GC3H Lithium Ion Battery

The LiFePO₄ Dragonfly Battery

The pinnacle of quality and safety at an unbeatable price point.

Model DFTHOGC3H

This 12V deep cycle 270 Ah battery weighs roughly 80 lbs.

Utilizing the same stable LiFePO4 chemical composition and built-in battery management system

(BMS) technology as our other products, the is one of the most unique deep cycle batteries on the market.

The DFTHOGC3H offers a form factor that no other battery on the market has. With unlimited mounting possibilities and 270 Ah of power this battery is ideal for any application and maximizing your system's space and power. This battery is capable of being discharged to a 100% depth of discharge and charges 5 times faster than lead-acid. The DFTHOGC3H allows for greater flexibility in what you can power and how you install it, providing energy independence that other batteries cannot.

Built to last 10 to 15 years and backed by an industry leading warranty, at Dragonfly Energy, we're leading the green energy change.











Specifications

- 270 Amp Hour, 12 Volt Battery
- LiFePO4 Chemistry
- 3000-5000 Cycles
- Dimensions (L x W x H): 22.83" x 7.09" x 13.15" See QR Code below
- 80.8 lbs.
- Operating Temp Range: 4°F (-20°C) to 135°F (57.2°C)
- Water Resistant and Sealed (Batteries should not be submerged)
- Designed and Assembled in the USA
- Built-in BMS (Battery Management System)

Charging Parameters

- Absorption Voltage: 14.2V to 14.6V
- Float Voltage: 13.4V to 13.8V
- Equalization Voltage: 14.4V (if Applicable)
- Absorption Time:
 60 to 90 minutes
 per 270Ah battery bank
- No Temperature Compensation

Built-in Battery Management System

Our BMS keeps you and your battery safe and ensures your battery will last for many years.

- 300 Amps Continuous
- 500 Amps Surge for 30 Seconds
- ½ Second Surge for Loads Over 500 Amps
- High/Low Voltage Protection
- Short Circuit Protection
- High/Low Temperature Protection
- Cold Charging Protection
- Automatic Cell Balancing at Top of Charge

Please Note: This built-in protection will reset after 5 seconds in most fault conditions. Disconnecting the battery from loads will also reset the BMS.



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DFTHOG3H FAQs

How long does it take for the heat function to work?

The heater will activate when the internal temperature of the battery reaches 35 degrees F. If the battery has been exposed to below freezing temperatures for a long time without the heater enabled, it will take 2 to 4 hours for the internals of the battery to heat up enough for the battery to take a charge.

How much power does the heat function consume?

On average the internal heating function consumes about 1.8 amps. Our tests show at 0 degrees F with no insulation, the heater function is on about 30% of the time.

How do I properly store my DFTHOGC3H batteries?

We recommend bringing the Dragonfly Energy batteries to 100% state of charge. Then, disconnect the battery from any load by removing the negative cable from one battery. By disconnecting this way, your batteries only losing 3-5% of stored energy a month. To deactivate the heat enable function for storage, simply discon-nect the heat enable jumper wire from the heat enable post.

How can I check my battery's voltage?

If you do not have a battery monitor, you can purchase a multime-ter to monitor the voltage of your batteries. Please reference the voltage vs capacity table.

Is it necessary to charge my batteries out of the box?

Yes, if you are connecting your batteries in series you will need to charge your batteries out of the box. If you are connecting in parallel then you do not need to charge out of the box. See the diagram below.

Voltage vs Capicity

14.4V 100% 13.6V 100% 13.4V 99% 13.3V 90% 13.2V 70% 13.1V 40% 13.0V 12.9V 12.8V 17% 12.5V 14% 12.0V 9% 10.0V 0%

REMAINING CAPACITY

Quick Installation Tips:

VOLTAGE LEVEI

- Torque specifications 9 to 11ft-lb.
 Do NOT finger tighten
- Our batteries do not require ventilation since they do not emit fumes or gases, so you can put them in an enclosed areas.
- Our batteries can be mounted in any orientation that is suitable for you.
- <u>Do NOT</u> reverse the polarity of the battery, as this will damage both the battery and the device connected.
- The batteries come equipped with a 3/8" hole on the terminal to fit either a 3/8" or a 5/16" bolt.

Dragonfly Energy researches, develops, and distributes the most advanced and fairly priced deep cycle lithium-ion batteries in the world.

Call us for partnership, wholesale, and distribution opportunities or to place your order today!



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