

Disposal

Disposal of a used or damaged Lifos Go 105Ah battery must be done at a certified recycling location. There are many of these nationwide – please see www.lifos.co.uk for details.



Warranty

A Lifos Go 105Ah battery is supplied with a 5-year warranty from the date of purchase (please keep your proof of purchase) or 2750 battery cycles, whichever comes first. Note a full battery cycle is determined by a fully discharged Lifos Go 105Ah (down to 10% of its gross capacity) and charged to 100%. The 5 year warranty period assumes no more than one full cycle per 24hr period. In the event of a valid warranty claim the manufacturer will, at its discretion, supply a new or re-conditioned Lifos Go 105Ah battery dependent on how many years have passed since the date of purchase or how many cycles the battery has undertaken. This warranty is not transferable.

Conditions

- Any warranty claim can only be validated by a proof of purchase.
- The warranty is invalid if the battery has been subject to misuse, abuse or physical damage.
- This Lifos Go 105Ah battery must be of the correct size, design and capacity for the intended application.
- The warranty is invalid if the correct size fuse is not fitted to all cables connecting to the + terminals on Lifos Go 105Ah.
- The battery should be installed and operated at a temperature not exceeding the batteries design limits as noted on the previous page and on the battery itself.
- The warranty shall be voided if the battery becomes unserviceable due to: fire, freezing, abuse, alteration, modification or it suffers from an over discharged state.
- Installation of the battery must be performed by a responsible adult.

Warranty claims

- Contact the original point of purchase for instructions.
- The battery must only be returned in compliance with the transport and packaging regulations ruling at the date of return. Failure to do this may result in the carrier refusing to ship the battery.

Lifos Go 105Ah safety and product limitations

- Keep out of the reach of children
- Do not under any circumstances disassemble this battery
- Do not immerse the battery in liquid
- Do not use the battery with damaged cables or terminals
- This battery is not designed for cranking and starter Applications
- Do not expose the battery to fire or crush or puncture its casing
- Do not mix Lifos Go 105Ah batteries with other brands of batteries, whether in series or parallel
- Do not short circuit battery positive (+) and negative (-), which can cause spark, fire, or even explosion.

Limited liability

The manufacturer nor any of its employees, agents, distributors or resellers are liable for any third-party damage howsoever caused. The extent to which the manufacturer is liable to a customer is limited to the purchase price paid by the customer for the Lifos battery.



RoHS
Compliant



UK
CA



www.lifos.co.uk



We want your photos and videos! Here is your chance for you and your Lifos battery to be a star!

Just send in pics or videos of you and your Lifos in a great location and if selected we will not only give you everlasting recognition on our online favourite users wall of fame but we will send you an Official Lifos Mains Charger worth £20 completely free! Please send to hello@lifos.co.uk including your address details and best of luck!

Note – we cannot guarantee to publish every entry and only those selected by our marketing department for publication will be awarded an Official Lifos Mains Charger. By providing your images you automatically grant us the right to use these images/videos howsoever we see fit.

LIFOS GO

User manual

105Ah

Lithium Iron
Phosphate Battery
(LiFePO₄)



Lifos Go 105Ah quick user guide

This guide should be read in conjunction with the main instructions included overleaf, but the following points will enable speedy deployment of your Lifos Go 105Ah battery.

- Your Lifos Go 105Ah will be supplied partially charged. This is because transportation regulations prohibit shipping a fully charged lithium battery. Please ensure the battery is fully charged before first use.
- Please ensure you depress the On/Off button before its first charge. It will be clear the battery is **active** because the indicator will glow green. If you intend to deactivate the battery or leave it for long periods without using it, please press the button again to turn it off. This process helps prevent natural power loss and will keep your battery in top condition. **Note**, if the power button is in the On position but has not had any charge or discharge for a period of 12hrs the indicator light will turn off. This confirms the battery is in a dormant state to conserve energy but will instantly switch back on again once a load or charge is recognised.
- Lifos Go 105Ah can be charged by a solar panel (via a suitable charge controller), vehicle alternator (via a suitable DC to DC converter) and any lead acid or lithium iron phosphate battery charger. In general, any charger with a voltage range of 11.2v to 14.7v will charge Lifos, however, be aware that some chargers that do not reach 14.7v may not 100% fully charge your Lifos battery. Do not use chargers with an upper cut-off voltage higher than 14.7V i.e. those for designed for NMC / LCO lithium chemistry. If in doubt, please contact hello@lifos.co.uk
- The Battery Management System (BMS) within each Lifos Go 105Ah battery may give inaccurate data via the Bluetooth App until ten charge and discharge cycles have taken place. This is because during these ten cycles the BMS is balancing and calibrating the four lithium cells within Lifos Go 105Ah.
- If more than one Lifos Go 105Ah has been purchased and you wish to connect them in series, parallel or both please see page 1 of this manual for detailed instructions.
- Always use an appropriate sized cable and fuse based upon the expected current of your load. This ensures the electrical circuits within the load and the battery are protected at all times. Fit the fuse/s as close to the Lifos Go + terminal as possible. If in doubt consult a qualified electrician or contact Lifos – hello@lifos.co.uk (or its retailers / agents) for advice .

Data sheets, MSDS, other documents and FAQ's can be accessed from www.lifos.co.uk

Important: please read before first use.

Technical helpline 01684 774 000

Thank you for purchasing this advanced lithium iron phosphate (LiFePO₄) battery. Combining the very best lithium cells along with an outstanding battery management system ensures this battery will provide you with incredibly long-lasting power in a super lightweight package.

