



# SLOVENSKI STANDARD

## SIST EN ISO 11073-10407:2011

01-maj-2011

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**Zdravstvena informatika - Komunikacija osebnih medicinskih naprav - 10407. del:  
Specialne naprave - Kontrolna naprava za merjenje krvnega pritiska  
(ISO/IEEE 11073-10407:2010)**

Health informatics - Personal health device communication - Part 10407: Device  
specialization - Blood pressure monitor (ISO/IEEE 11073-10407:2010)

Medizinische Informatik - Kommunikation von Geräten für die persönliche Gesundheit -  
Teil 10407: Gerätespezifikation - Blutdruckmonitor (ISO/IEEE 11073-10407:2010)

Informatique de santé - Communication entre dispositifs de santé personnels - Partie  
10407: Spécialisation des dispositifs - Moniteur de pression sanguine  
(ISO/IEEE 11073-10407:2010)

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35.240.80	Uporabniške rešitve IT v zdravstveni tehniki	IT applications in health care technology

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EUROPEAN STANDARD  
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**EN ISO 11073-10407**

March 2011

ICS 35.240.80

English Version

**Health informatics - Personal health device communication -  
Part 10407: Device specialization - Blood pressure monitor  
(ISO/IEEE 11073-10407:2010)**

Informatique de santé - Communication entre dispositifs de  
santé personnels - Partie 10407: Spécialisation des  
dispositifs - Moniteur de pression sanguine (ISO/IEEE  
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Medizinische Informatik - Kommunikation von Geräten für  
die persönliche Gesundheit - Teil 10407:  
Gerätespezifikation - Blutdruckmonitor (ISO/IEEE 11073-  
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**Health informatics — Personal health  
device communication —**

Part 10407:

**Device specialization — Blood pressure  
monitor**

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*Informatique de santé — Communication entre dispositifs de santé  
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*Partie 10407. Spécialisation des dispositifs — Moniteur de pression  
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Institute of Electrical and Electronics Engineers, Inc.  
3 Park Avenue, New York • NY 10016-5997, USA  
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## Foreword

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ISO/IEEE 11073-10407 was prepared by the 11073 Committee of the Engineering in Medicine and Biology Society of the IEEE (as IEEE Std 11073-10407-2008). 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*

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- *Part 10407: Device specialization — Blood pressure monitor*
- *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 document uses the optimized framework created in IEEE Std 11073-20601<sup>a</sup> and describes a specific, interoperable communication approach for blood pressure monitors. These standards align with and draw on the existing clinically focused standards to provide support for communication of data from personal health devices.

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<sup>a</sup>Information on references can be found in Clause 2.

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# Health informatics — Personal health device communication —

## Part 10407: Device specialization — Blood pressure monitor

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### 1. Overview

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#### 1.1 Scope

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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 blood pressure monitor devices and compute engines (e.g., cell phones, personal computers, personal health appliances, and 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 blood pressure monitors.

#### 1.2 Purpose

This standard addresses a need for an openly defined, independent standard for controlling information exchange to and from personal health devices and compute engines (e.g., cell phones, personal computers, personal health appliances, and set top boxes). Interoperability is the key to growing the potential market for these devices and to enabling people to be better informed participants in the management of their health.

#### 1.3 Context

See IEEE Std 11073-20601™ for an overview of the environment within which this standard is written.

This document, IEEE Std 11073-10407, defines the device specialization for the blood pressure monitor, being a specific agent type, and provides a description of the device concepts, its capabilities, and its implementation according to this standard.