

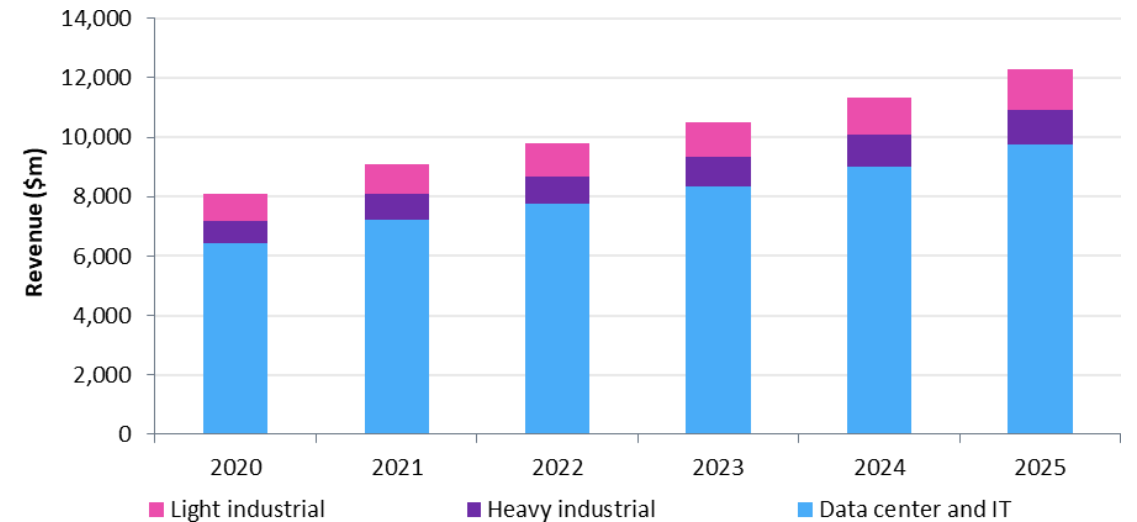
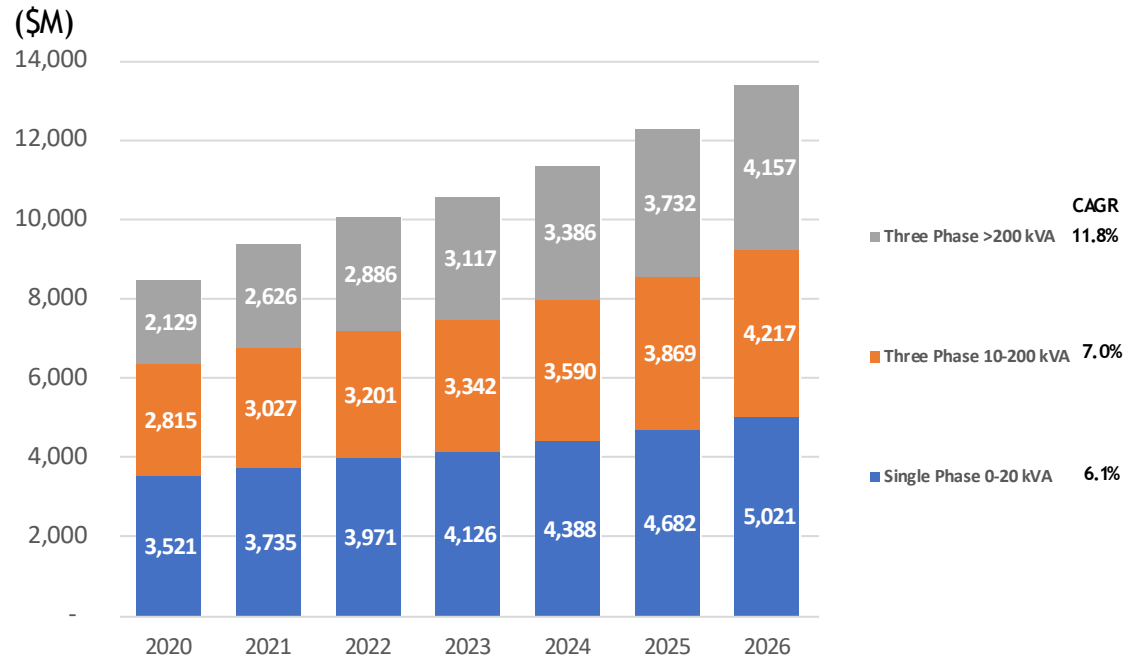


