



Lithium-ion
Battery Use and Care Guide

Notice

Every effort was made to ensure that the information in this guide was accurate at the time of printing. However, information is subject to change without notice, and VIAVI reserves the right to provide an addendum to this manual with information not available at the time that this guide was created.

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WARNING:



Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

Lithium-ion battery safety

To ensure maximum performance from your Li-ion battery, it is important to follow the information provided in this guideline and in the product specific documentation.

Refer to your specific VIAVI product documentation for additional information.

WARNING:



Danger of extreme heat, fire or explosion if battery is tampered with. Replace only with VIAVI-approved battery. Do not dispose of battery in fire.

Follow all local restrictions regarding the proper disposal or recycling of the battery. Keep the battery away from heat sources. See product's user guide or datasheet for maximum charging, operating, and storage temperatures.

Use and care

Do not leave batteries unused for extended periods of time, either in the product or in storage. When a battery has been unused for 6 months, check the charge status and charge or dispose of the battery as appropriate.

The typical estimated life of a lithium-ion battery is about 2–3 years or 300–500 charge cycles, whichever occurs first. One charge cycle is a period of use from fully charged, to fully discharged, and fully recharged again. Use a 2–3 year life expectancy for batteries that do not run through complete charge cycles.

Rechargeable lithium-ion batteries have a limited life and will gradually lose their capacity to hold a charge. This loss of capacity (aging) is irreversible. As the battery loses capacity, the length of time it will power the product (run time) decreases.

Lithium-ion batteries continue to slowly discharge (self-discharge) when not in use or while in storage. Routinely check the battery's charge status. The product user's guide typically includes information on how to check battery status, as well as battery charging instructions. The latest product guides are available at

https://support.viavisolutions.com/welcome

Use only VIAVI-approved batteries in our products.

Battery maintenance

- Observe and note the run time that a new fully-charged battery provides for powering your product. Use this new battery run time as a basis to compare run times for older batteries. The run time of your battery will vary depending on the product's configuration and the applications that you run.
- Routinely check the battery's charge status.
- Carefully monitor batteries that are approaching the end of their estimated life.
- Consider replacing the battery with a new one if you note either of the following conditions:
 - The battery run time drops below about 80% of the original run time
 - The battery charge time increases significantly
- If a battery is stored or otherwise unused for an extended period, be sure to follow the storage instructions in this document. If you do not follow the instructions, and the battery has no charge remaining when you check it, consider it to be damaged. Do not attempt to recharge it or to use it. Replace it with a new battery.

Charging

Always follow the charging instructions provided with your product. Refer to your product's user manual and/or online help for detailed information about charging its battery.

Charge the lithium-ion battery using only the VIAVI battery charger. The battery is to be used only with VIAVI test products.

Contact us at TAC@viavisolutions.com for the latest user's guide for your product.

Storage and operating conditions

- Charge or discharge the battery to approximately 50% of capacity before storage.
- Charge the battery to approximately 50% of capacity at least once every six months.
- Refer to the product's user guide or VIAVI product datasheet for operating conditions and storage temperatures.

NOTE:



The battery self-discharges during storage. High temperatures reduce the battery storage life.

Handling precautions

- Read and follow all warning notices and instructions marked on the battery, VIAVI product, and included in this guide.
- Do not disassemble, crush, or puncture the battery.
- Do not short the external contacts on the battery.
- Do not dispose of a battery in fire.
- Do not expose a battery to temperatures above the product's storage temperature (refer to the product's user guide or datasheet).
- Keep the battery away from children.
- Avoid exposing the battery to excessive shock or vibration.
- Do not use if there is damage to the exterior of the battery.
- Refer to the SDS (Safety Data Sheet), available on *www.viavisolutions.com* for emergency response information.

WARNING:



If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

Transportation

- Always check all applicable local, national, and international regulations before transporting a lithium-ion battery.
- Transporting an end-of-life, damaged, or recalled battery may, in certain cases, be specifically limited or prohibited.
- Contact your shipping company or VIAVI Solutions as needed for shipping guidance.

California Proposition 65

California Proposition 65, officially known as the Safe Drinking Water and Toxic Enforcement Act of 1986, was enacted in November 1986 with the aim of protecting individuals in the state of California and the state's drinking water and environment from excessive exposure to chemicals known to the state to cause cancer, birth defects or other reproductive harm.

For the VIAVI position statement on the use of Proposition 65 chemicals in VIAVI products, see the **Hazardous Substance Control** section of the <u>VIAVI Standards and Policies webpage</u>.

EU WEEE and Battery directives

Batteries used to power VIAVI products should not be disposed of as unsorted municipal waste and should be collected separately and disposed of according to your national regulations.

VIAVI has established a take-back process in compliance with the EU Waste Electrical and Electronic Equipment (WEEE) Directive, 2012/19/EU, and the EU Battery Directive, 2006/66/EC.

Instructions for returning waste equipment and batteries to VIAVI can be found in the WEEE section of the <u>VIAVI Standards and Policies web page.</u>

If you have questions concerning disposal of your equipment or batteries, contact the VIAVI WEEE Program Management team at **WEEE.EMEA@ViaviSolutions.com**.

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Technical assistance

If you require technical assistance, call 1-844-GO-VIAVI / 1.844.468.4284.

Outside US: +1-855-275-5378

Email: **TAC@viavisolutions.com**

For the latest TAC information, visit

https://support.viavisolutions.com/welcome



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