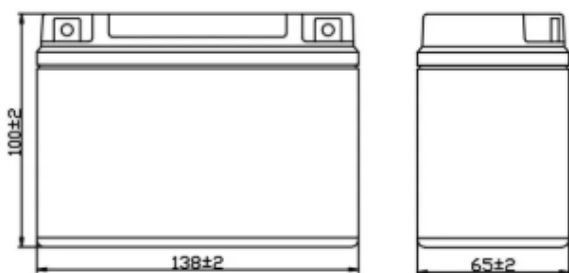


### Features:

- **Longer Cycle Life:** LFP Offers up to 20 times longer cycle life and 5 times longer float/calendar life than a lead acid battery. This helps to minimize replacement cost and reducing the total cost of ownership over time.
- **Lighter Weight:** About 40% of the weight of a comparable lead acid battery. LFP is generally a “drop-in” replacement for lead acid batteries.
- **Higher Power:** Delivers twice the power of a lead acid battery, even at high discharge rates, whilst maintaining high energy capacity.
- **Wider Temperature Range:** -20°C to +60°C.
- **Superior Safety:** Lithium Iron Phosphate chemistry eliminates the risk of explosion or combustion due to high impacts, overcharging or short circuit.
- **Increased Flexibility:** Modular design enables deployment of up to 2x batteries in series and 20x batteries in parallel.
- **Protection:** Advanced built-in BMS provides high protection when in use.



### General Description:



### Applications:

- Electric vehicles, boats, toys
- Kontiki, trolling motors
- Automotive starter battery (quad bike etc...)
- Telecommunications
- Medical equipment
- UPS, Back-up power
- Emergency lighting
- Motor racing / Motorsport
- Automotive
- Alarm systems

### General Description:

This high performance 12.8V 8Ah capacity LFP battery is perfect for powering systems requiring deep discharge. The battery design is strong, safe and easy to use. This is the very latest Lithium technology available and with our unique onboard BMS (Battery Management System) further increase safety and durability. >3000 cycles @ 70% DOD (Depth of Discharge).

Batteries can be connected in parallel for increased capacity and connected in series for increased voltage Max 24V, 160Ah (3.84kWh).

### Electrical Specifications:

Nominal Voltage:	12.8V
Nominal Capacity:	8Ah
Nominal Energy:	102Wh
Internal Resistance:	≤30mΩ @ 50% SOC
Efficiency:	99%
Self-Discharge:	< -3% / per month
Maximum in Series:	2 pcs
Maximum in Parallel:	20 pcs

### Mechanical Specifications:

Terminal Type:	2 * M4 Bolts (washers incl.)
Weight:	1.5kg
Case Dimension (L x W x H):	138mm x 65mm x 100mm
Case Type:	Black ABS, IP66 rating
Cell type / Chemistry:	Cylindrical-LiFePO <sub>4</sub>
Bluetooth Smart Module:	Not Applicable
BMS Features:	

Low voltage, high voltage, over temperature, over-current, short-circuit protection, cell balancing, Bluetooth connectivity

## Discharge Current and Voltage:

Max Continuous Discharge Current:	10A
Peak Discharge Current:	20A (10s)
Discharge Pulse Current:	25A $\pm$ 10A (31ms $\pm$ 10ms)
BMS Low Voltage Cut-off:	8.8V (2.2V $\pm$ 0.5V)
BMS Reconnect Voltage:	10.8V (2.7V $\pm$ 0.05V)
Short-Circuit Protection:	200-800 $\mu$ s Auto-recover or charge release

## Temperature Ranges:

Discharge Temperature:	-20°C to +60°C
Charge Temperature:	-20°C to +45°C
Storage Temperature:	-20°C to +45°C
High Temperature Protection:	+60°C

## Packaging:



## Charge Current and Voltage:

Max Charge Current	8A
Recommended Charge Current:	2A – 5A
End of Charge Voltage:	14.4V $\pm$ 0.2V
BMS Over Charge Voltage Cut-Off:	15V (3.75V $\pm$ 0.05V)
Balancing Voltage:	3.6V $\pm$ 0.05V per cell
Balancing Current:	36mA $\pm$ 5mA

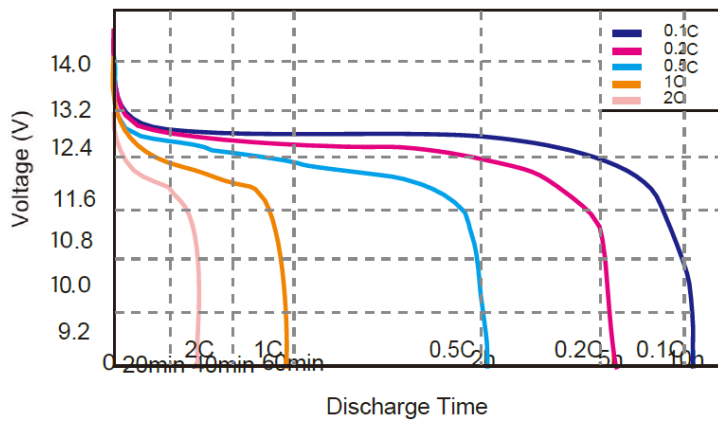
## Compliance Specifications

Certifications:	CE for pack UN38.3 for pack UL1642 for cells IEC61233 for cells BIS for cells
Shipping Classifications:	UN3840

