ENERGY & POWER TECHNOLOGIES

Certification for Next Generation Personal e-Mobility

As personal e-Mobility devices, including hoverboards, continue to grow in popularity, the need for electrical system certification is more important than ever. As always, UL's public safety mission is at the forefront of everything we do. We help provide peace of mind to consumers, retailers and manufacturers by testing and certifying the products that people use every day.

INTRODUCING ACCREDITED USA & CANADA NATIONAL STANDARD UL 2272, 1st EDITION

UL Standard Technical Panel (STP) of UL 2272 approved the 1st edition of ANSI/CAN/UL 2272 and it was published on November 21, 2016. It now extends the scope of UL 2272 to cover all types of personal e-Mobility devices (single rider; non-roadworthy; typically stand when operating; does not have pedals). So, two significant UL 2272 updates include:

- Supporting an updated list of products for personal e-Mobility intended for a single rider with a rechargeable electric drive train that balances and propels the rider, and which may be provided with a handle for grasping while riding. The device may or may not be self-balancing. As a result the name of the Standard is now changed to "Electrical Systems for Personal e-Mobility Devices" (formerly "Electrical Systems for Self-Balancing Scooters").
- UL 2272 becomes accredited national standard for USA by ANSI and accredited national standard for Canada by SCC making it bi-national. This means it reached consensus between various stakeholders in both countries. Evaluating and certifying to the single standard ensures the national electrical safety system requirements of both countries are met.

UL supports retailers and manufacturers by offering electrical and fire-safety testing and certification under UL 2272. This standard evaluates the safety of the electrical drive train system and battery and charger system combinations of hoverboards and other 1-wheel, 2-wheel, x-wheel (which includes hoverboards).

UL 2272 does NOT evaluate for performance, reliability, or rider safety. As a result, UL recommends that proper safety precautions, detailed below, should be taken when buying and using a personal e-Mobility device:

- Safety First – Make sure it is UL certified. Look for the UL Mark on the packaging and the UL holographic certification label with the Enhanced Mark on the bottom of the product.
- Keep the e-Mobility device away from flammable materials while charging.
- Follow the manufacturer's recommended charging times. DO NOT overcharge.
- Use only the charger that is packaged with and documented on the UL certification page of the e-Mobility device.
- If an incident does occur, leave the area and call 911. Due to the nature of battery chemical fires, it may be incorrect to use a fire extinguisher.
- Follow all manufacturer-recommended safety guidelines, including wearing recommended personal protective gear.

FREE WEBINAR

INITIAL LAUNCH OF UL 2272

Overview of UL 2272 with the principal engineer who played a key role in the development of the standard. You'll learn about UL's certification programs for hoverboards, future plans for UL 2272 standard development including reaching consensus on the standard's requirements.

Visit bit.ly/UL2272REC or UL.com/PeM to view today!

To learn more, visit UL.com/PeM. For a quote, email eMobility@ul.com.

CERTIFIED PRODUCTS

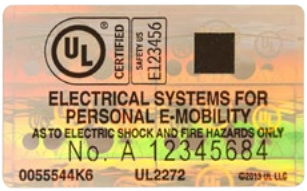
UL certified its first hoverboard in May 2016. Our list of certified products can be found by clicking here to check the UL Online Certifications Directory for the most up-to-date information. Enter "FKIS" into the category code field to find all currently certified manufacturers of personal e-Mobility devices. Click on any file link next to the manufacturer name to see which particular models currently hold certification.

WHAT IS UL DOING ABOUT COUNTERFEIT PRODUCTS?

UL is committed to keeping potentially unsafe products away from consumers by supporting government and law enforcement agencies, like U.S. Customs and Border Protection, to seize products with counterfeit UL Marks and prosecute the criminals responsible.

HOW CAN YOU TELL IF YOUR PRODUCT IS UL CERTIFIED?

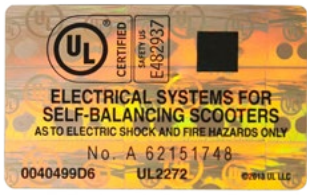
We strive to make identifying a UL Certified product as easy as possible. Simply look for the UL Mark for self-balancing scooters or personal e-Mobility on the front of the packaging and the UL holographic certification label with the Enhanced Mark on the bottom of the product. These labels are your indication that you have a genuine UL Certified product.



2017 ISSUED CERTIFICATION LABEL

A HISTORY OF EXPERTISE IN BATTERY TESTING AND CERTIFICATION

UL Battery and Energy Storage Technology services are designed to help reduce the complexities associated with creating energy storage products. UL works to help ensure the safe manufacture, handling and use of new technologies through various tests on energy storage systems (such as batteries in stationary/motive and portable applications), power supplies, and materials. UL has the foremost battery experts and has been extensively studying battery technologies for over 30 years.



2016 ISSUED CERTIFICATION LABEL

WHAT YOU SHOULD KNOW

The Consumer Products Safety Commission (CPSC) issued a letter on 2/18/16 to manufacturers, importers and retailers of hoverboards urging them to make certain the hoverboards they "import, manufacture, distribute or sell in the United States comply with currently applicable voluntary safety standards, including all referenced standards and requirements contained in UL 2272." The testing requirements for UL 2272 specifically evaluate the safety of the electrical system: the safety of the electrical drive train system and battery and charger system combinations, but does NOT evaluate for performance, reliability, or rider safety.

In addition to its existing compliance guidance, as part of its Fiscal Year 2017 Operating Plan, CPSC will work to address hazards associated with devices powered by high energy density batteries (lithium-ion), as well as "system safety features that ensure high energy density batteries, battery packs, safety circuits, end products and chargers all work together to achieve safe operation for the intended application."

Manufacturers and retailers wishing to submit personal e-Mobility products for testing, or inquiring about battery testing with UL, email eMobility@ul.com.

To learn more, visit UL.com/PeM. For a quote, email eMobility@ul.com.