

3-Phase On-line UPS

PlusMAX 2 Series Introduction

20KVA to 80KVA



What is PlusMAX 2 Series 20-80kVA

○ Power rating

- 20、30、40、60、80kW Tower UPS with modular design;
- 20-320kW (up to 4 paralleling)
- 380/400/415VAC 3Ph+N+PE, 50/60Hz

○ Key feature

- **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 declines the charging time dramatically;
- Predictable component lifetime enhances system reliability;
- **Optimized parallel technology**, eliminates single point of failure;
- Optimized battery management (OBM) technology, extended batteries life by 50%;
- Battery **32-44 adjustment** provides a more flexible battery configuration;
- A 5-inch colour touch LCD with **8** languages provides a user-friendly interface for operation;
- **Three-step IGBT** PWM control technology, online mode efficiency up to **96%**, ECO mode efficiency up to **99%**.



20-40KVA



60-80KVA

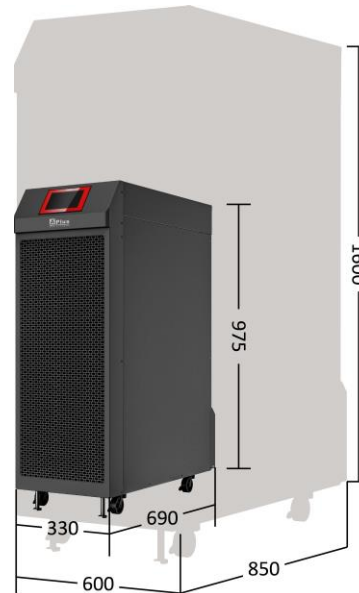
Holistic Enhanced Performance

- Equipped with input, output, bypass, and maintenance switch, providing a more flexible deployment;
- Dual input & Single input adaptive, meet diverse utility power conditions.
- Significantly reduce footprint compared to the previous generation;
- Compatible with lithium battery, maximum 80A powerful charging ability, release lithium battery ultimate performance, and easily achieves up to **500+** cycle life of the battery.

Convenience Operation



Smaller footprint

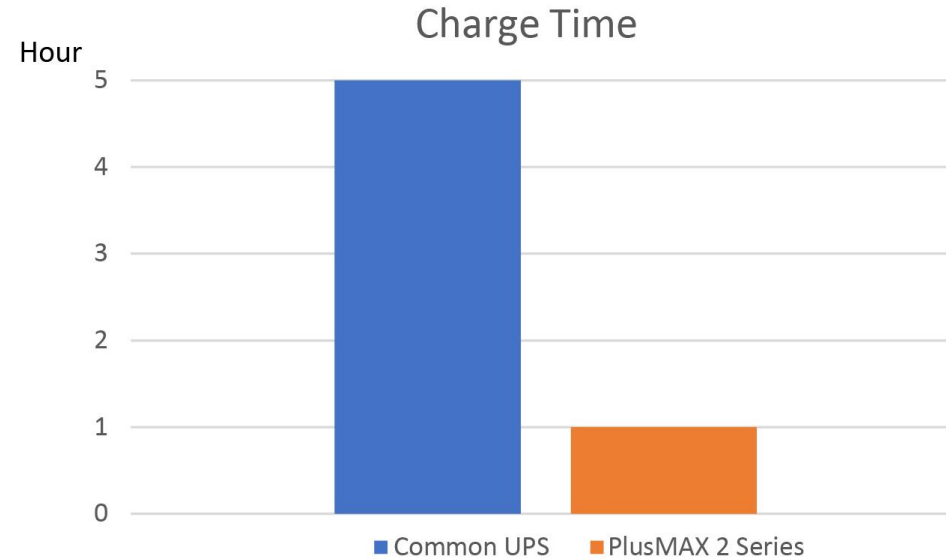
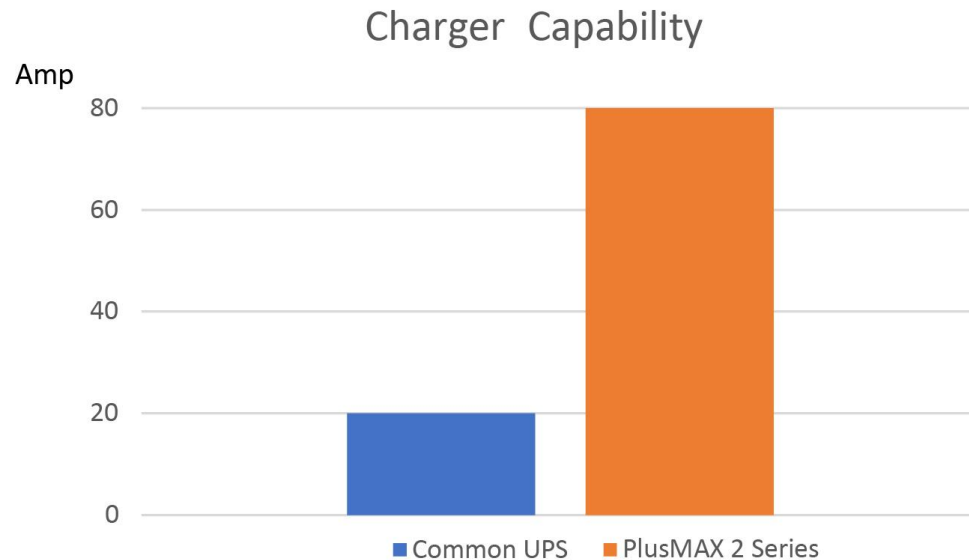


