

FLP12-84

Datasheet

FULBAT[®]

HIGH CYCLIC BATTERY

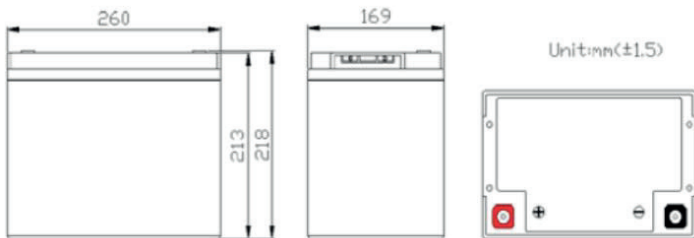


LiFePO₄ NON-SPILLABLE

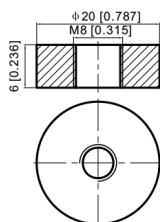
FLP Series are Lithium Iron Phosphate (LiFePO₄) batteries specially designed to replace lead acid batteries thanks to their standard size cases and their similar charging voltage. The FLP Series offer many advantages compared to lead acid in terms of weight, cyclic performance, safety and power. This range is ideal for applications that require a higher power-weight ratio and with minimal service or replacement requirements.

DIMENSIONS & WEIGHT

Length	260±2mm
Width	169±2mm
Total height	218±2mm
Gross weight	10.5kg



TERMINAL



SPECIFICATIONS

Nominal voltage	12.8V
Nominal capacity	84Ah (5hr)
Energy	1075.2Wh
Internal resistance	Approx 25mΩ
Cycle life	Up to 2000 cycles at 100% DOD* Up to 4000 cycles at 80% DOD*
Protection function (BMS)	Over charge protection/Over discharge protection/Over current protection/Temperature protection/Balanced function
Terminal	T11(M8)
Standard charge	
Charge voltage	14.6±0.2V
Charge mode	Charge CC: 0.2C to 14.6V, then 14.6V until current drops to 0.02C
Charge current	16.8A
Max. charge current	42A
Standard discharge	
Discharge current	16.8A
Max. continuous current	84A
Max. pulse current	168A (≤5s)
Discharge cut-off voltage	10.0V
Operating temp. range	
Charge temperature	0°C to 45°C
Discharge temperature	-20°C to 60°C
Storage temperature	0°C to 35°C
Self discharge	Can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly self-discharge ratio is less than 3.5% at 25°C
Container material	A.B.S.
IP Rate	IP65

APPROVALS

ISO9001 - Quality management system
ISO14001 - Environmental management System
UN38.3 certified: approved for transport by Air (IATA)

APPLICATIONS



Marine & leisure



Renewable energy

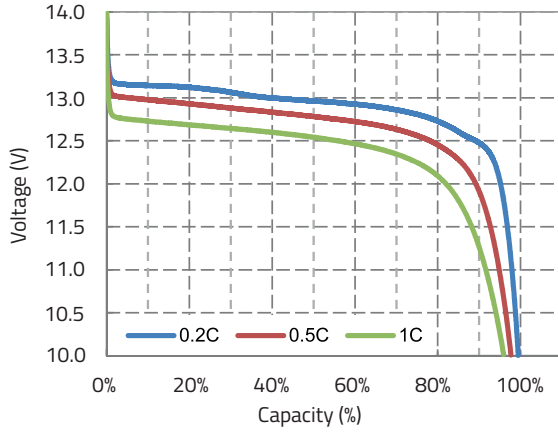


Mobility

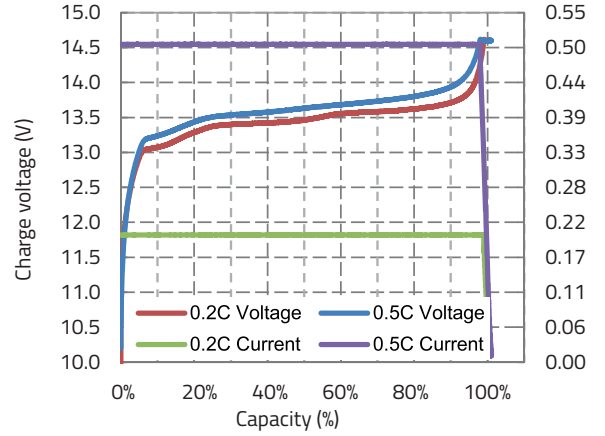


Floor cleaning machine

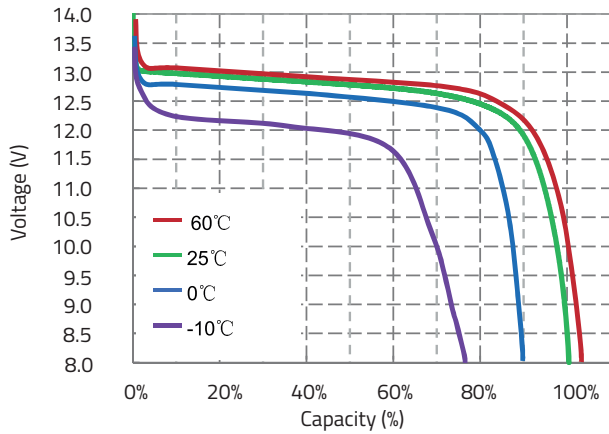
DIFFERENT RATE DISCHARGE CURVE, 25°C



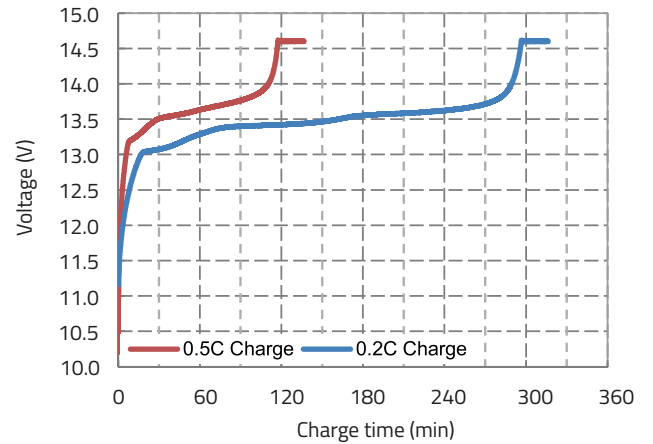
CHARGE CHARACTERISTICS, 0.2C & 0.5C, 25°C



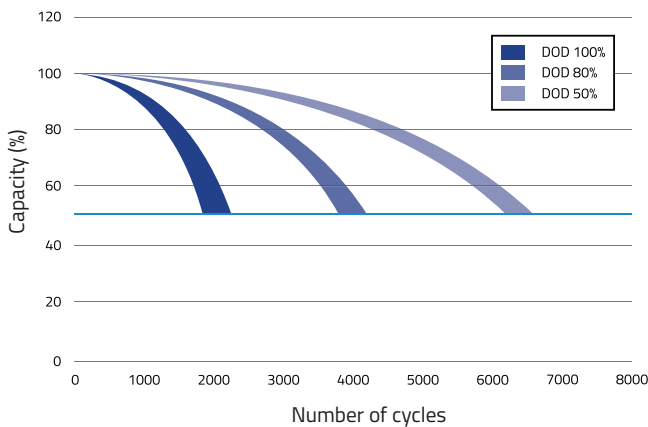
DIFFERENT TEMPERATURE DISCHARGE, 0.5C, 25°C



CHARGE CHARACTERISTICS, 0.2C & 0.5C, 25°C



DIFFERENT DOD DISCHARGE CYCLE LIFE CURVE



OPEN CIRCUIT VOLTAGE VS SOC%

