



# DL 12 23

## • LiFePO4 11 YEARS OF WARRANTY

- Voltage: 12V
- Reserve Capacity: 23Ah
- Energy [Wh]: 276
- Active BMS Protection
- Weight: 6 lbs (2.7 kg)
- Length: 5.94 in (152 mm)
- Width: 5.11 in (130 mm)
- Height: 3.8 in (99 mm)
- F2
- Operating Temperature: -20F to +120F
- **Battery Charger not included**



Dakota Lithium 12 Volt 23 packs a big punch in a small package. With both USB 3.0 waterproof plugs, standard F2 Terminals, and a built in volt meter, this LiFePO4 battery gives you the freedom, power, and reliability to #GoFurther and #PlayHarder in the most extreme of conditions. Built from Dakota Lithium's legendary LiFePO4 cells, this battery has 2X the power, 1/3 the weight and 5X the lifespan of traditional batteries — providing exceptional lifetime value, all backed up by Dakota Lithium's best in class 11 year warranty. Dakota Lithium Iron Phosphate technology provides optimal performance down to minus 20 degrees Fahrenheit (for winter warriors) and the 23 Amp hours of capacity provides a full day of power for high amp draw electronics like Garmin fish finders, graphs, or anything where you need a longer run time. Voltmeter allows you to monitor the battery capacity and the USB ports allow easy charging of cell phones, GoPro, and personal electronics. Same performance as our legendary 10 Ah battery, but with 130% more capacity. LiFePO4 charger recommended.

### 200%

TWICE 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 12 23  
 VOLTAGE 12V  
 CAPACITY 23Ah  
 BATTERY TYPE Deep Cycle Lithium Iron Phosphate  
 CYCLE LIFE > 5,000 CYCLE @ 80% DOD  
 INTELLIGENCE Active BMS Protection  
 CERTIFICATION UN38 / UL1642 / IEC62133

12V

**PRODUCT + PHYSICAL SPECIFICATIONS**

BCI Group Size	Type	Voltage	Cell(s)	Terminal Type <sup>g</sup>	Dimensions <sup>e</sup> Inches (mm)			Weight Lbs. (kg)
					Length	Width	Height <sup>f</sup>	
	<b>DL 12 23</b>	<b>12</b>		<b>F2</b>	<b>5.94 (152)</b>	<b>5.11 (130)</b>	<b>3.8 (99)</b>	<b>6 (2.7)</b>

**ELECTRICAL SPECIFICATIONS**

Capacity <sup>A</sup> Minutes		Energy (Wh)			Short Circuit Current (amps)
@ 25 Amps	5-Hr	10-Hr	20-Hr	20-Hr	
-	<b>23</b>	<b>23</b>	<b>23</b>	<b>276</b>	

**CHARGING INSTRUCTIONS**

Charger Settings	
<b>Recommended Charging Voltage</b>	14.4V
<b>Maximum Charging Voltage</b>	15 V
<b>Maximum Charging Current @ Temperature</b>	
> 32F (0C)	12
14F to 32 F (-10C TO 0C)	N/R
-4 F to 14 f (-20C to -10C)	N/R



**CHARGING INSTRUCTIONS**

12A max, 14.4V recommended, 15V max. Avoid charging below 32F

**CHARGER SOLD SEPARATELY**

This battery should be charged using a LiFePO4 compatible charger. Dakota Lithium 12V batteries should be charged at 14.4 volts, higher than AGM or lead acid. Lead acid chargers will work, but will only charge the battery to 80% of capacity.

**OPERATIONAL DATA**

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

Electrical Features	
<b>Continuous Discharge Current</b>	23Amps
<b>Pulse Discharge Current @ 77°F (25°C)</b>	
<b>Communication</b>	N/A
<b>BMS Protections</b>	Cell balancing, low/high voltage cutoff, short circuit, high temperature
<b>BMS Functions</b>	Cell Balancing
<b>Safety Systems</b>	BMS
<b>Series Connections</b>	
<b>Parallel Connections</b>	
<b>Discharge Voltage Cutoff</b>	9.0V
<b>Maximum Discharge Voltage</b>	11.0V
<b>Data Logging</b>	
Other Features	
<b>Environmental Protection</b>	
<b>Shipping Classification</b>	
<b>Case Flame Rating</b>	
<b>CCA</b>	





## HALF THE WEIGHT. TWICE THE POWER

All Dakota Lithium batteries are engineered with Lithium Iron Phosphate technology (LiFePO<sub>4</sub>) 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** - LiFePO<sub>4</sub> Different Li-ion batteries use different chemistries. Dakota Lithium exclusively engineers our batteries using lithium iron phosphate or LiFePO<sub>4</sub> 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 LiFePO<sub>4</sub> 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 LiFePO<sub>4</sub> 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 LiFePO<sub>4</sub> 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.