



MARINE

GOLF

INDUSTRIAL

AUTO

PPLICATIONS

SOLAR

DL 24 110

## LiFePO4 11 YEARS OF WARRANTY

Voltage: 24V

Reserve Capacity: 110Ah

• Energy [Wh]: 2816

Active BMS Protection

• Weight: 50.5 lbs (23 kg)

• Length: 19.1 in (483 mm)

• Width: 6.6 in (170 mm)

• Height: 9.9 in (240 mm)

• M8

• Operating Temperature: -20F to +120F

Battery Charger included



UL 1642 UN 38.3 IEC 62133



Built Dakota tough and with exceptional energy density, this single 24V lithium battery will power your passion from morning to night. Engineered with Lithium Iron Phosphate (LiFePO4) technology, this single battery has three times the power, one third the weight, and lasts 5 times longer than a lead acid battery – providing exceptional lifetime value. Built for endurance in rugged environments and cold conditions, this battery has a cycle life of 3,000 – 6,000 recharge cycles (8-10 years at regular use) and is backed up by a best in class 11 year warranty. 110 Amp hours (Ah) of capacity is optimal for a full day of fishing with 24V trolling motors, or to be linked in series or parallel for solar energy storage in the home, RV, boat, or off grid applications. Ideal for deep cycle applications in marine environments where you need lots of power for a long time. This battery is a re-engineered version of DL's legendary 24V 60Ah single lithium battery but with twice the capacity. Free LiFePO4 battery charger included.

300%

TRIPLE THE POWER OF TRADITIONAL BATTERIES

1/3

ONE THIRD THE WEIGHT

5X

**CHARGES UP TO 5X FASTER** 

**8X** 

LASTS 8X LONG

100%

**SAFE & RELIABLE** 





MODEL **DL 24 110** 

VOLTAGE 24V

CAPACITY 110Ah

BATTERY TYPE Deep Cycle Lithium Iron Phosphate

CYCLE LIFE > 5,000 CYCLE @ 80% DOD

INTELLIGENCE Active BMS Protection

CERTIFICATION UN38 / UL1642 / IEC62133



#### **PRODUCT + PHYSICAL SPECIFICATIONS**

BCI Group Size	Туре	Voltage	Cell(s)	Terminal Type <sup>G</sup>	Din	nensions <sup>c</sup> Inches (mm	)	Weight Lbs. (kg)
					Length	Width	Height <sup>F</sup>	
	DL 24 110	24		M8	19.1 (483)	6.6 (170)	9.9 (240)	50.5 (23)

## **ELECTRICAL SPECIFICATIONS**

Capacity <sup>A</sup> Minutes				Energy (Wh)	Short Circuit Current (amps)
@ 25 Amps	5-Hr	10-Hr	20-Hr	20-Hr	
-	110	110	110	2816	

### **CHARGING INSTRUCTIONS**

Charger Settings					
Recommended Charging Voltage 14.4V					
Maximum Charging Voltage 15 V					
Maximum Charging Current @ Temperature					
> 32F (0C)	50				
14F to 32 F (-10C TO 0C) N/R					
-4 F to 14 f (-20C to -10C) N/R					



### **CHARGING INSTRUCTIONS**

50A max, 14.4V recommended, 15V max. Avoid charging below 32F

## **CHARGER INCLUDED**

Single 24V 5A LiFePO4 charger included.

#### **OPERATIONAL DATA**

Optimal Operating Temperature	Recommended Storage Temperature
-20°F to 120°F (-6°C to 49°C)	-20F to 120F (-6C to 49C)
At temperatures below 32°F (0°C)	
Charging Current Reduced	

Electrical	Features		
Continuous Discharge Current	100Amps		
Pulse Discharge Current @ 77°F (25°C)			
Communication	N/A		
BMS Protections	Cell balancing, low/high voltage cutoff, short circuit, high temperature		
<b>BMS Functions</b>	Cell Balancing		
Safety Systems	BMS		
Series Connections			
Parallel Connections			
Discharge Voltage Cutoff	9.0V		
Maximum Discharge Voltage	11.0V		
Data Logging			
Other F	eatures		
Environmental Protection			
Shipping Classification			
Case Flame Rating			
CCA			





## HALF THE WEIGHT. TWICE THE POWER

All Dakota Lithium batteries are engineered with Lithium Iron Phosphate technology (LiFePO4) providing long lasting performance in the harshest environments. Allowing you to go further, last longer, and play harder.

# 11 YEAR WARRANTY

Dakota Lithium offers a best in class 11 year pro-rated warranty on all of our batteries.

# AMERICAN INNOVATION & USA BASED SUPPORT

# **SAFETY**

Dakota Lithium has engineered the safest lithium battery technology on the market today - a battery that is safer than the one in your cellphone, camera, or laptop. Here are a few examples of how we manage safety here at Dakota Lithium:

**SAFETY BATTERY MANAGEMENT SYSTEM (BMS)** - Ensures safety and long battery lifespan All Dakota Lithium batteries include an active BMS protection circuit that handles cell balancing, low voltage cutoff, high voltage cutoff, short circuit protection and temperature protection for increased performance and longer life. Safety measures provided by the BMS prevent overheating. All Dakota Lithium batteries have a BMS that can support linking batteries in series or parallel.

LITHIUM IRON PHOSPHATE - LiFePO4 Different Li-ion batteries use different chemistries. Dakota Lithium exclusively engineers our batteries using lithium iron phosphate or LiFePO4 for short. Lithium Iron Phosphate batteries are the safest lithium battery chemistry. Unlike the cell phone battery in your pocket, or the laptop battery on your desk, the structural stability of LiFePO4 results in significantly less heat generation compared to other lithium chemistries.

NO THERMAL RUNAWAY - Dakota Lithium cells do not produce oxygen The main cause of fire or explosion of a lithium ion battery is due to the cells being compromised or ruptured, which causes thermal runaway. Without proper management, thermal runaway may result in fire. Dakota Lithium LiFePO4 is extremely stable and does not produce the oxygen needed to aid thermal runaway and unlike other lithium battery chemistries will not result in a catastrophic meltdown.

**100% COBALT FREE** - No rare earth elements NCM and other lithium ion chemistries that contain rare earth elements such as Colton or Cobalt produce oxygen and toxic fumes when ruptured, leading to fire. Dakota Lithium does not contain rare earth elements, and does not produce oxygen or is prone to fire.

**CERTIFICATIONS** - Tested and certified for safety and reliability Dakota Lithium batteries meet U.N. 38.3 standards and built from grade A cells. Dakota Lithium's cells are UL1642 certified and have been tested per IEC62133 standards. UN Manual of Tests and Criteria certified, and meets all US & International regulations for air, ground, marine, and train transport. Dakota Lithium is ISO Certified per 9001:2015 standards, and select models are produced in ISO 14001 certified facilities. IEC62133 certifications and additional laboratory services are available as required by our OEM clients.

**INSTALLATION & CARE** - Treat your batteries right When proper installation and battery care is followed, your LiFePO4 battery will be safe and reliable for many years. This includes making sure all connections are tight and proper wiring sizes are used, **compatible chargers** and charging components are used, and the batteries are used for purposes that they are designed for.