Compatible with Lithium Battery



Typical Application

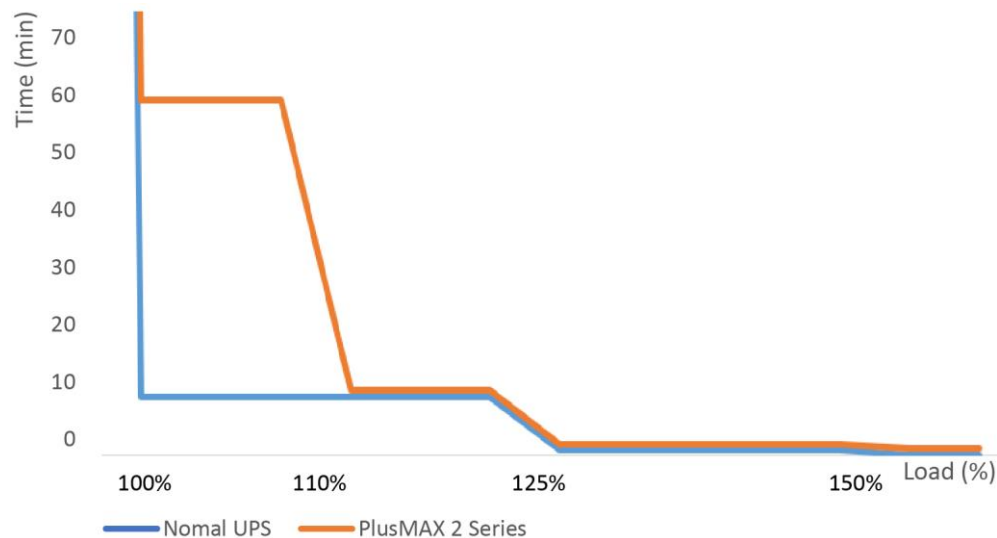
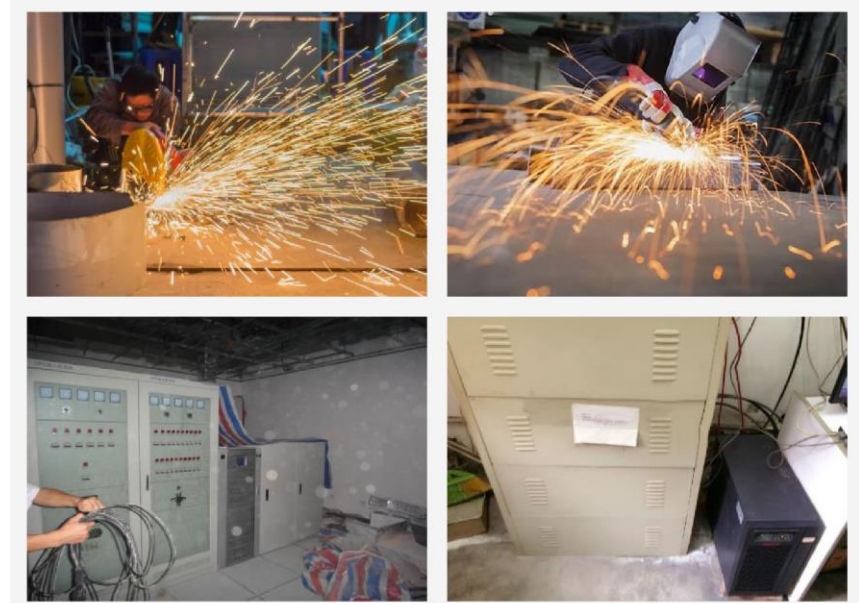
- 80kVA UPS, 64kW load, 461VDC 80Ah lithium battery provides 30min backup time;
- Lithium battery charge/discharge capability: **1C/4C**;



