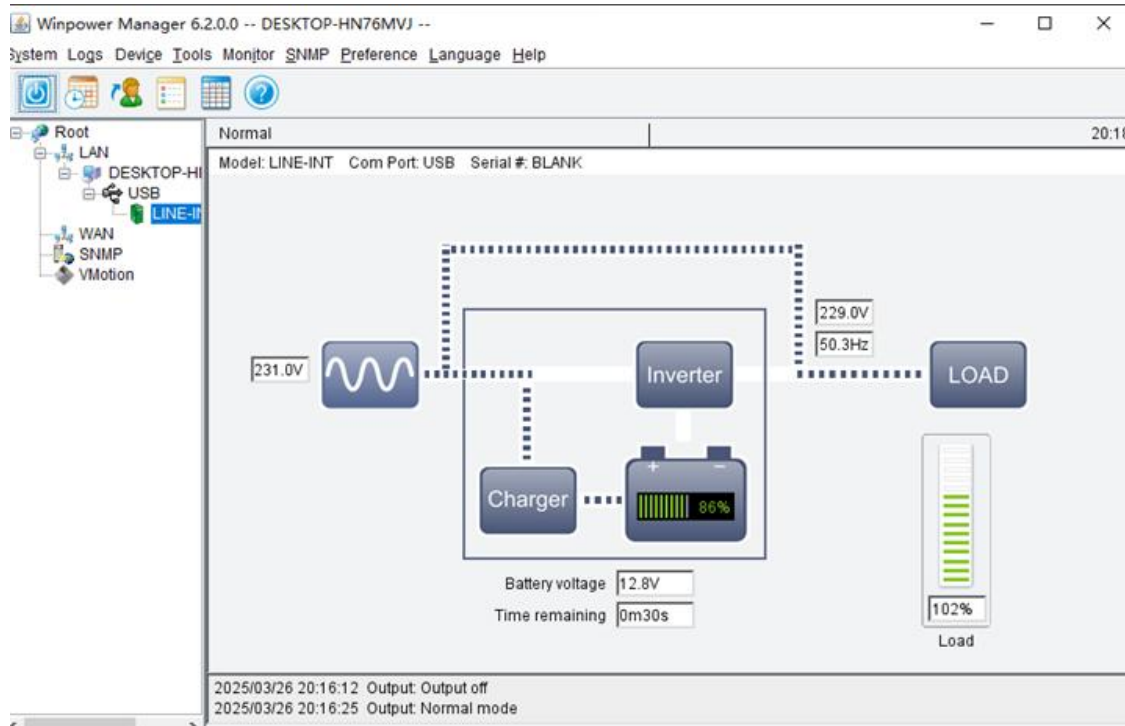
Control

Setting

Log

Info.

- With Smart software-“Winpower”, remote management

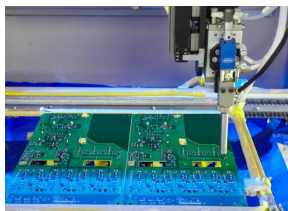


- **Service reminder** for preventive maintenance and key component replacement to minimize downtime.
- Unexpected UPS power outages might be happened by the capacitor, Fan, and Battery lapse without warning;
- APUS III provide end of **lifetime warning** to remind the customer to maintain the UPS;
- **Proactive service** reduces the risk of UPS failure, enhance reliability, and increase service sales and revenue.

- Modular design, easy service and low TCO for highest levels of critical power protection

- High Reliability

- PCBA conformal precision coating
- BYP SCR temperature monitoring
- Optimized parallel technology(OPT)
- Integrated Modbus RTU communication



- Lower TCO

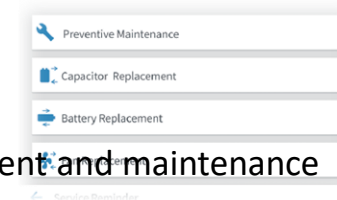
- Output PF 1.0 @40 °C
- Smaller footprint
- High efficiency: up to 96%@double conversion, 99%@ECO.
- Support parallel in ECO
- Optimized Battery Management (OBM)

- Flexible

- Up to 4 units parallel.
- Various battery support: VRLA, Ni-Cd and Li-ion.
- Battery 32-44 adjustment provides a more flexible battery configuration;

- Easy Maintenance and Service

- Hot swap modular design, MTTR<5min
- Easy slide & maintenance battery module
- Service reminder with key component replacement and maintenance remind.



- Smart management

- 7-inch color touchable display
- 2 intelligent communication card slots
- Winpower software monitoring

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