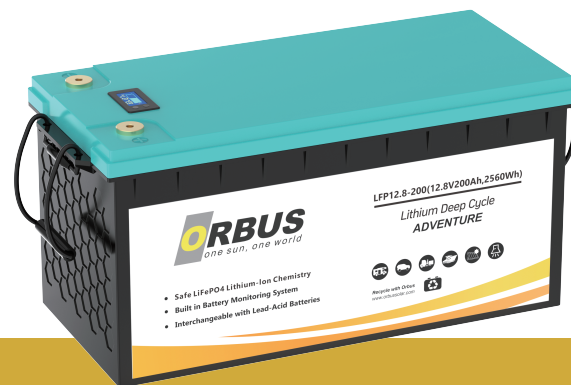


**FEATURES** Lithium Iron Phosphate (LiFePO<sub>4</sub>): the Safest Lithium Technology.  
Integrated Battery Management System(BMS).  
Bluetooth/RS485/RS232/SMBus/CANBus (Optional).  
SOC LED Indicator.

**PERFORMANCE** Long Cycle Life>4000cycles @100% DOD.  
High Density, High Discharge Current, High Temperature Range.  
Low Weight, Free Maintenance.  
Fast Charging.  
Environment Friendly.



HD12.8-200(12.8V200Ah)

## BATTERY DATA SHEET

### Electrical Parameters

Nominal Voltage	12.8V
Rated Capacity	200Ah
Energy	2560Wh
Resistance	≤10m Ω
Efficiency	99%
Cycle Life	>4000cycles@0.5C,100% DOD
Self Discharge	2% per Month
Max. Modules in Series/Parallel	4S/4P

### Mechanical Parameters

Dimension(L x W x H)	522x 228x 250 mm 20.6 x 8.97 x 9.8"
Weight	20.8kg(45.76lbs)
Terminal Type	M8
Battery Housing	ABS, UL-94 V-0
Housing Protection	IP56
Cell Type-Chemistry	LiFePO <sub>4</sub> Battery Cell
SoC Display	LED indicator

### Discharge Parameters

Continuous Discharge Current	200A
Pulse Discharge Current	600A(<3 seconds)
Recommended Volt. Disconnect	10V
BMS Discharge Cut-off Voltage	8V
Reconnect Voltage	9.2V
Short Circuit Protection	200~600 us

### Charge Parameters

Charge Method	CC-CV
Charge Voltage	14.4~14.8V
Recommended Float Voltage	13.8V
Recommended Charge Current	25A
Maximum Charge Current	50A
BMS Charge Cut-off Voltage	15.6V

### Compliance Certificate

Certifications	UL2054, UL1973
	CE
	IEC62133, IEC62619
	KC
	BIS
Shipping Classification	UN3480, Class 9,UN38.3 & MSDS

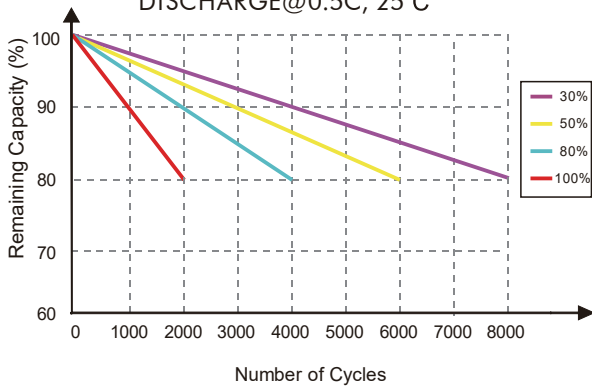
### Temperature Parameters

Discharge Temperature	-30 to 60°C (-22 to 140°F)
Charge Temperature	0 to 45°C (32 to 113°F)
Storage Temperature	-40 to 60°C(-40 to 140°F)
BMS High Temperature Cut-off	80°C(176°F)

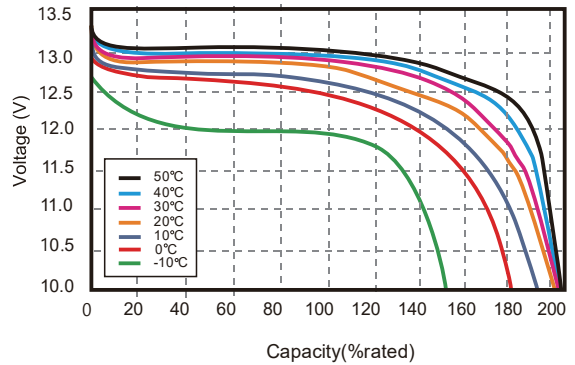


## Performance Characteristics

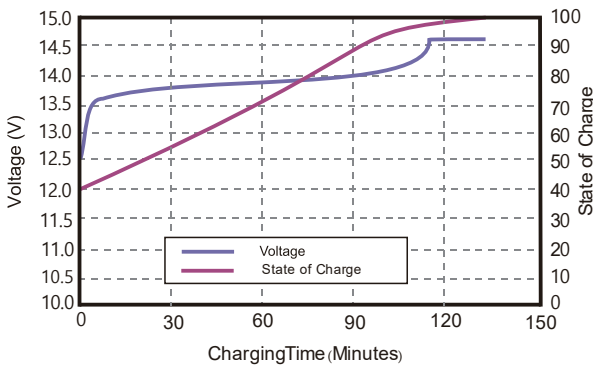
CYCLE LIFE vs. DEPTH OF DISCHARGE(DOD)  
DISCHARGE@0.5C, 25°C



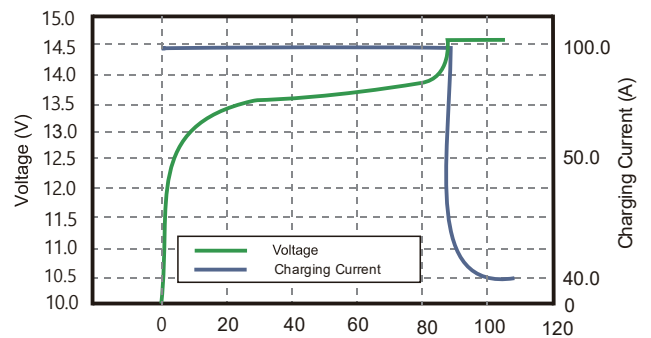
DISCHARGE CAPACITY at VARIOUS TEMPERATURES  
DISCHARGE @0.5C, 25°C



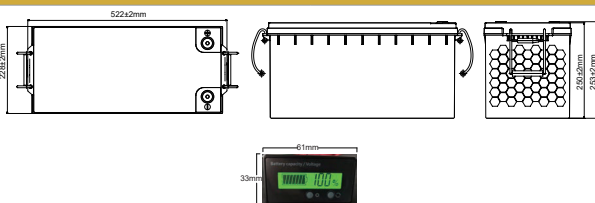
STATE OF CHARGE CURVE @0.5C, 25°C



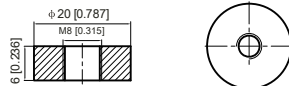
CHARGING CHARACTERISTICS @0.5C, 25°C



### Battery Dimension



M8 - 1.0x 8mm  
Threaded Hole



### Battery Applications

- + Touring car
- + Electric Ships
- + Floor Cleaning Machines
- + UPS backup power supply
- + Outdoor monitoring equipment
- + Solar energy storage equipment

### Battery Recycle



**NOTE:** Do Not Mix With Sealed Lead Acid Batteries When Recycling.  
See Orbus User's Manual for Proper Operation.  
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