

First edition
2010-05-01

**Health informatics — Personal health
device communication —**

Part 10404:

Device specialization — Pulse oximeter

*Informatique de santé — Communication entre dispositifs médicaux sur
le site des soins —*

Partie 10404: Spécialisation des dispositifs — Oxymètre de pouls



Reference number
ISO/IEEE 11073-10404:2010(E)



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Published in Switzerland

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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.

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The main task of technical committees is to prepare International Standards. 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.

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ISO/IEEE 11073-10404 was prepared by the 11073 Committee of the Engineering in Medicine and Biology Society of the IEEE (as IEEE Std 11073-10404-2008). It was adopted by Technical Committee ISO/TC 215, *Health informatics*, in parallel with its approval by the ISO member bodies, under the "fast-track procedure" defined in the Partner Standards Development Organization cooperation agreement between ISO and IEEE. Both parties are responsible for the maintenance of this document.

ISO/IEEE 11073 consists of the following parts, under the general title *Health informatics — Personal health device communication* (text in parentheses gives a variant of subtitle):

- *Part 10101: (Point-of-care medical device communication) Nomenclature*
- *Part 10201: Domain information model*
- *Part 10404: Device specialization — Pulse oximeter*
- *Part 10407: Device specialization — Blood pressure monitor*

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- *Part 10408: (Point-of-care medical device communication) Device specialization — Thermometer*
- *Part 10415: (Point-of-care medical device communication) Device specialization — Weighing scale*
- *Part 10417: Device specialization — Glucose meter*
- *Part 10471: (Point-of-care medical device communication) Device specialization — Independant living activity hub*
- *Part 20101: (Point-of-care medical device communication) Application profiles — Base standard*
- *Part 20601: (Point-of-care medical device communication) Application profile — Optimized exchange protocol*
- *Part 30200: (Point-of-care medical device communication) Transport profile — Cable connected*
- *Part 30300: (Point-of-care medical device communication) Transport profile — Infrared wireless*

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Introduction

ISO/IEEE 11073 standards enable communication between medical devices and external computer systems. This standard uses the optimized framework created in IEEE Std 11073-20601™-2008^a and describes a specific, interoperable communication approach for pulse oximeters. These standards align with, and draw upon, the existing clinically focused standards to provide support for communication of data from clinical or personal health devices.

^a For information on references, see Clause 2.