

# LiFePO<sub>4</sub> Lithium Battery











### LIVEN LVIF Series-LiFePO<sub>4</sub>

- > High performance, completely maintenance-free, low self-discharge
- > Floating & standby use: up to 10 years
- > 100% precise quality testing, stable quality and high reliable performance
- > Uniform output voltage in all the discharge curve
- > Provide full nominal capacity, even at high currents
- > Energy density: up to 130Wh/kg
- > Capacity density: up to 145Ah/kg
- > Suitable for standby power and energy storage power use
- > Long storage time
- > Cycle use: Up to 2000 cycles at 100% DOD

## **Application:**

- > Telecommunications
- Uninterruptable Power Supply (UPS)
- > DC power supply
- Electric Power System (EPS)
- > Emergency backup power supply
- > Wheelchairs and Scooters
- > Golf trolleys and Golf cart
- > Railway and Marine systems
- > Electric tools
- > Medical equipments

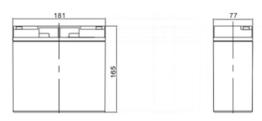
# **Specification:**

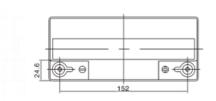
NOMINAL VOLTAGE			12.8 V
NOMINAL CAPACITY (0.2C, 25°C)			19.2±1Ah
DISCHARGE	NORMAL CURRENT		18A
	MAX CONTINUOUS CURRENT		≤25A (≤ 5min)
	CUT-OFF VOLTAGE		10±0.2V
CHARGE	CHARGE VOLTAGE		14.4±0.15V
	CHARGE CURRENT		≤ 4A
	CHARGE MODE		CC/CV, use special Lithium LFP Charger.
INNER RESISTANCE	DISCHARGING INNER RESISTANCE		≤ 45mΩ
CONFIGURATION			04S06P
OPERATION TEMPERATURE RANGE		CHARGE	0°C~+45°C
(When the environment temperature is higher than 45°C, please pay attention to ventilation and heat rejection)		DISCHARGE	-20°C~+60°C
STORAGE TEMPERATURE RANGE (Capacity 80%) (Recommended long term storage temperature is 15~25°C)			0°C~ +40°C
HUMIDITY RANGE (When the environment temperature is higher than 45°C, please pay attention to ventilation and heat rejection)		CHARGE- DISCHARGE	RH= 85%, When the environment humidity is higher than 85%, please pay attention to protect.
		STORAGE	RH= 50%, Easily oxidized components note sealed.
BP PROTECTION - BMS FEATURES  OVP=Over charge protection; UVP=Over discharge protection; SC=Short-circuit;  TEMP=Temperature levels protection (Charge & Discharge); BF=Balanced Function			OVP, UVP, SC, TEMP, BF
BATTERY PACK HOUSING			Plastic case.
DIMENSIONS (LxWxH) (mm)			181±1mm x 76.5±1mm x166±2mm
WEIGHT (kg)			2.60 ±0.1kg
CYCLE			Standard charge at 0.2C (A), rest 0.5~1h, discharge at 0.2C to cut off voltage, rest 0.5~1h, repeat the above steps until 1500 cycles. (capacity retention rate= 80%)

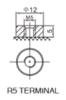




### **Drawing:**

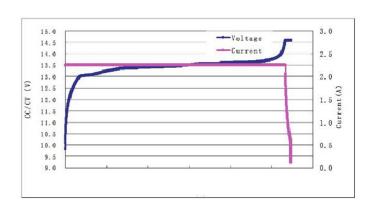




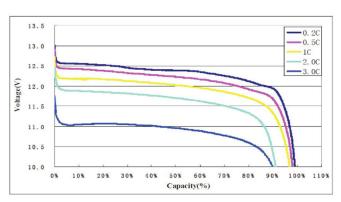


### **Battery Characteristic Curve at 25°C (77°F)**

12V LiFePO4 Battery Charge Curve; 0.2C; 25'C

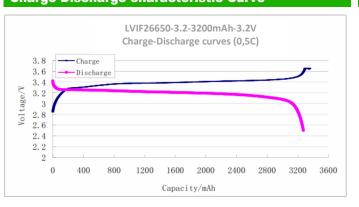


#### 12V LiFePO4 Battery Different Rate Discharge Curve; 25'C



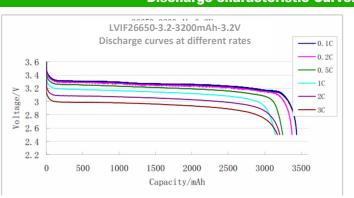
### Cell feature Curves at 25°C (77°F)

# Charge-Discharge characteristic Curve

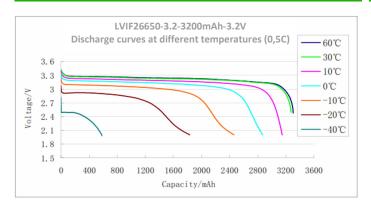


# Discharge characteristic Curves

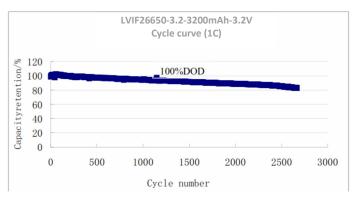
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#### **Discharge Curves at different Temperatures**



# Life characteristics of cyclic use



– Living Energy