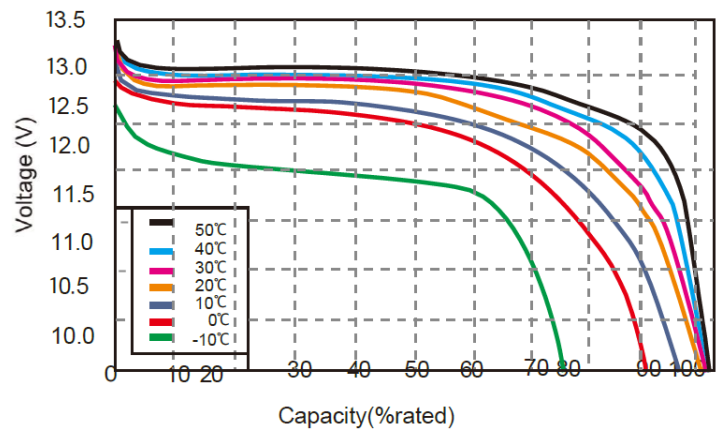


## Performance Characteristics:

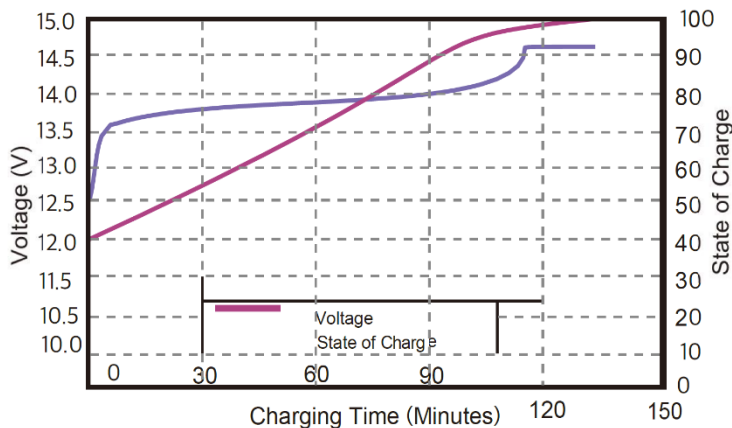
### Discharge Rate Curves:



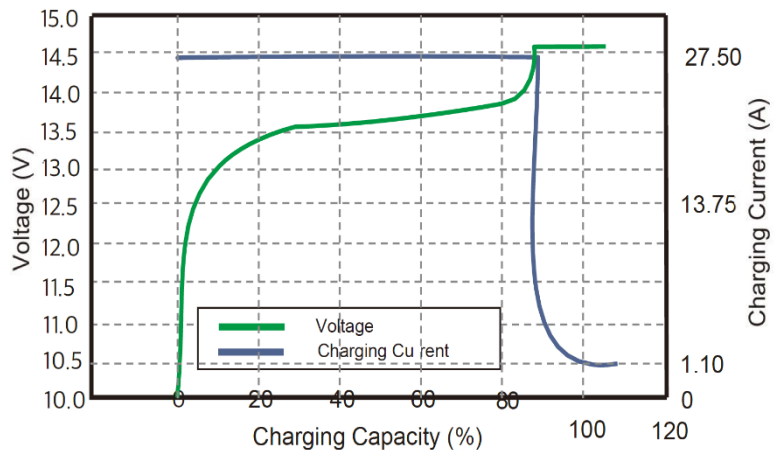
### Temperature Discharge Curves:



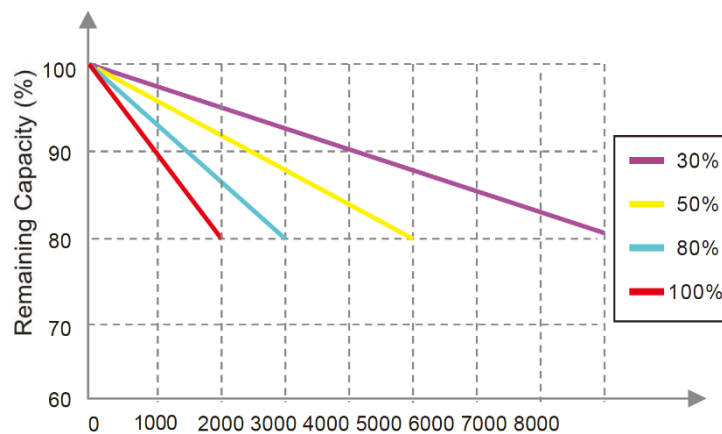
### State of Charge Curves:



### Charging Characteristics:



### Cycle Life Curves:



### Self-Discharge Curves:

