



LIVEN LVIF Series-LiFePO₄

- > 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

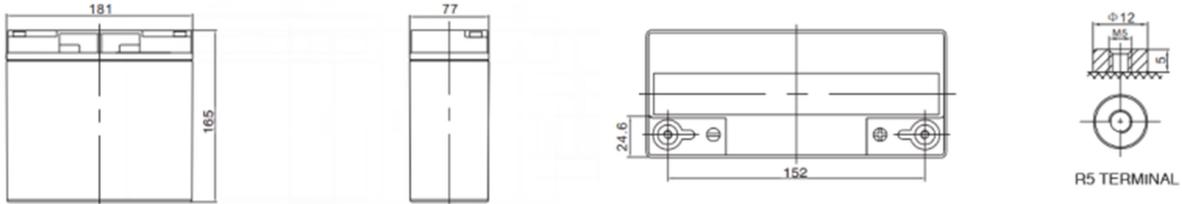
Application:

- > 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:

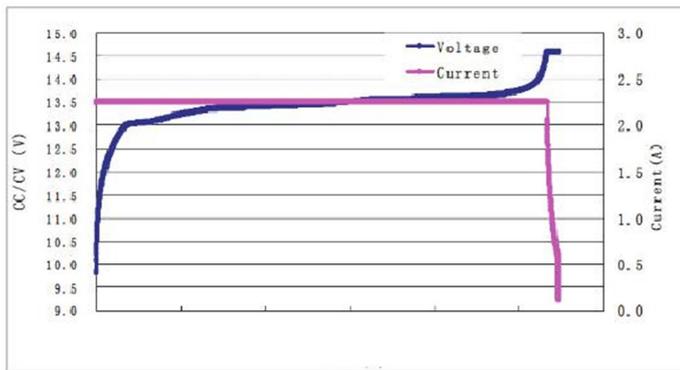
NOMINAL VOLTAGE		12.8 V
NOMINAL CAPACITY (0.2C, 25°C)		19.2±1Ah
DISCHARGE	NORMAL CURRENT	≤10A
	MAX CONTINUOUS CURRENT	40A (@ 5min)
	MAX PEAK CURRENT	40A (@ 5sec)
	CUT-OFF VOLTAGE	10±0.2V
CHARGE	CHARGE VOLTAGE	14.4±0.15V
	CHARGE CURRENT	≤ 4A
	CHARGE MODE	CC/CV, use special Lithium LFP Charger.
INNER RESISTANCE	DISCHARGING INNER RESISTANCE	≤ 45mΩ
CONFIGURATION		04S12P
OPERATION TEMPERATURE RANGE <i>(When the environment temperature is higher than 45°C, please pay attention to ventilation and heat rejection)</i>		CHARGE 0°C~+45°C DISCHARGE -20°C~+60°C
STORAGE TEMPERATURE RANGE (Capacity 80%) <i>(Recommended long term storage temperature is 15~25°C)</i>		0°C~ +40°C
HUMIDITY RANGE <i>(When the environment temperature is higher than 45°C, please pay attention to ventilation and heat rejection)</i>		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 <i>OVP=Over charge protection; UVP=Over discharge protection; SC=Short-circuit; TEMP=Temperature levels protection (Charge & Discharge); BF=Balanced Function</i>		OVP, UVP, SC, TEMP, BF
BATTERY PACK HOUSING		Plastic case.
DIMENSIONS (LxWxH) (mm)		181±1mm x 76.5±1mm x166±2mm
WEIGHT (kg)		2.90 ±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 2000 cycles. (capacity retention rate= 80%)

Drawing:

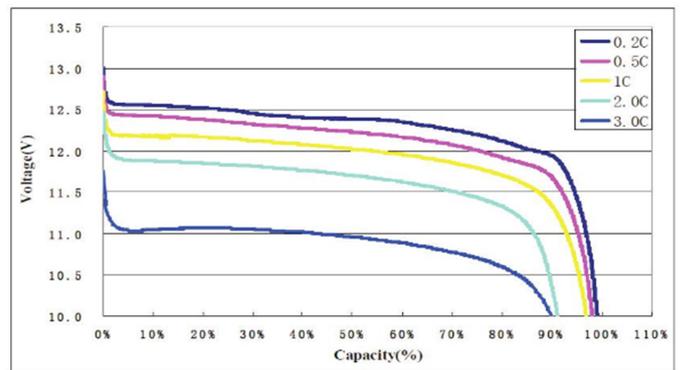


Battery Characteristic Curve at 25°C (77°F)

LVIF – 12,8V LiFePO4 LIVEN Battery
Battery Charge Curve (0,2C; 25°C)

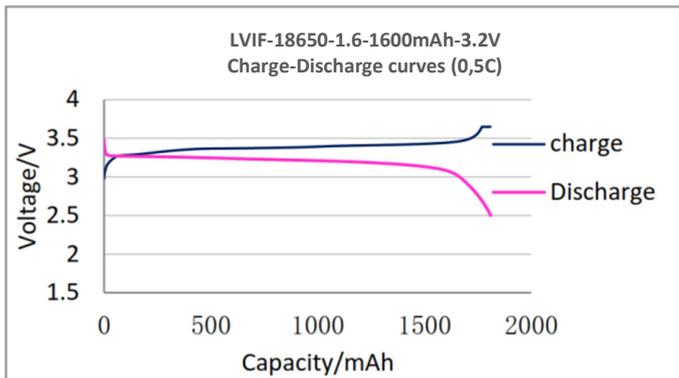


LVIF – 12,8V LiFePO4 LIVEN Battery
Different Rate Discharge Curve (25°C)

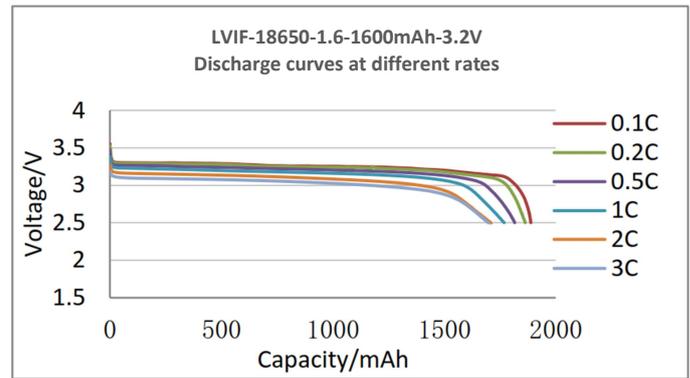


Cell feature Curves at 25°C (77°F)

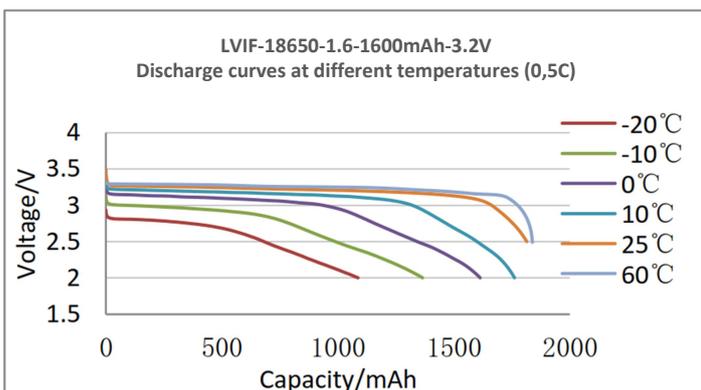
Charge-Discharge characteristic Curve



Discharge characteristic Curves



Discharge Curves at different Temperatures



Life characteristics of cyclic use