BEACONTM

Product Introduction



3-Phase UPS Market



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 80% of 1 phase UPS size.
- Data center and IT is key targeting market.

ChargeUPS 3-Phase Portfolio



20-80kVA 100-200kVA >200kVA

Module



PRISM 25-75kVA



PRISM 25-200kVA



PRISM 625kVA



Lithium Battery

Tower



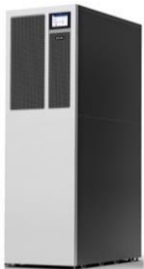
BEACON
20-80kVA



BEACON
20-80kVA
Built-in battery



BEACON
120-200kVA



BEACON
100-200kVA



BEACON ISO
20-200kVA



VRLA 9-200Ah Battery

Tower UPS that offers a semi modular design



BEACON provides all-in-one solution with build-in batteries and EBM for end-users. Compatible with lithium-ion batteries and robust UPS charger design release Lithium battery ultimate performance.

Value Proposition

- **More Power**
 - 11% more power VS traditional UPS.
- **Lower TCO**
 - Double conversion mode efficiency up to 96% to reduce energy cost.
- **Robust and Reliable**
 - Optimized Parallel Technology.
 - 100-110% overload, 60min
- **Easy service**
 - Proactive Service reminder.
 - Semi-module.



Typical Application



Data Center



Light industrial



Medical campus



HIGHER DENSITY

- Significantly reduces up to **50%** of the footprint compared to the previous generation
- Compatible with lithium battery, significantly reduce the system's footprint.



**Smaller
footprint**



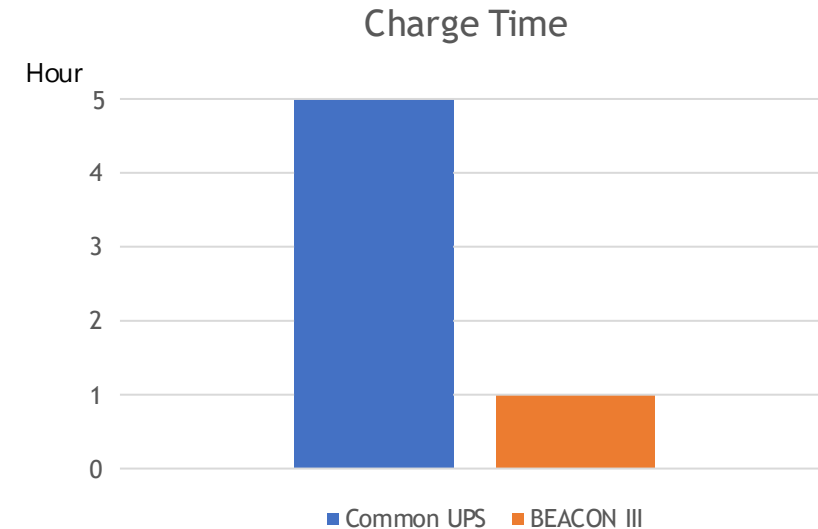
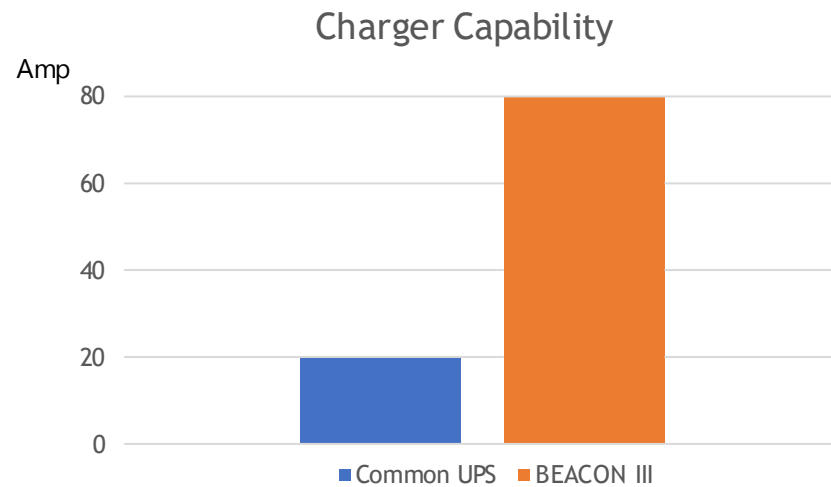
**Compatible with Lithium
Battery**

