
**Methods of evaluation of the battery life of a
battery-powered watch**

*Méthodes d'évaluation de l'autonomie de fonctionnement d'une montre à
pile*



Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 12819 was prepared by Technical Committee ISO/TC 114, *Horology*.

Annexes A and B form a normative part of this International Standard.

© ISO 1999

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization
Case postale 56 • CH-1211 Genève 20 • Switzerland
Internet iso@iso.ch

Printed in Switzerland

Methods of evaluation of the battery life of a battery-powered watch

1 Scope

This International Standard specifies two methods for determining the battery life of a battery-powered watch and specifies the labelling to be used by the manufacturers or the distributors to inform the users.

According to the available information, either the theoretical battery life or the practical battery life is calculated using the formulae given in this International Standard.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 6426-2, *Horological vocabulary — Part 2: Technico-commercial definitions*.

IEC 60086-3, *Primary batteries — Part 3: Watch batteries*.

3 Terms and definitions

For the purposes of this International Standard, the terms and definitions given in ISO 6426-2 and the following apply.

3.1 battery life

operating duration of a battery-powered watch, as determined by the characteristics of the battery and the movement

NOTE The battery life starts when the battery is inserted into the watch and lasts until the point when the voltage falls below the level required for operation and the watch stops.

4 General

4.1 Parameters

The following parameters affect the calculation:

- the type of battery used;
- the type of movement used;
- the operating and environmental conditions.