

FL48420

Forklift Lithium Battery



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Long Cycle Life: provides up to 20 times longer cycle life and 5 times longer float/service life than lead acid, battery help to minimize replacement costs and reduce total cost of ownership.

Smaller Footprint: better gravimetric/volumetric specific energy up to 3 times compare with lead acid battery.

More Available Energy: deliver twice energy of the lead acid battery, when discharged with heavy load.

Superior Safety: build-in BMS—eliminates the risk of explosion or combustion due to high impact, overcharging or short circuit situation with safe lithium iron phosphate chemistry.

Fully compatible: design to replace VRLA battery, compatible with conventional lead acid powered system.

Technical Parameters

Nominal Voltage (V)	51.2
Nominal Capacity (Ah)	420
Total Energy (kWh)	21.50
End Charge Voltage (V)	58.4
Discharge Cut-off Voltage (V)	40
Float Charge Voltage (V)	55.2
Standard Charge/Discharge Current (A)	280 CH / 350 DCH
Max. Charge/Discharge Current (A)	560 CH / 700 DCH
Peak Output Current (A)	840 @1s
Lithium Chemistry	LiFePO ₄
Cycle Life	3500
Design Life	10 years

Mechanical Specifications

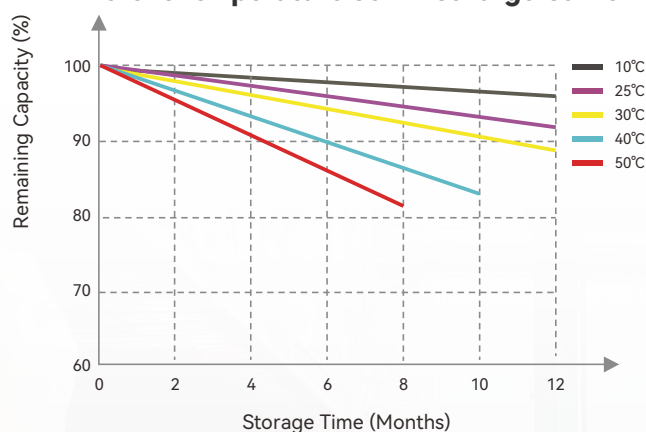
Dimension (mm)	W970 * D630 * H571
Weight (kg)	Approx. 300
Communication	CAN
Ingress Rating	IP 65
Safety Standards	UN38.3, CE

▸ Environmental Specifications

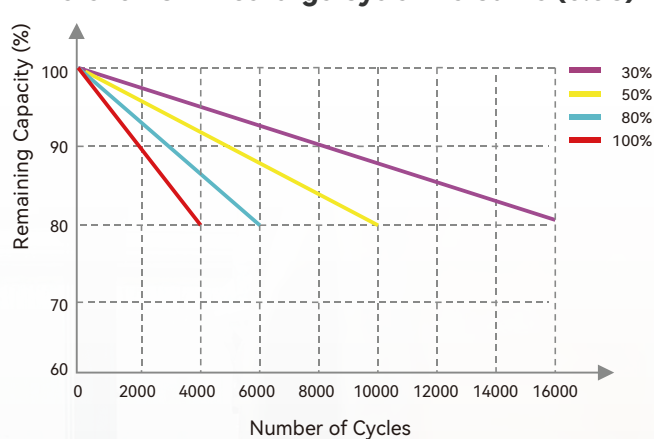
Storage Temperature (°C)	-20 ~ 45 (1 month)
Operating Temperature Charge (°C)	-20 ~ 55
Operating Temperature Discharge (°C)	-20 ~ 55
Operating Relative Humidity	5 ~ 95%

▸ Operating Performance

Different Temperature Self Discharge Curve



Different DOD Discharge Cycle Life Curve (0.5C)



Notes:

Battery should be kept in a dry and ventilated place, avoid direct contact with corrosive substances, also away from sources of fire and heat. Keep the SOC of the battery above 50% if you need to store it for an extended long period. It should be refresh charged every 3 months regularly and SOC should be maintained at about 50% if battery will be stored for a long term.