Powerful charging ability, release lithium battery ultimate performance



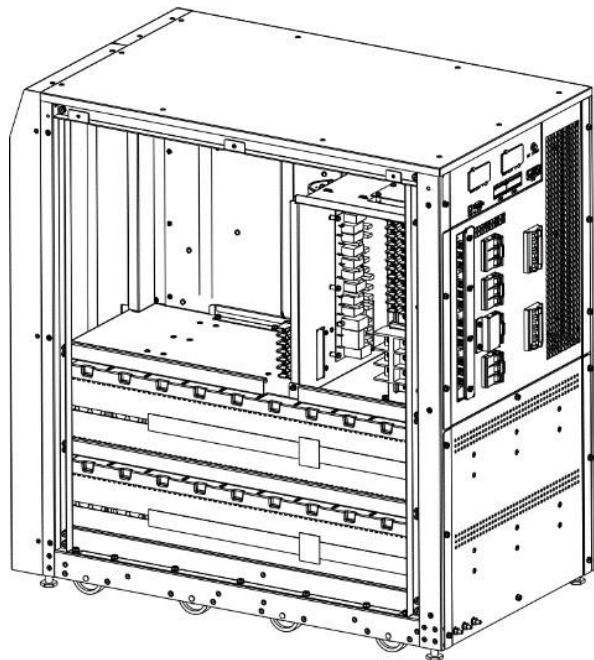
Typical Application:

- 80kVA UPS, 64kW load, 461VDC 80Ah lithium battery provides 30min backup time;
- Lithium battery charge/discharge capability: **1C/4C**;



- Regular UPS could provide a maximum 0.2C charging ability, **5h fully charge the lithium battery.**
- BEACON III could provide a maximum 80A charging current, **1h fully charge the lithium battery**, Release lithium battery ultimate performance

Flexible



Model	Battery default	Battery option
20K	1*40*8Ah	2*40 max
30K	2*32*8Ah	2*40 max
40K	2*40*8Ah	2*40 max
60K	3*40*8Ah	4*40 max
80K	4*40*8Ah	4*40 max

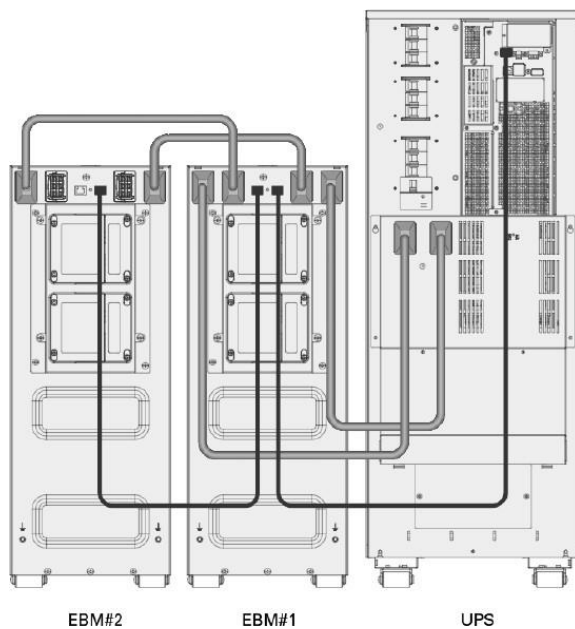


Multiple Application

- Provide long-run and standard models
 - 1.Pre-install battery and without pre-install battery options for flexible configuration and stock management.
 - 2.Support external battery bank.
 - 3.Configurable backup time
- Support Multi-language.

