



LFP12-20 (12.8V 20Ah)

Specifications	
Nominal Voltage	12.8V
Rated Capacity (10HR)	20Ah
Weight	2.8kg (6.17lbs)
Energy	256Wh
Resistance	≤30mΩ
Efficiency	99%
Cycle Life	2000cycles @1C,100% DOD
Self Discharge	2% per Month
Max. Modules in Series/Parallel	4S/20P
Dimensions	Length 181 mm
	Width 77 mm
	Container Height 167 mm
	Total Height 167 mm
Terminal Type	T12
Battery Housing	ABS, UL-94 V-0
Housing Protection	IP56
Cell Type-Chemistry	LiFePO4 Cylindrical Cell



Description and Features

The LFP series is full-fledged lead acid battery replacement with all the advantages of LiFePO4 technology. This lithium battery ensures maximum safety and long service life even with regular deep discharge. Available in a range of 12.8V batteries from 7.5Ah to 100Ah.

Features

- Excellent performance
- Long cycle life
- Safest lithium technology (LiFePO4)
- Integrated BMS

Performance

- Long Cycle Life>2000cycles @80% DOD.
- High Density, High Discharge Current, High Temperature Range.
- Low Weight, Free Maintenance.
- Fast Charging.
- Environment Friendly.

Layout	Terminal

Discharge Parameters

Continuous Discharge Current	40A
Pulse Discharge Current	50A(>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	10A
Maximum Charge Current	20A
BMS Charge Cut-off Voltage	15.6V

Compliance Certificate

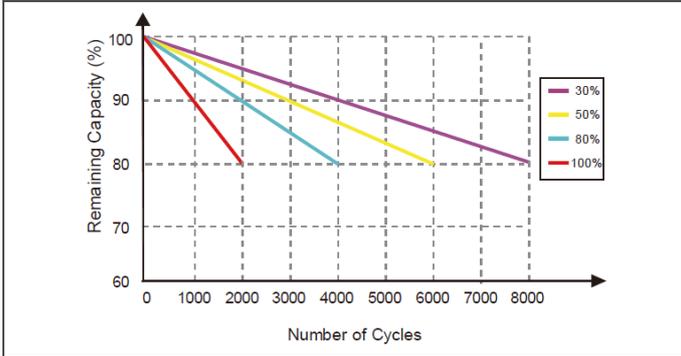
Certifications	UL1642(cell)
	CE
	IEC62133 & CB
	KC
	BIS
Shipping Classification	UKCA (for UK)
	UN3480, Class 9,UN38.3

Temperature Parameters

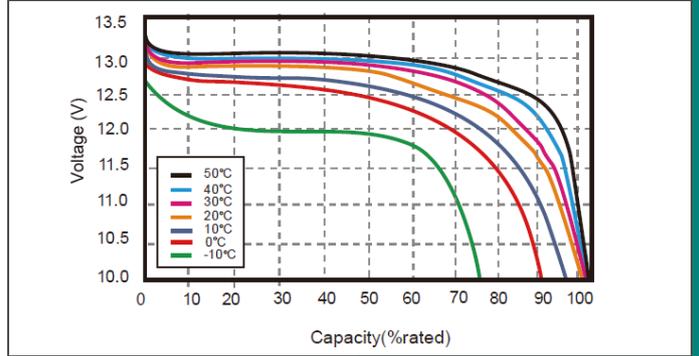
Discharge Temperature	-30 to 60 °C (-22 to 140 °F)
Charge Temperature	0 to 45 °C (32 to 113 °F)
Storage Temperature	-40 to 60 °C (-40 to 140 °F)
BMS High Temperature Cut-off	80 °C(176 °F)



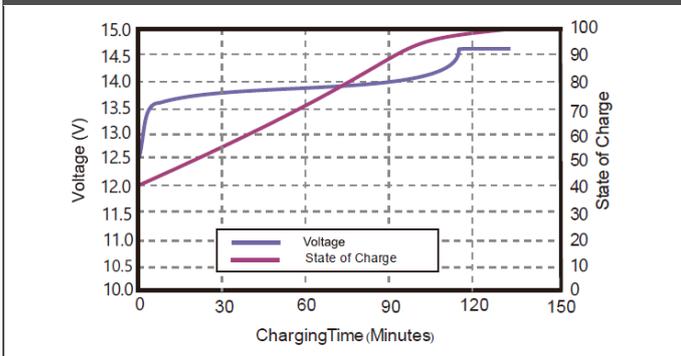
Cycle Life Vs. Depth Of Discharge (DOD) Discharge @ 0.1C, 25°C



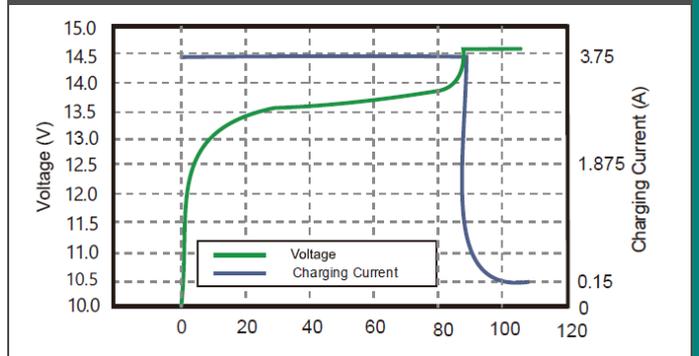
Discharge Capacity At Various Temperatures Discharge @ 1C



State Of Charge Curve @ 0.5C, 25°C



Charging Characteristics @ 0.5C, 25°C



Battery Applications

- Data Center UPS
- Telecom Backup Power
- Military Power Supply
- Solar Energy Storage System
- Solar Street LED Lightings
- Autonomously Guided Vehicles (AGVs)
- Industrial Robotics & Handling Equipment
- Aerial Work Platform
- Floor Cleaning Machines
- Power Tools, Lawn Mower
- Electric Bike & Motorcycles
- Electric Mobilities(E-scooters, Wheelchair)
- Golf Trolley & Golf Carts
- Medical Devices
- Electric Ships
- Passenger Vehicles

(Note) All above information shall be changed without prior notice, Landport Batteries reserves the right to explain and update the latest information.