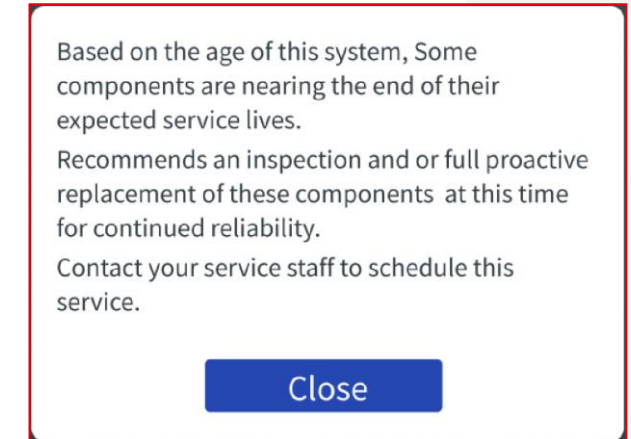
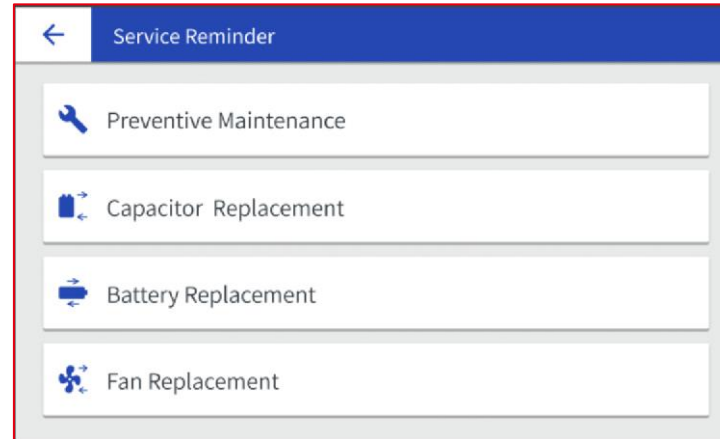
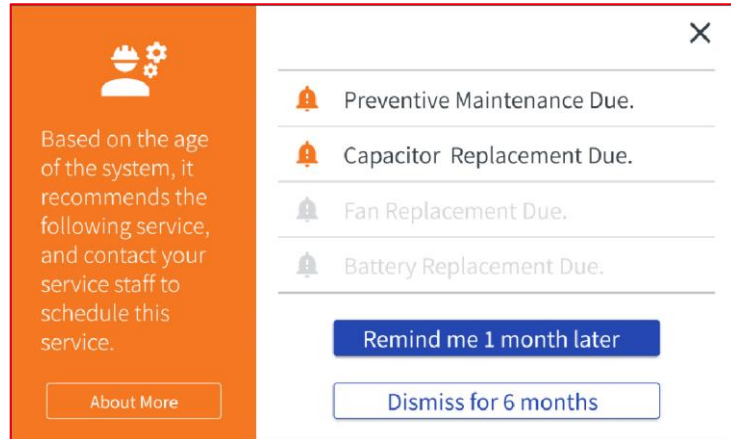
- Regular UPS could provide a maximum 0.2C charging ability, 5h fully charge the lithium battery.
- PlusMAX 2 Series could provide a maximum 80A charging current, **1h fully charge the lithium battery**,
Release lithium battery ultimate performance