English, Simplified Chinese, Traditional Chinese, French, German, Spanish, Portuguese, Italian, Russian, and Polish

Flexible battery configuration on-site



**BEACON connect with EBM to
achieve flexible backup time**

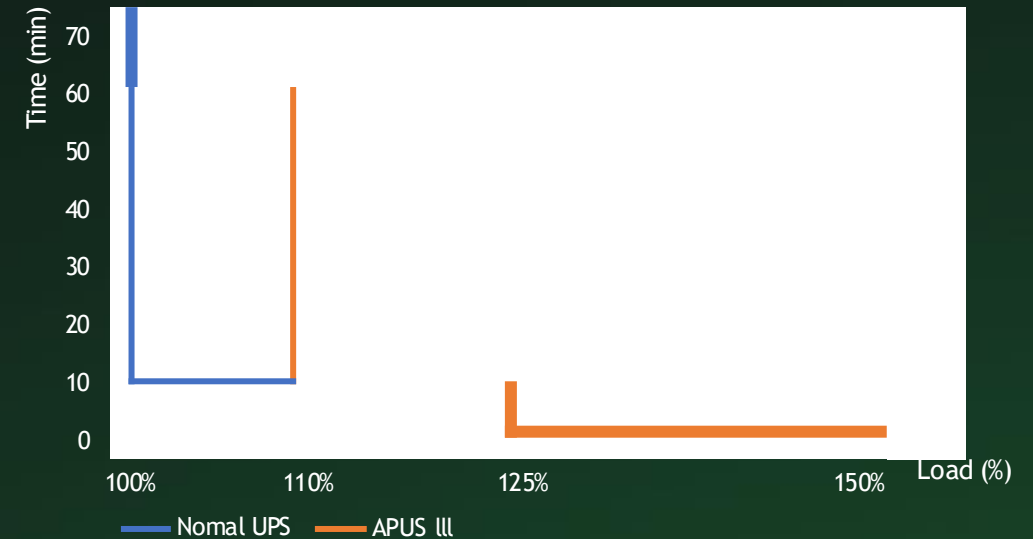


32-44 pcs battery range

Reliability for light industry application



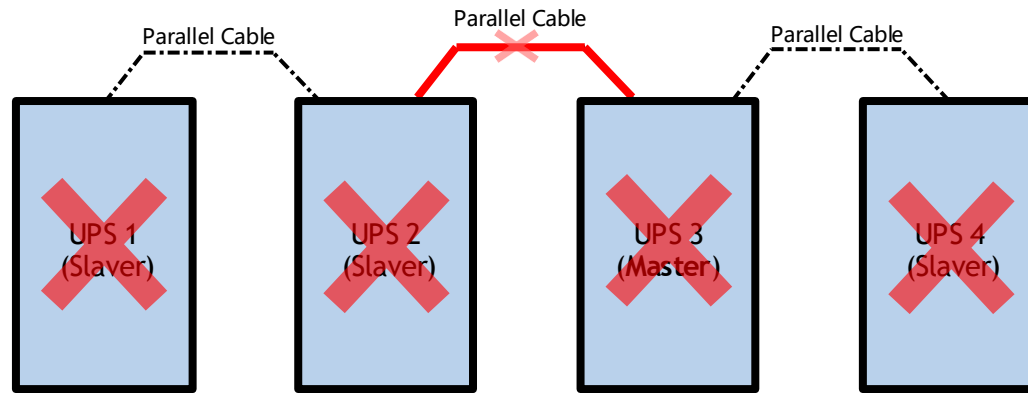
- Dust pollution exists during installation and in the working environment.
- **All PCBA conformal coating** and equipped with standard filter reduces the risk of internal short circuits;
- Improve reliability in highly dusty environments.



