



# DL 12 46

## • LiFePO4 11 YEARS OF WARRANTY

- Voltage: 12V
- Reserve Capacity: 46Ah
- Energy [Wh]: 552
- Active BMS Protection
- Weight: 10.5 lbs (4.75 kg)
- Length: 7.6 in (194 mm)
- Width: 5.1 in (132 mm)
- Height: 6.8 in (173 mm)
- F12
- Operating Temperature: -20F to +120F
- **Battery Charger included**



#GoFurther with three times the usable power of a traditional U1 battery. Engineered in a 35Ah U1 SLA case, but with 46Ah of Lithium Iron Phosphate (LiFePO4) technology, this battery has three times the power, half the weight, and lasts 5 times longer than a U1 sealed lead acid battery – providing exceptional performance & lifetime value. 46 Amp hours of capacity provides a full day of power for high amp draw electronics like Garmin and Lowrance fish finders, small trolling motors (<30 lbs thrust), off-grid applications, mobility scooters and electric wheel chairs, or anything where you need a longer run time. Same performance as our legendary 10 Ah battery, but with 460% more capacity. Optimal performance down to minus 20 degrees Fahrenheit (for winter warriors). Drop in replacement for U1 35Ah SLA batteries (same size, physical dimensions & terminals) but with three times (3X) longer run time. Free 10 Amp 12V LiFePO4 compatible charger included. Backed up by an 11 year warranty.

### 300%

TRIPLE THE POWER OF  
TRADITIONAL BATTERIES

### 1/2

ONE HALF THE WEIGHT

### 5X

CHARGES UP TO 5X FASTER

### 5X

LASTS 5X LONG

### 100%

SAFE & RELIABLE

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MODEL **DL 12 46**  
VOLTAGE **12V**  
CAPACITY **46Ah**  
BATTERY TYPE **Deep Cycle Lithium Iron Phosphate**  
CYCLE LIFE **> 6,000 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)
	<b>DL 12 46</b>	<b>12</b>		<b>F12</b>	Length	Width	Height <sup>f</sup>	<b>10.5 (4.75)</b>
					<b>7.6 (194)</b>	<b>5.1 (132)</b>	<b>6.8 (173)</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>25</b>	<b>25</b>	<b>25</b>	<b>300</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)	30
14F to 32 F (-10C TO 0C)	N/R
-4 F to 14 f (-20C to -10C)	N/R



## CHARGING INSTRUCTIONS

23A max, 14.4V recommended, 15V max. Avoid charging below 32F

## CHARGER INCLUDED

Free 12V 10A LiFePO4 charger included

## 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>	50Amps
<b>Pulse Discharge Current @ 77°F (25°C)</b>	300
<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.