SLOVENSKI STANDARD
oSIST prEN ISO/IEEE 11073-10404:2022

01-september-2022

Zdravstvena informatika - Interoperabilnost naprav - 10404. del: Komunikacija osebnih medicinskih naprav - Specialne naprave - Pulzni oksimeter (ISO/IEEE/FDIS 11073-10404:2022)

Health informatics - Device interoperability - Part 10404: Personal health device communication - Device specialization - Pulse oximeter (ISO/IEEE/FDIS 11073-10404:2022)

Medizinische Informatik - Kommunikation von Geräten für die persönliche Gesundheit - Teil 10404: Gerätespezifikation - Pulsoximeter (ISO/IEEE/FDIS 11073-10404:2022)

Informatique de santé - Interopérabilité des dispositifs - Partie 10404: Spécialisation des dispositifs - Oxymètre de pouls (ISO/IEEE/FDIS 11073-10404:2022)

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Health informatics — Device interoperability —

Part 10404: Personal health device communication — Device specialization — Pulse oximeter

Informatique de santé — Interopérabilité des dispositifs —
Partie 10404: Spécialisation des dispositifs — Oxymètre de pouls

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Institute of Electrical and Electronics Engineers, Inc
3 Park Avenue, New York
NY 10016-5997, USA

Email: stds.ipr@ieee.org
Website: www.ieee.org

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IEEE Std 11073-10404™-2020
(Revision of IEEE Std 11073-10404-2008)

Health informatics—Personal health device communication

Part 10404: Device specialization—Pulse oximeter

Developed by the
IEEE 11073™ Standards Committee
of the
IEEE Engineering in Medicine and Biology Society

Approved 30 January 2020
IEEE SA Standards Board

Abstract: Within the context of the ISO/IEEE 11073 family of standards for device communication, this standard establishes a normative definition of communication between personal telehealth pulse oximetry devices and compute engines (e.g., cell phones, personal computers, personal health appliances, set top boxes) in a manner that enables plug-and-play interoperability. It leverages appropriate portions of existing standards including ISO/IEEE 11073 terminology, information models, application profile standards, and transport standards. It specifies the use of specific term codes, formats, and behaviors in telehealth environments restricting optionality in base frameworks in favor of interoperability. This standard defines a common core of communication functionality for personal telehealth pulse oximeters.

Keywords: IEEE 11073-10404™, medical device communication, personal health devices, PHD, pulse oximeter

The Institute of Electrical and Electronics Engineers, Inc.
3 Park Avenue, New York, NY 10016-5997, USA

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Introduction

This introduction is not part of IEEE Std 11073-10404-2020, Health informatics—Personal health device communication—Part 10404: Device specialization—Pulse oximeter.

ISO/IEEE 11073 standards enable communication between medical devices and external computer systems. This document uses the optimized framework created in IEEE Std 11073-20601-2019™ and describes a specific, interoperable communication approach for the pulse oximeter.[1] These standards align with, and draw on, the existing clinically focused standards to provide support for communication of data from clinical or personal health devices.

[1] Information on references can be found in Clause 2.