

UPS Systems with Lithium-Ion Batteries:

UPS Systems with Lithium-Ion Batteries can be the perfect choice for your three phase UPS. Lithium-ion batteries offer several advantages over traditional valve-regulated, lead acid batteries commonly used in UPSs today.

UPS Systems with Lithium-Ion Batteries Benefits

Normal battery voltages are 2.25 volts per cell or 13.5 volts DC for a “12” volt battery. Battery voltages under charge should be 13.5 volts on average for all batteries. After isolation, the open cell (non-charging state) should be slightly lower than 13.5. These readings are recorded and any discrepancies are noted. Depending on the size of the battery, the voltage will drop to 11 volts or so under load. All battery voltages under load are recorded.



Longer life expectancy: Lithium-ion technology can double or triple battery service life, reducing the risks of downtime or load interruption during maintenance or replacement. Lithium-ion batteries also offer up to 10X the cycle life of VRLA batteries.

More power in less space: Lithium-ion batteries provide multiple times the energy and power density compared to VRLA. As a result, UPSs built with Li-ion batteries take up only about one-third the space of a VRLA-based solution that delivers the same power.

More forgiving in a wide range of temps: Li-ion batteries can withstand a wider temperature range than VRLA batteries.

Reduced cooling requirements and costs: The smaller footprint and wider temp range of lithium ion batteries can reduce the space needed in a battery room and increase the optimal operating temperature range.

Less weight: Lithium-ion batteries offer at least a two-thirds reduction in weight, at least. That means customers have more flexibility in terms of where they install the systems and can often avoid costly building modifications.

Battery monitoring systems included: Li-ion batteries always come with sophisticated battery monitoring systems (BMS) that provide a clear picture of battery runtime and health.