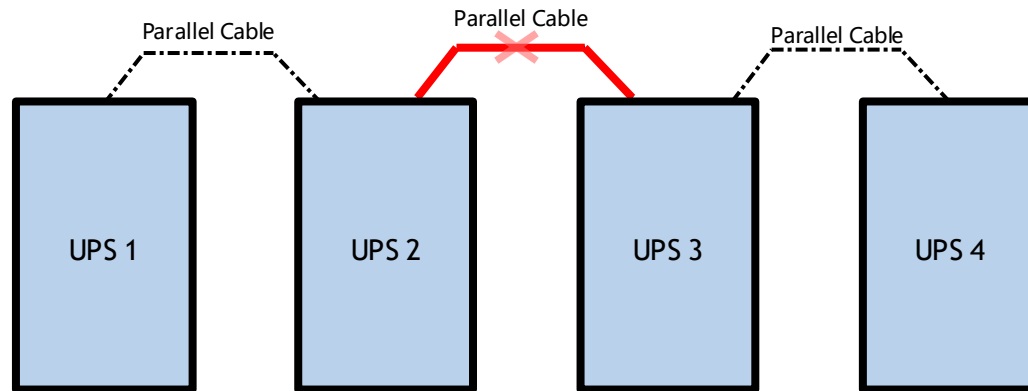
- **100-110% overload, 60min** transfer to bypass mode;
- Higher overload capability reduces the risk of transfer to bypass due to rush power.

Reliability: Optimized Parallel Tech

Master-Slave Architecture



Optimized Parallel Technology



- Regular Master-slave parallel solution might cause a single point of failure.
- Non-master-slave in the parallel system ensures UPS continues output without parallel cable to eliminate a single point of failure and enhance reliability.
- OPT allows one-by-one maintenance without extra maintenance bypass switch.

What is the real cost of a UPS System



Lower TCO - Capex

PF 1.0 to Save initial investment.



