LIVEN BATTERY

LiFePO₄ Lithium Battery



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

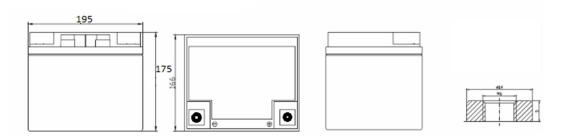
Specification:

NOMINAL VOLTAGE			12.8 V
NOMINAL CAPACITY (0.2C, 25°C).			39.6±2Ah
	NORMAL CURRENT		≤20A
DISCHARGE	MAX CONTINUOUS CURRENT		80A (@ 5min)
	MAX PEAK CURRENT		100A (@ 5sec)
	CUT-OFF VOLTAGE		10±0.2V
CHARGE	CHARGE VOLTAGE		14.4±0.15V
	CHARGE CURRENT		≤ 10A
	CHARGE MODE		CC/CV, use special Lithium LFP Charger.
INNER RESISTANCE	DISCHARGING INNER RESISTANCE		≤ 40mΩ
CONFIGURATION			04S11P
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%)			0°C~ +40°C
(Recommended long term storage temperature is 15~25°C)			DIL 050/ Whom the consistence of house district higher than 050/
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)			195±2mm x 165.0±2mm x 175±2mm
WEIGHT (kg)			$5.90 \pm 0.1 \text{kg}$
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%)



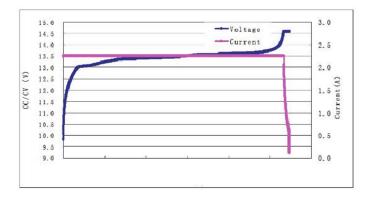


Drawing:

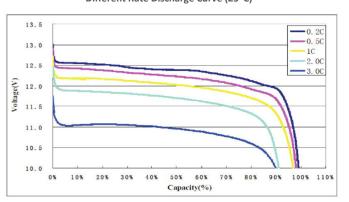


Battery Characteristic Curve at 25°C (77°F)

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

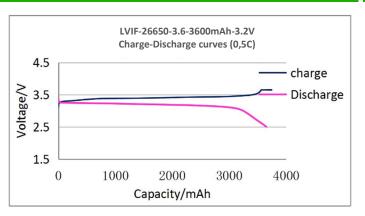


LVIF – 12,8V LiFePO4 LIVEN Battery Different Rate Discharge Curve (25°C)

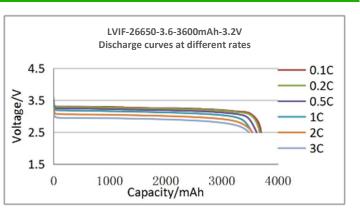


Cell feature Curves at 25°C (77°F)

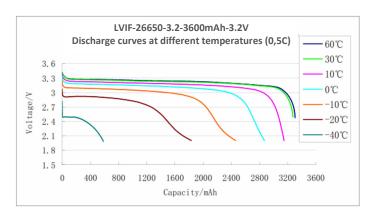
Charge-Discharge characteristic Curve



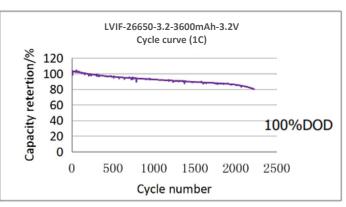
Discharge characteristic Curves



Discharge Curves at different Temperatures



Life characteristics of cyclic use



— Living Energy

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