



JOINT CANADA-UNITED STATES
NATIONAL STANDARD

ANSI/CAN/UL 2056:2025

STANDARD FOR SAFETY

Power Banks

ULNORM.COM : Click to view the full PDF of UL 2056 2025



ANSI/UL 2056-2025



SCC FOREWORD

National Standard of Canada

A National Standard of Canada is a standard developed by a Standards Council of Canada (SCC) accredited Standards Development Organization, in compliance with requirements and guidance set out by SCC. More information on National Standards of Canada can be found at www.scc.ca.

SCC is a Crown corporation within the portfolio of Innovation, Science and Economic Development (ISED) Canada. With the goal of enhancing Canada's economic competitiveness and social well-being, SCC leads and facilitates the development and use of national and international standards. SCC also coordinates Canadian participation in standards development, and identifies strategies to advance Canadian standardization efforts.

Accreditation services are provided by SCC to various customers, including product certifiers, testing laboratories, and standards development organizations. A list of SCC programs and accredited bodies is publicly available at www.scc.ca.

ULNORM.COM : Click to view the full PDF of UL 2056 2023

UL Standard for Safety for Power Banks, ANSI/CAN/UL 2056

First Edition, Dated October 22, 2024

Summary of Topics

This revision of ANSI/CAN/UL 2056 dated February 18, 2025 includes changes to the enclosure requirements: [4.3](#) and [6.1.4](#).

Text that has been changed in any manner or impacted by ULSE's electronic publishing system is marked with a vertical line in the margin.

The revised requirements are substantially in accordance with Proposal(s) on this subject dated November 29, 2024

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form by any means, electronic, mechanical photocopying, recording, or otherwise without prior permission of ULSE Inc. (ULSE).

ULSE provides this Standard "as is" without warranty of any kind, either expressed or implied, including but not limited to, the implied warranties of merchantability or fitness for any purpose.

In no event will ULSE be liable for any special, incidental, consequential, indirect or similar damages, including loss of profits, lost savings, loss of data, or any other damages arising out of the use of or the inability to use this Standard, even if ULSE or an authorized ULSE representative has been advised of the possibility of such damage. In no event shall ULSE's liability for any damage ever exceed the price paid for this Standard, regardless of the form of the claim.

Users of the electronic versions of UL's Standards for Safety agree to defend, indemnify, and hold ULSE harmless from and against any loss, expense, liability, damage, claim, or judgment (including reasonable attorney's fees) resulting from any error or deviation introduced while purchaser is storing an electronic Standard on the purchaser's computer system.

No Text on This Page

ULNORM.COM : Click to view the full PDF of UL 2056 2025



ANSI/UL 2056-2025

OCTOBER 22, 2024
(Title Page Reprinted: February 18, 2025)



1

ANSI/CAN/UL 2056:2025

Standard for Power Banks

First Edition

October 22, 2024

This ANSI/CAN/UL Safety Standard consists of the First Edition including revisions through February 18, 2025.

The most recent designation of ANSI/UL 2056 as an American National Standard (ANSI) occurred on February 18, 2025. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page, Preface or SCC Foreword.

This Standard has been designated as a National Standard of Canada (NSC) on February 18, 2025.

© 2025 ULSE Inc. All rights reserved.

ULNORM.COM : Click to view the full PDF of UL 2056 2025

No Text on This Page

ULNORM.COM : Click to view the full PDF of UL 2056 2025

CONTENTS

Preface 5

INTRODUCTION

1 Scope7
 2 Units of Measurement7
 3 Components7
 4 Referenced Publications8
 5 Glossary 10

CONSTRUCTION

6 General 12
 6.1 Casing and enclosure 12
 6.2 Cells 12
 6.3 Wiring and terminals 13
 6.4 External power bank connectors 13
 6.5 Printed wiring boards 13
 6.6 Lithium ion systems only 13
 6.7 Direct plug-in construction 14
 6.8 Wireless charging and discharging function 14

PERFORMANCE

7 General 14
 8 Protective Devices 15
 9 Samples 15
 10 Important Test Considerations 16
 11 Temperature Measurements 16

ELECTRICAL TESTS

12 Short-Circuit of Output Port Test 16
 13 Abnormal Charging of the Battery Test 17
 14 Abusive Overcharge of the Battery Test 18
 15 Forced Discharge of the Cells Test 19
 16 Temperature Test and BMS Verification 20
 17 Power Input Test 22
 18 Overload of Output Ports Test 22
 19 Flammability of Photovoltaic Cells Test 22
 20 Capacity Verification Test 23

ENCLOSURE TESTS

21 General 23
 22 Steady Uniform Force Test 23
 23 Flexing Force Test 24
 24 Mold Stress Relief Test 25
 25 Drop Impact Test 25
 26 Label Permanence Test 26