# IEC 62932-1

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# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

colour inside

## Flow battery energy systems for stationary applications – Part 1: Terminology and general aspects

## Systèmes de production d'énergie à batteries à accumulateurs à circulation d'électrolyte pour les applications stationnaires – Partie 1: Terminologie et aspects généraux



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# FLOW BATTERY ENERGY SYSTEMS FOR STATIONARY APPLICATIONS –

## Part 1: Terminology and general aspects

## FOREWORD

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The text of this International Standard is based on the following documents:

| FDIS | Report on voting |
|---|---|
| 21/1027/FDIS | 21/1037/RVD |

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

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

A list of all parts in the IEC 62932 series, published under the general title *Flow battery energy systems for stationary applications*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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# FLOW BATTERY ENERGY SYSTEMS FOR STATIONARY APPLICATIONS –

# Part 1: Terminology and general aspects

## 1 Scope

This part of IEC 62932 relates to flow battery energy systems (FBES) used in electrical energy storage (EES) applications and provides the main terminology and general aspects of this technology, including terms necessary for the definition of unit parameters, test methods, safety and environmental issues.

## 2 Normative references

There are no normative references in this document.

## 3 Terms, definitions and abbreviated terms

### 3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

**3.1.1**
**ambient temperature**
environmental temperature around a flow battery energy system

**3.1.2**
**auxiliary energy**
energy consumed by all the auxiliary equipment and components of a flow battery and of a flow battery energy system

Note 1 to entry: The equipment and components include, but are not limited to, battery management system, battery support system, fluid circulation system.

**3.1.3**
**battery management system**
**BMS**
electronic system associated with a flow battery energy system which monitors and/or manages its state, calculates secondary data, reports that data and/or controls its environment to influence the flow battery energy system's performance and/or service life

Note 1 to entry: The function of the battery management system can be fully or partially assigned to the battery pack and/or to equipment that uses flow battery energy store systems.

[SOURCE: IEC 61427-2:2015, 3.8, modified – admitted terms "battery management unit" and "BMU" omitted, "battery" replaced by "flow battery energy system", Notes 2 to 4 deleted.]