Reliability -High-Level Protection & Overload capability

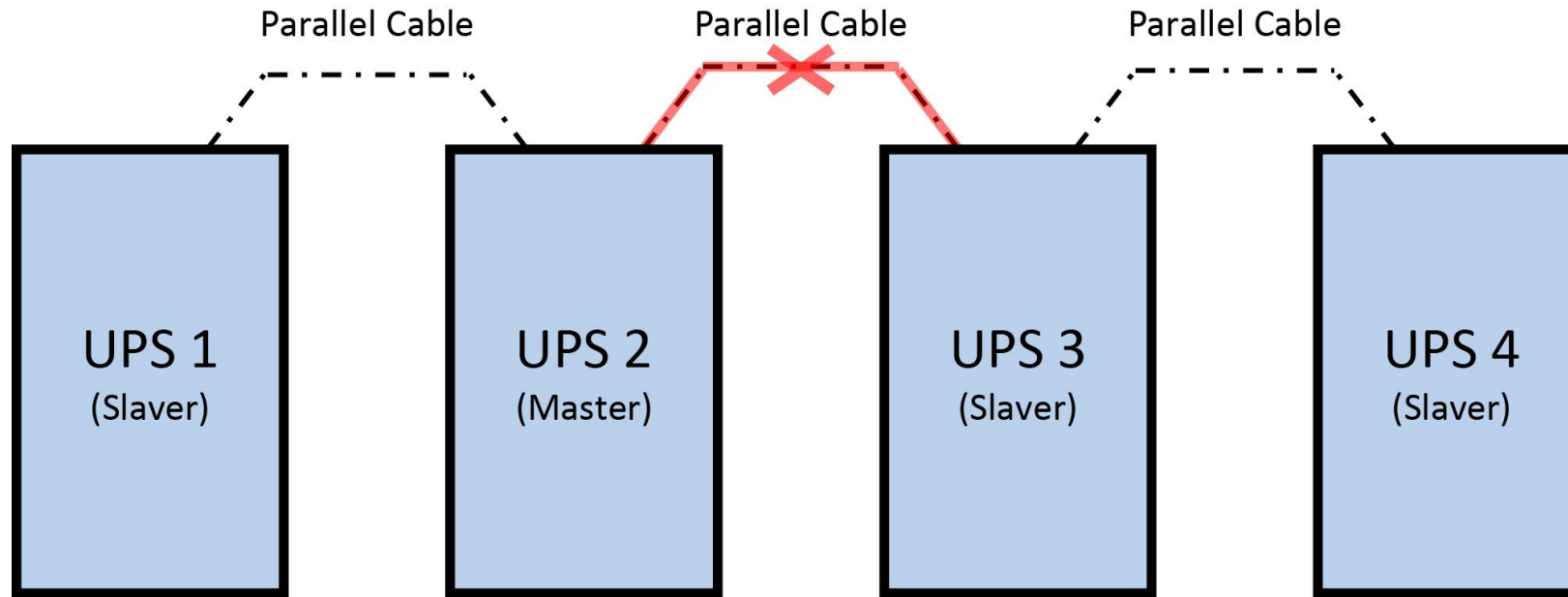
- Dust pollution exists during installation and using environment;
- Standard dustproof filter, commit with dustproof UL 900;
- **All PCBA conformal coating** reduces the risk of internal short circuit;
- Improve reliability in a heavy dusty environment.



