

## 12V 40.0AH

LVIF40-12 LVIF40-12

# LVIF40-12

### **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:**

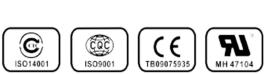
- > Telecommunications
- > Uninterruptable Power Supply (UPS)
- > DC power supply
- > Railway and Marine systems

> Wheelchairs and Scooters

> Golf trolleys and Golf cart

- > Electric Power System (EPS) > Emergency backup power supply
  - > Electric tools > Medical equipments

NOMINAL VOLTAGE			12.8 V
NOMINAL CAPACITY (0.2C, 25°C).			41.6±2Ah
DISCHARGE	NORMAL CURRENT		40A
	MAX CONTINUOUS CURRENT		≤50A (≤ 5min)
	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			04S13P
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)			RH= 85%, When the environment humidity is higher than 85%,
HUMIDITY RANGE (When the environment temperature is higher than 45°C, please pay attention to ventilation and heat rejection)		DISCHARGE	please pay attention to protect.
		STORAGE	RH= 50%, Easily oxidized components note sealed.
<b>BP PROTECTION - BMS FEATURES</b> 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 ±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%)



#### **Specification:**

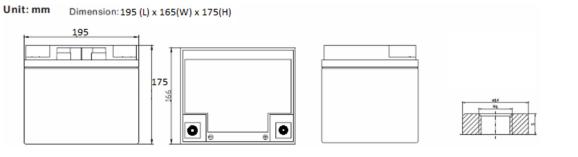
www.liven-battery.com

Living Energy



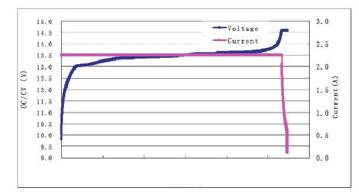


#### **Outer Dimensions:**



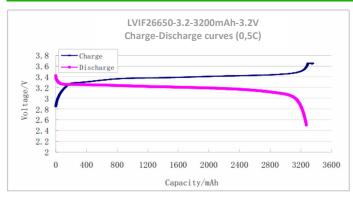
#### Battery Characteristic Curve at 25°C (77°F)

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

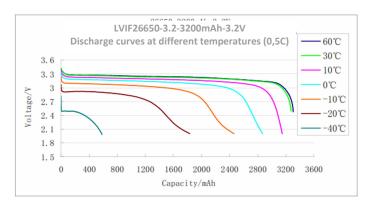


#### Cell feature Curves at 25°C (77°F)

#### **Charge-Discharge characteristic Curve**

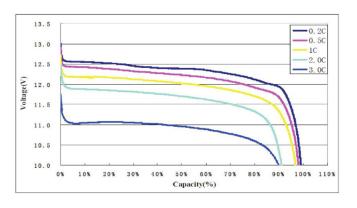


#### **Discharge Curves at different Temperatures**

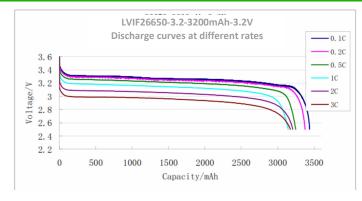


#### www.liven-battery.com

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



#### **Discharge characteristic Curves**



#### Life characteristics of cyclic use