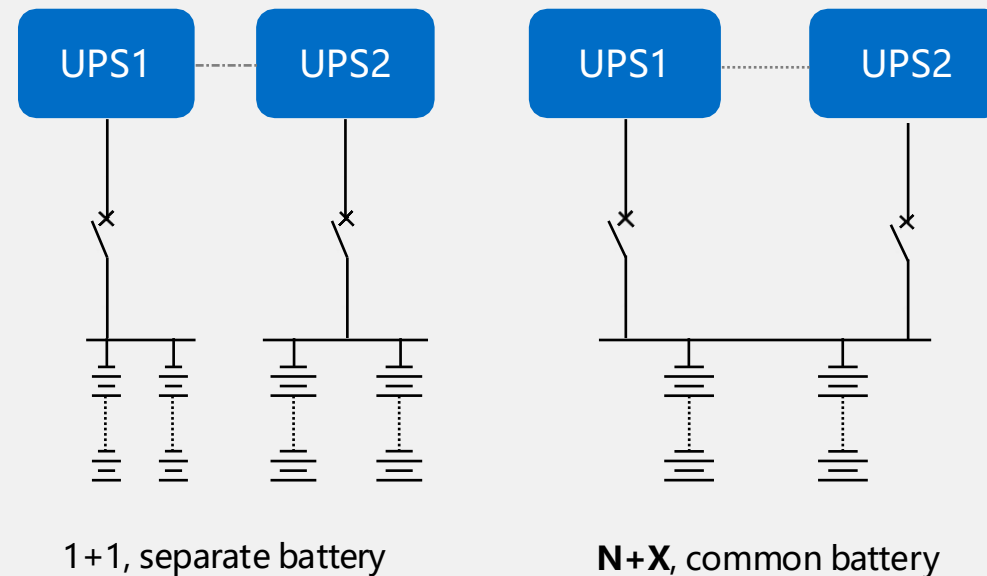
↑
1.0

PF 1.0 Vs PF 0.9

Provide **10%** more output active power

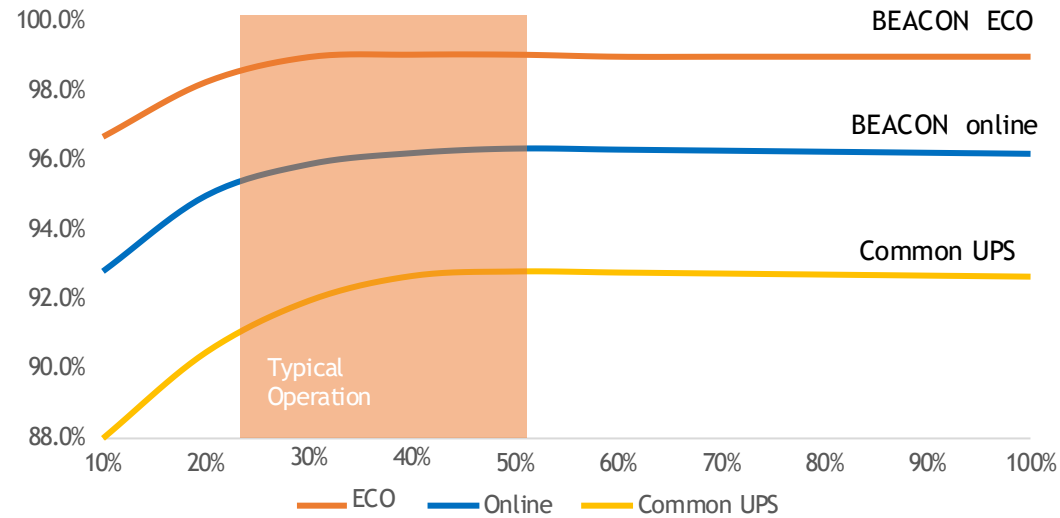
* TCO: Total Cost of Ownership, Capex: Capital Expenditure.

Separate and common battery solutions are available



