

## LINCAD UPDATES ITS LITHIUM-ION POWER SYSTEM BATTERY RANGE WITH THE EVOLUTION OF LIPS 16

An interview with Mike Hendey,  
Lincad's Senior Systems Engineer



Mike Hendey

### Q. Why has Lincad manufactured the LIPS 16?

A. Lincad's current range of LIPS batteries are the result of continued improvements in specific energy through the integration of new cell technology and enhanced mechanical and electronic design. The Lincad R&D team continue to evolve our LIPS (lithium-ion power system) battery range and we identified a need for an upgrade to a previous model. One of our international defence customers had also specifically requested this model be developed, so the timing seemed right.

### Q. What sets the LIPS 16 apart from Lincad's previous LIPS models?

A. This is the next step in modernising our LIPS range. The LIPS 16 is lighter and has more functionality than the previous model. We have updated the electronics and updated the internal construction to keep it current and cost effective. We constantly research cell technology to ensure the cells we use are the best in the world.

### Q. Is the LIPS 16 for the defence market only?

A. The LIPS 16 is primarily a military battery in the sense that it is ruggedised and has been specifically designed to be suitable for demanding military and field-based defence environments. It offers a cutting-edge upgrade to the more traditional lead acid batteries that have predominantly been used on applications such as the Hostile Artillery Locating (HALO) system. However, it lends itself well to a range of applications in different sectors that require that kind of performance.

### Q. When will the LIPS 16 be launched to market?

A. The LIPS 16 will be available for purchase in 2021. We already have strong interest from existing customers, and we expect to see global demand. Due to its in-built heating system, the LIPS 16 works well across a wide temperature range. Therefore, it is suitable for use in a broad range of environmental conditions, both hot and cold.

### Q. Why would customers choose the LIPS 16 over lead acid alternatives?

A. The LIPS 16's fully metallic enclosure has been sealed to IP55 to offer superior physical protection and electromagnetic screening for internal components, while other advantages can be found in the lighter weight, flexible design and an enhanced two-year storage life when in a completely discharged state.





**Q. Does the LIPS 16 satisfy current regulations for transportation of lithium-ion batteries?**

**A.** The LIPS 16 is versatile and offers an internal discharge feature that allows stand-alone discharge of the internal cell stack – a vital aspect for transporting lithium ion battery equipment. This feature allows the user to discharge the cell stack to levels optimised for long term storage or for transport by air in compliance with IATA regulations without the need for external equipment.

**Q. What new features sets the LIPS 16 apart from previous LIPS models?**

**A.** Lincad continues to take battery performance to new levels. Additional new LIPS 16 features include the ability to update the operational software and interrogate the battery memory using a mobile, tablet or PC, as well as the ability for the internal battery management system (BMS) to store periodic operational data for use in maintenance activities.

**Q. What are the storage capabilities of the LIPS 16?**

**A.** The step change in the electronic management systems used in the LIPS 16 offers the advantage of a two-year storage life when in a completely discharged state. The risk of an over-discharge condition, even when the battery is left on equipment, is thus greatly reduced.

**Q. What recharge capabilities does the LIPS 16 have?**

**A.** Like our entire LIPS range of batteries, LIPS 16 can be recharged to return many hundreds of discharge cycles. They have been optimized to charge from our in-service range of charging systems but can be adapted to accept charge from alternative sources if required.

**Q. What make the LIPS 16 peculiarly suitable for military environments?**

**A.** The LIPS 16 is a solid robust battery ideally suited for military environments and has a long battery life of over 80 AMP hours. It is flexible and can be used for numerous applications from powering military radio equipment to field hospital ventilation systems. It can even be used as a generic power supply for multiple applications at the same time. ●

