



CERTIFICATE OF ACCREDITATION

ANSI-ASQ National Accreditation Board

500 Montgomery Street, Suite 625, Alexandria, VA 22314, 877-344-3044

This is to certify that

Mobile Power Solutions
6260 SW Arctic Drive
Beaverton, OR 97005

has been assessed by ANAB
and meets the requirements of international standard

ISO/IEC 17025:2017

while demonstrating technical competence in the field of

TESTING

Refer to the accompanying Scope of Accreditation for information regarding the types of tests to which this accreditation applies.

AT-2630
Certificate Number


ANAB Approval

Certificate Valid: 10/24/2018-10/24/2020
Version No. 001 Issued: 10/24/2018



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Mobile Power Solutions

6260 SW Arctic Drive
 Beaverton, OR 97005
 Shauna Wilson
 shauna@mobilepowersolutions.com 503 645 6789

TESTING

Valid to: **October 24, 2018**

Certificate Number: **AT-2630**

Electrical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
UN Transportation Testing for Lithium Batteries	UN / DOT 38.3, Sections 38.3.3 Preconditioning (Battery Cycling), 38.3.4.1, T1 Altitude Simulation, 38.3.4.2, T2 Thermal Test (Temperature Cycling), 38.3.4.3, T3 Vibration, 38.3.4.4, T4 Mechanical Shock, 38.3.4.5, T5 External Short Circuit, 38.3.4.6, T6 Impact, 38.3.4.7, T7 Overcharge, 38.3.4.8, T8 Forced Discharge	Cells and Batteries	<p>Measurements: Digital Multimeter, Scale with weights Temperature meter with Data Logger</p> <p>Conditionings: Low Pressure Chamber Vibration Shaker Shock Generator Compression Devices Thermal Chambers Resistor Boxes Power Supply Metering Stick Concrete Floor</p>
Safety of Primary and Secondary Lithium Cells and Batteries During Transport	IEC 62281, Edition 2 & 3, Sections 6.4.1 Altitude Simulation, 6.4.2 Thermal Cycling 6.4.3 Vibration, 6.4.4 Shock, 6.4.5 External Short Circuit, 6.4.6 Impact/crush, 6.5.1 Overcharge, 6.5.2 Forced Discharge, 6.6.1 Drop Test		

Electrical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Secondary Cells and batteries Containing Alkaline or Other Non-Acid Electrolytes – Safety Requirements for Portable Sealed Secondary Cells, and for Batteries Made From Them, for Use in Portable Applications	IEC 62133 First Edition and IEC 62133:2012, UL 62133:2017 Edition 2, IEC 62133-2:2017, Insulation and Wiring, Continuous Charging, Low Rate Charging, Vibration, Molded Case Stress, Temperature Cycling, External Short Circuit, Free Fall, Mechanical Shock, Thermal Abuse, Thermal abuse, Crushing of Cells, Low pressure, Over-charging, Forced discharge	Cells and Batteries	<p>Measurements: Digital Multimeter, Scale with weights Temperature meter with Data Logger</p> <p>Conditionings: Low Pressure Chamber Vibration Shaker Shock Generator Compression Devices Thermal Chambers Resistor Boxes Power Supply Metering Stick Concrete Floor</p>
Minimum Operational Performance Standards for Lithium Batteries	RTCA DO-227, RTCA DO-227A, TSO-C142a		
Minimum Operational Performance Standards for Rechargeable Lithium Batteries and Battery Systems	RTCA DO-311, RTCA DO-311A, TSO-C142a		
Standard for Safety for Lithium Batteries	UL 1642		
Standard for Household and Commercial Batteries	UL 2054		
Information Technology Equipment – Safety – Part 1: General Requirements	UL 60950-1 / CSA-C22.2		

Note:

1. This scope is formatted as part of a single document including Certificate of Accreditation No. AT-2630.



Vice President