A few tips on how to get the best from your Lifos Go 105Ah battery:

- Protect the battery from direct sunlight although it will work well in a wide temperature range (-20 to +60 degrees C).
- Lifos Go 105Ah has an IP rating of 54. This means that water splashes from all directions, such as light rain, and dust ingress will not damage the battery. This does not mean the battery is waterproof and should be protected from the elements particularly if permanently used outdoors.
- Observe the correct polarity otherwise permanent damage could be caused – the battery casing is marked with + and –.
- Don't short circuit Lifos Go 105Ah otherwise permanent damage could be caused.
- Lifos Go 105Ah can be connected in Parallel (Fig.1). You are able to connect up to 4 Lifos Go 105Ah batteries in parallel giving you a battery bank capacity of 420Ah (105A x 4).
- Lifos Go 105Ah can be connected in Series (Fig.2). You are able to connect up to 4 Lifos Go 105Ah batteries in series giving you a battery bank voltages of 12v (single battery), 24v (2 x batteries) 36v (3 x batteries) or 48v (4 x batteries).
- Lifos Go only generates limited heat and no noxious gases.

The Lifos Go 105Ah can be connected up in parallel or series when needed but only in the below configurations:

Parallel	Series			
	1 (12v)	2 (24v)	3 (36v)	4 (48v)
1	YES	YES	YES	YES
2	YES	YES	YES	YES
3	YES	YES	NO	NO
4	YES	YES	NO	NO

Please note – when connecting multiple batteries, fully charge each battery and allow at least 6 hours to 'settle' and then check each is within 50mV of each other. Once all are within this tolerance they may be connected to one another.

- Most mains lead acid battery chargers will charge the Lifos Go 105Ah but some smart chargers might only charge up to 85%. If this is the case we recommend getting a new charger, please see our website for recommendations on the FAQ pages. However you will not cause any damage to the battery if using your old charger. For DC – DC charging please also check our website for recommendations on the FAQ pages.
- Lifos Go 105Ah can be used if it is positioned on its side but will give best performance if it is positioned with its terminals facing upward.

NOTE – do not mix new Lifos Go 105Ah batteries with old batteries, whether in series or parallel.

Storage of Lifos Go 105Ah

Lifos Go 105Ah has an extremely low rate of self-discharge but if you intend not to use the battery for an extended period please charge the battery to approx. 80% and turn the power button off prior to storage. It is recommended to re-charge the Lifos Go 105Ah once every 3 months.

NOTE – allowing the battery to over discharge (+3 months since its last charge) can lead to a shortened life, could damage the battery and invalidate your warranty.



Fig.1

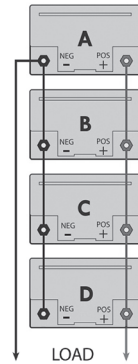
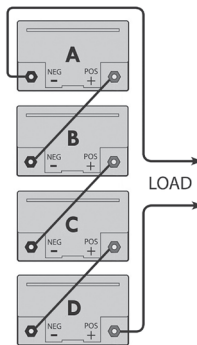


Fig.2



Accessing the Lifos App

The App is available for all Apple and Android devices. Search the Apple App store for Lifos and download for free. If using an Android device go to Google Play search Lifos and download for free. The App will give you full visibility of your Lifos Go 105Ah battery and its performance. Your device connects to the Lifos App via Bluetooth so you need to be within 10m of the battery to access its data. Each time you wish to view the data you will need to log on via the App but this is quick and easy.

If you are using more than one Lifos Go 105Ah battery, you will not be able to identify each battery separately if they are in close proximity to one another.

If you have connected your batteries in parallel then you only need to look at any one battery (it does not matter which one) to see the total power for the complete battery bank (SOC).

If you have connected your batteries in series then you also only need to look at one battery to see the total power for the complete battery bank, however you will only see the voltage of the battery bank from the single battery and not the battery bank as a whole.

If you have any questions about this connectivity please visit www.lifos.co.uk for help.

NOTE – only one Apple/Android device at a time can be connected to each battery.

Lifos Go 105Ah battery load limitation

The Lifos Go 105Ah battery is perfectly suited to heavy DC loads such as motor movers, but its Battery Management System (BMS) will not allow any load higher than 120A or 1500w at 12.5vDC or 1200w at 230vAC through an inverter. It should be noted that inductive loads, even if rated at 1500w may not be powered by the Lifos Go 105Ah because the inrush current of these devices can often be many times the rated load during initial start up. Examples of inductive loads are microwave ovens.

Resistive AC loads (via a suitable 12vDC to 230AC inverter) that can be powered by Lifos Go 105Ah include: toasters, travel kettles, travel irons, hair dryers, heaters etc (Max 1200W).

NOTE – in the event an AC load higher than 1200w is connected to Lifos Go 105Ah the battery will shut down and will not power the device but the battery will not be damaged because its BMS will protect it. In this circumstance the Lifos Go 105Ah will be instantly reset so it is able to power loads within its approved power range as noted above.

Connecting up your Lifos Go 105Ah battery

Your Lifos Go 105Ah battery has removeable battery pole terminals.

Generally the pole connections are great for quick release connections found in caravans, RVs and boats. However if you unscrew the pole connections you will then be able to use ring terminals directly onto the battery.

When connecting to the Lifos Go 105Ah using the bolts and washers provided, we recommend a torque setting of 8Nm.

Please connect the Positive (+) connection first before connecting the Negative (-) connection.

In all circumstances, an appropriate sized fuse must be fitted to all positive cables being connected to the + terminals of Lifos Go 105Ah as failure to do so could result in damage to either load circuit or Lifos battery in the event of an accidental dead short etc. Please consult a qualified electrician if guidance is needed regarding fuse or cable size appropriate to your load.

Disconnection is the reverse process, Negative (-) first, Positive (+) last. (This is standard disconnection procedure for connection and disconnection of batteries and will help to avoid short circuits).

Lifos App Icon



Lifos App

