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**Secondary cells and batteries for renewable energy storage – General requirements and methods of test –
Part 2: On-grid applications**

INTERNATIONAL
ELECTROTECHNICAL
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SECONDARY CELLS AND BATTERIES FOR RENEWABLE ENERGY STORAGE – GENERAL REQUIREMENTS AND METHODS OF TEST –

Part 2: On-grid applications

FOREWORD

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IEC 61427-2 edition 1.1 contains the first edition (2015-08) [documents 21/862/FDIS and 21/863/RVD] and its amendment 1 (2024-03) [documents 21/1179/FDIS and 21/1194/RVD].

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.

International Standard IEC 61427-2 has been prepared by IEC technical committee 21: Secondary cells and batteries.

A list of all parts in the IEC 61427 series, published under the general title *Secondary cells and batteries for renewable energy storage – General requirements and methods of test*, can be found on the IEC website.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

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SECONDARY CELLS AND BATTERIES FOR RENEWABLE ENERGY STORAGE – GENERAL REQUIREMENTS AND METHODS OF TEST

Part 2: On-grid applications

1 Scope

This part of IEC 61427 relates to secondary batteries used in on-grid Electrical Energy Storage (EES) applications and provides the associated methods of test for the verification of their endurance, properties and electrical performance in such applications. The test methods are essentially battery chemistry neutral, i.e. applicable to all secondary battery types.

On-grid applications are characterized by the fact that batteries are connected, via power conversion devices, to a regional or nation- or continent-wide electricity grid and act as instantaneous energy sources and sinks to stabilize the grid's performance when randomly major amounts of electrical energy from renewable energy sources are fed into it.

Related power conversion and interface equipment is not covered by this part of IEC 61427.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

None.

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