- BEACON provides 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)

* TCO: Total Cost of Ownership, Opex: Operational Expenditure.

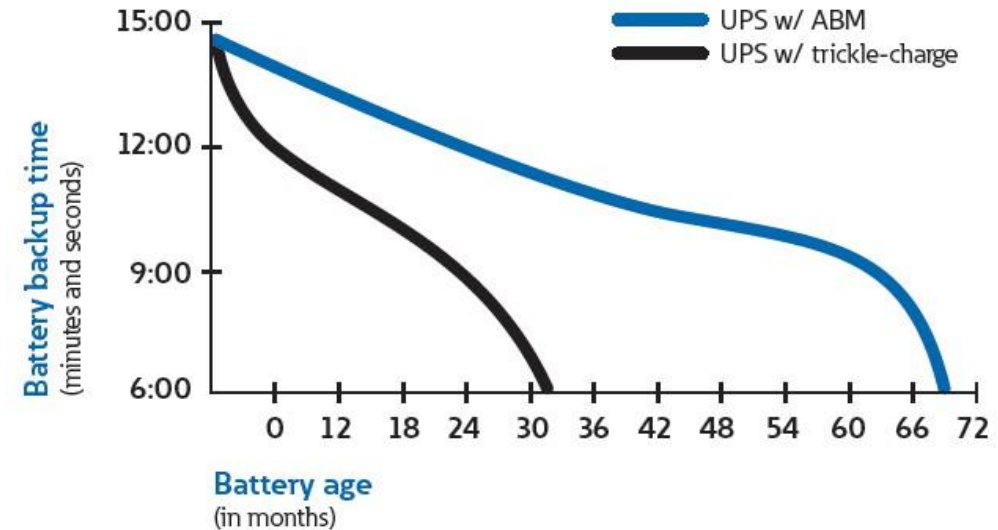
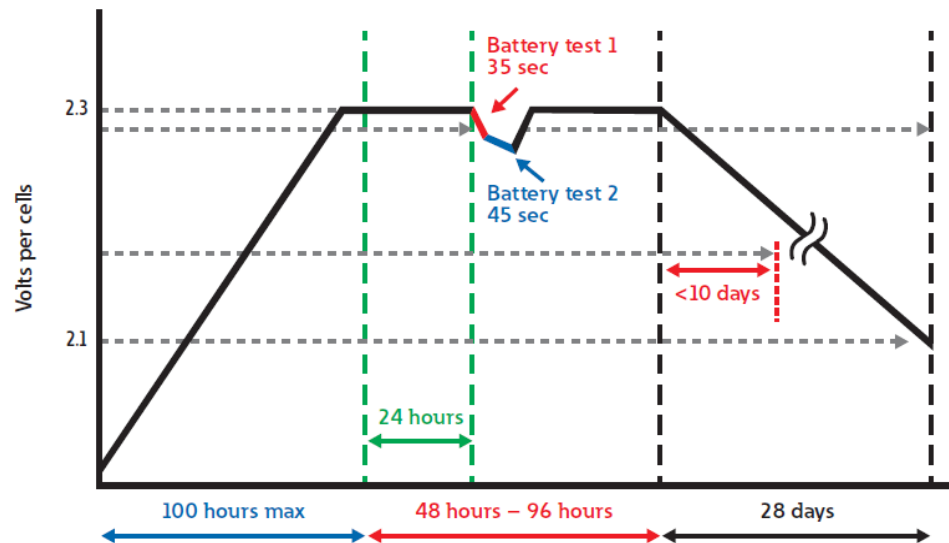