- **102-110% overload, 60min** transfer to bypass mode;
- 111-125% overload, 10min transfer to bypass mode;
- 126-150% overload, 1 min transfer to bypass mode;
- Higher overload capability, reduce the risk of transfer to bypass.

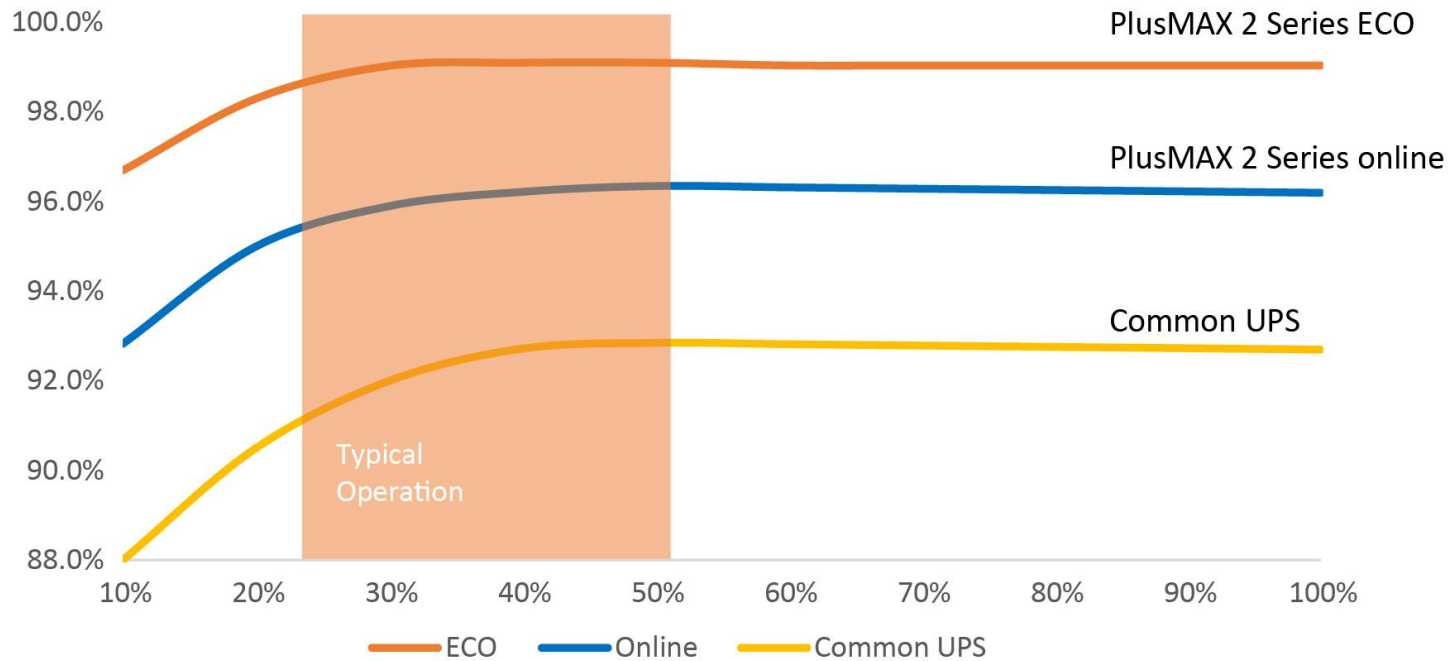


- Unexpected UPS power outages might be happened by the capacitor, Fan, and Battery lapse without warning;
- PlusMAX 2 Series provide end of lifetime warning to remind the customer to maintain the UPS;
- Proactive warnings reduce the risk of UPS failure, enhance reliability, and increase service sales and revenue.



