

# FLP12-84

## Datasheet

# FULBAT<sup>®</sup>

**HIGH CYCLIC BATTERY**

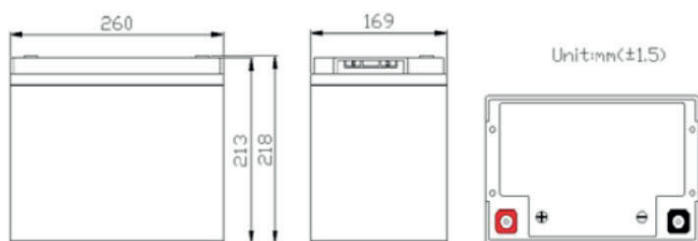


## LiFePO<sub>4</sub> NON-SPILLABLE

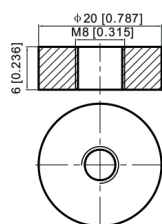
FLP Series are Lithium Iron Phosphate (LiFePO<sub>4</sub>) batteries specially designed to replace lead acid batteries thanks to their standard size cases and their similar charging voltage. The FLP Series offer many advantages compared to lead acid in terms of weight, cyclic performance, safety and power. This range is ideal for applications that require a higher power-weight ratio and with minimal service or replacement requirements.

### DIMENSIONS & WEIGHT

<b>Length</b>	260±2mm
<b>Width</b>	169±2mm
<b>Total height</b>	218±2mm
<b>Gross weight</b>	10.5kg



### TERMINAL



### SPECIFICATIONS

<b>Nominal voltage</b>	12.8V
<b>Nominal capacity</b>	84Ah (5hr)
<b>Energy</b>	1075.2Wh
<b>Internal resistance</b>	Approx 25mΩ
<b>Cycle life</b>	Up to 2000 cycles at 100% DOD* Up to 4000 cycles at 80% DOD*
<b>Protection function (BMS)</b>	Over charge protection/Over discharge protection/Over current protection/Temperature protection/Balanced function
<b>Terminal</b>	T11
<b>Standard charge</b>	
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
<b>Standard discharge</b>	
Discharge current	16.8A
Max. continuous current	84A
Max. pulse current	168A (≤5s)
Discharge cut-off voltage	10.0V
<b>Operating temp. range</b>	
Charge temperature	0°C to 45°C
Discharge temperature	-20°C to 60°C
Storage temperature	0°C to 35°C
<b>Self discharge</b>	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
<b>Container material</b>	A.B.S.
<b>IP Rate</b>	IP65

### APPROVALS

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

### APPLICATIONS



Marine & leisure



Renewable energy

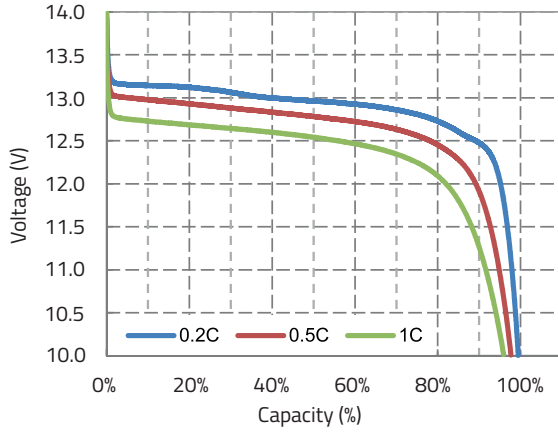


Mobility

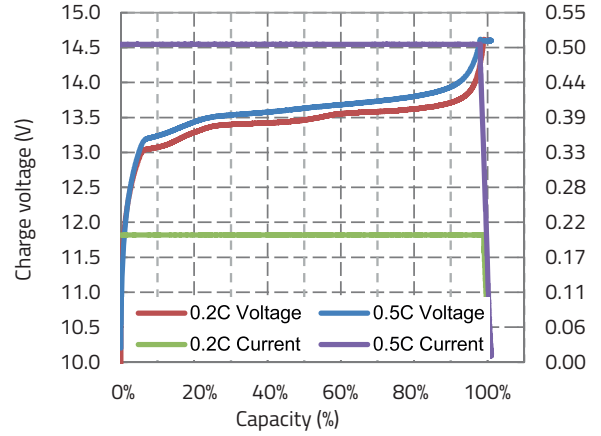


Floor cleaning machine

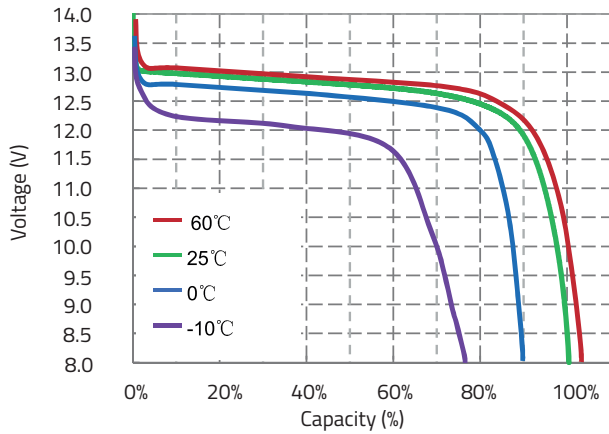
### DIFFERENT RATE DISCHARGE CURVE, 25°C



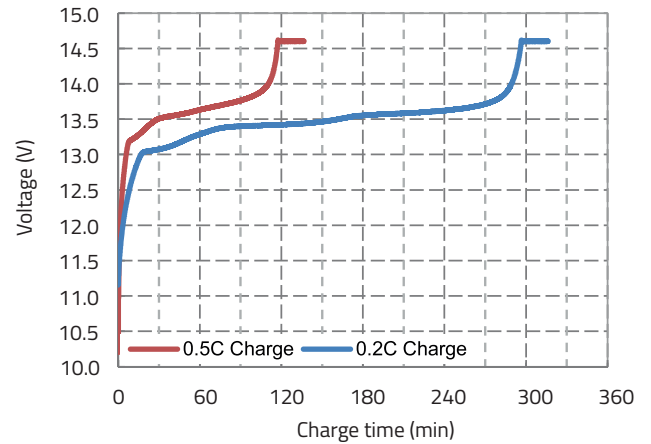
### CHARGE CHARACTERISTICS, 0.2C & 0.5C, 25°C



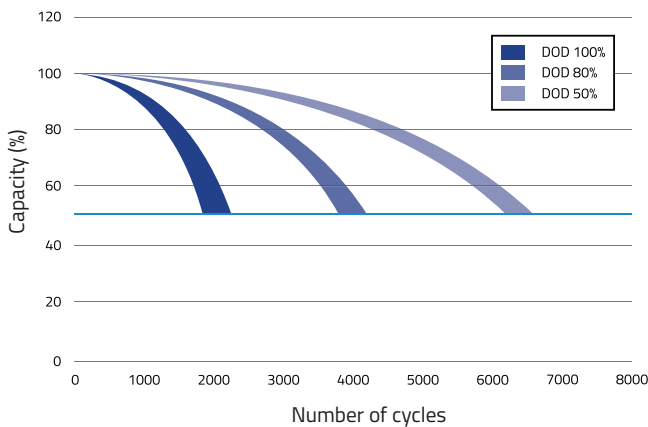
### DIFFERENT TEMPERATURE DISCHARGE, 0.5C, 25°C



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



### DIFFERENT DOD DISCHARGE CYCLE LIFE CURVE



### OPEN CIRCUIT VOLTAGE VS SOC%