Lower TCO – Optimized Battery Management (OBM)

Reduce the Opex

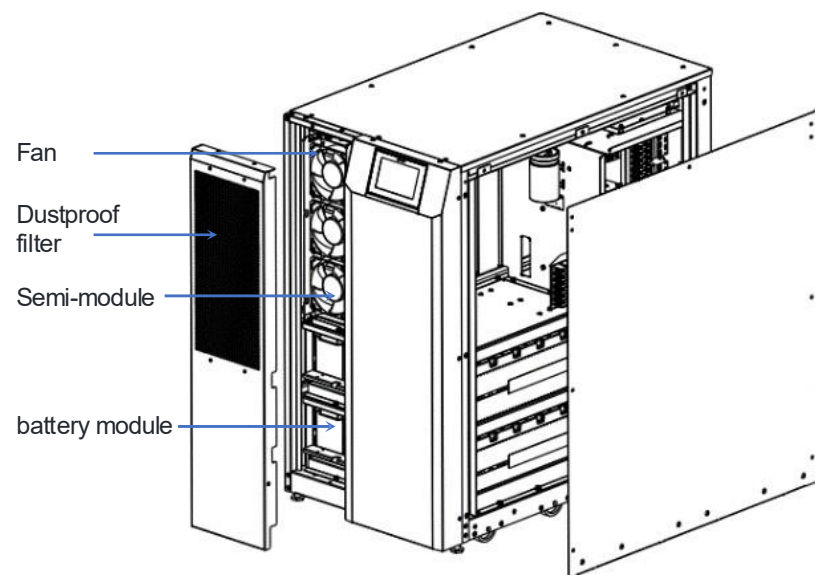


OBM Charging logic

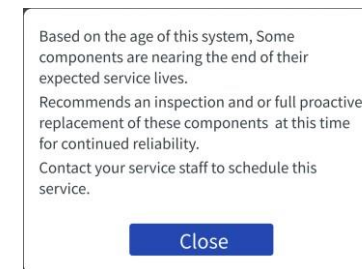
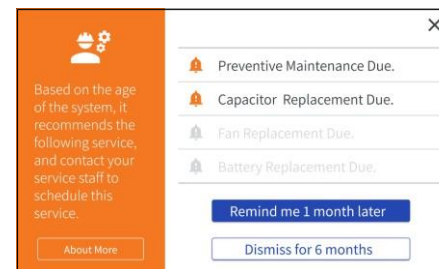
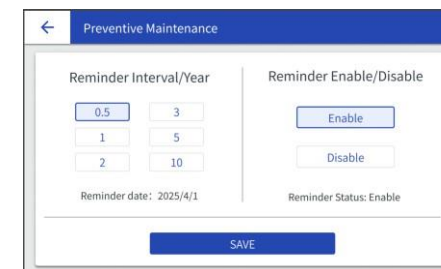
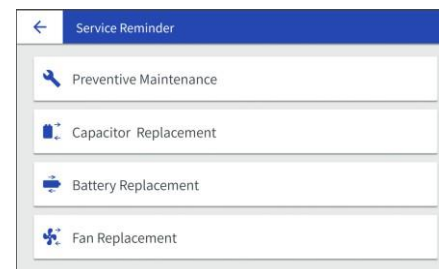


- Most UPS is float charging the battery, this method dries up the electrolyte and corrodes.
- OBM brings the customer three-stage charging logic: CV/CC Charge, Float, and Rest Mode.
- OBM increases 50% of service life compared with batteries that are constantly trickle charged.
- Significant reduce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

Easy Service

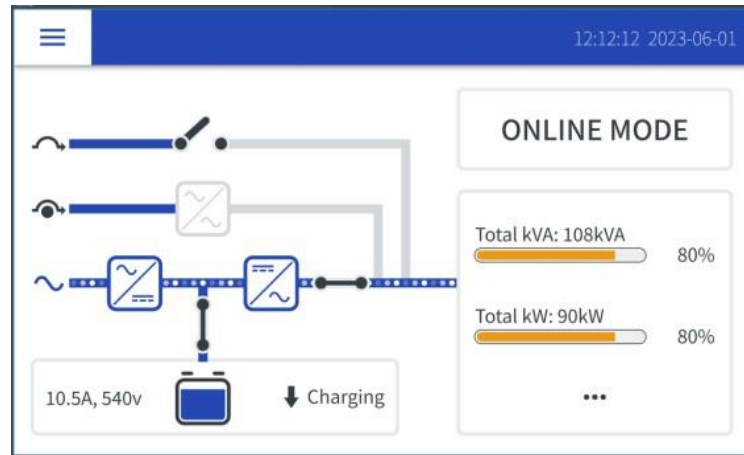


- Less than 25kg **semi-module** design as spare parts enables easier maintenance by one person.
- MTTR < 30min, reduce labor cost.
- **Fan** and **battery module** design to achieve easy replacement via front access.



- Unexpected UPS power outages might be caused by the capacitor, Fan, and Battery lapse without warning;
- BEACON 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.

User Friendly



5-inch touch LCD



Input
Output
bypass
maintenance switch

User-friendly
angular for easy
operation



- Convenient operation via Touch LCD
- User-friendly angle of LCD design
- Equipped with input, output, bypass, and maintenance switch, providing a more convenient operation on-site

Key Features

- **Three-level IGBT** PWM control technology, online mode efficiency up to **96%**, ECO mode efficiency up to **99%**;
- **Output power factor 1** provides more active power;
- Tower UPS, modular design, MTTR < 30mins;
- Higher density reduces up to **50%** of the footprint;
- Powerful charger reduces the charging time dramatically;
- Predictable component lifetime enhances system reliability;
- **Optimized parallel technology**, eliminates single point of failure;
- Optimized battery management (OBM) technology, extended battery life by 50%;
- 5-inch colour touch LCD with **8** languages provides a user-friendly interface for operation
- Robust design with default dust-proof filter & PCBA coating
- **Standard 3-4mins backup time @100% load**
- **Easy slide & maintenance battery module**
- **Up to 4 EBM connections for extended backup time.**
- **Pre-install battery and without pre-install battery options for flexible configuration and stock management**



20-80kVA



www.chargeups.ph