- Regular Master-slave parallel solution might cause a single point of failure;
- APLUS OPT ensures UPS continued output without parallel cable, allows one-by-one maintenance without extra maintenance bypass switch;
- No Master-slave in the parallel system, eliminates single point of failure, enhances reliability.

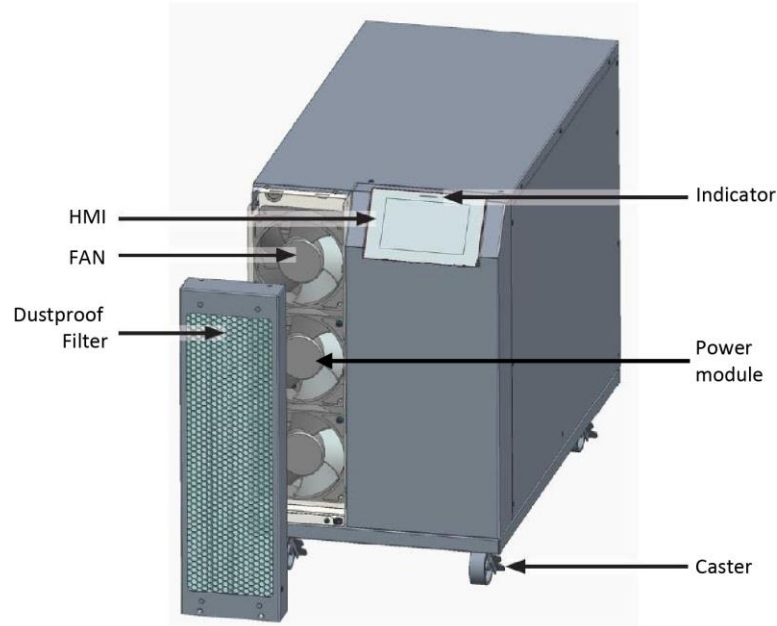
Lower TCO -Opex



- 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)

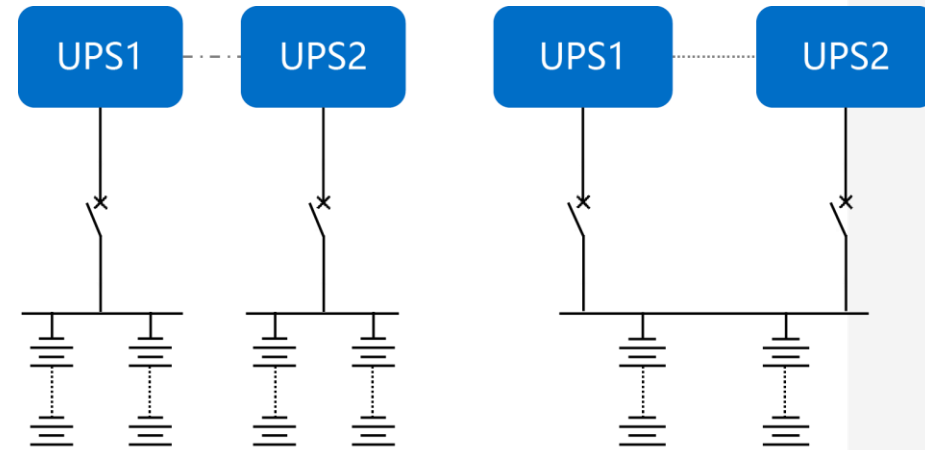
* TCO: Total Cost of Ownership, Opex: Operational Expenditure.

Modular designed, MTTR < 30min



- Power module easy replacement design, modular weight $\leq 25\text{kg}$, easy to maintain by one person;
- Cleanable and fire-resistant dust filter, comply with UL94 and UL900 standards;
- Fan modular design to achieve easy replacement via front access.

Separate and common battery solutions are available



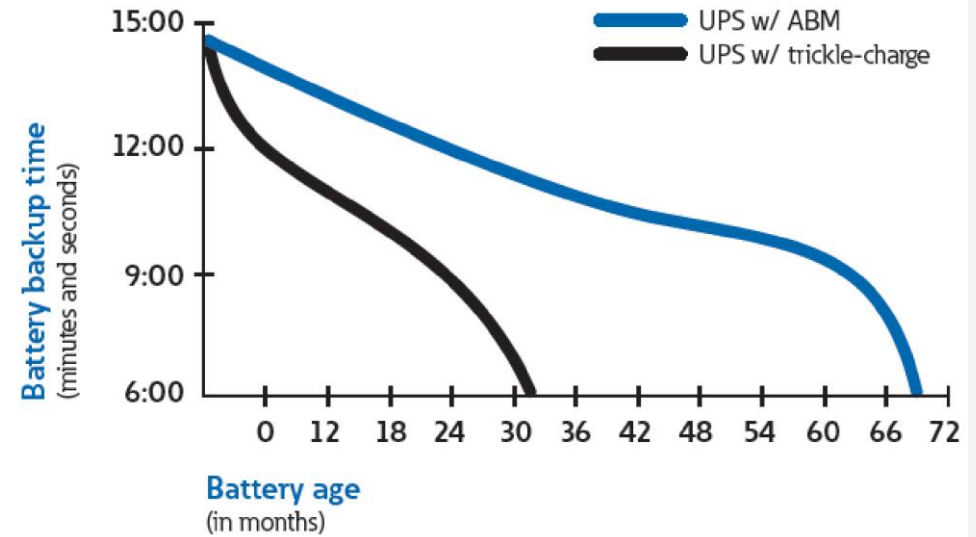
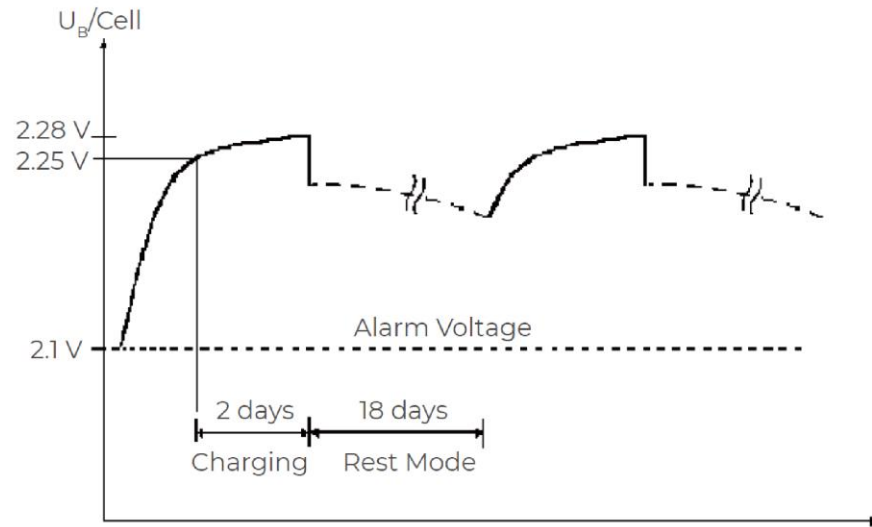
1+1, separate battery

N+X, common battery

- PlusMAX 2 Series provides separate battery solution and common battery solution.
- Saving 50% cost more by common battery solution.

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

Lower TCO -Optimized Battery Management (OBM) reduce the Opex



- Most USP is trickle charging the battery, this method **dries up the electrolyte and corrodes**, shortening the battery lifetime.
- OBM brings the customer three-stage charging logic: 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.

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