SLOVENSKI STANDARD
SIST EN ISO 11073-10471:2011

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Zdravstvena informatika - Komunikacija osebnih medicinskih naprav - 10471. del: Specialne naprave - Sistem hišnih naprav za samostojno življenje starejših in bolnih (ISO/IEEE 11073-10471:2010)

Health Informatics - Personal health device communication - Part 10471: Device specialization - Independant living activity hub (ISO/IEEE 11073-10471:2010)

Medizinische Informatik - Kommunikation von Geräten für die persönliche Gesundheit - Teil 10471: Gerätespezifikation - Schnittstellenkonzentrator und umsetzer für assistierende Systeme (ISO/IEEE 11073-10471:2010)

Informatique de santé - Communication entre dispositifs de santé personnels - Partie 10471: Spécialisation des dispositifs - Concentrateur d'activité pour une vie autonome (ISO/IEEE 11073-10471:2010)

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ICS:

11.180.99	Drugi standardi v zvezi s pripomočki za invalide	Other standards related to aids for disabled and handicapped people
35.240.80	Uporabniške rešitve IT v zdravstveni tehniki	IT applications in health care technology

SIST EN ISO 11073-10471:2011 **en**

EUROPEAN STANDARD

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EUROPÄISCHE NORM

EN ISO 11073-10471

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English Version

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Foreword

The text of ISO/IEEE 11073-10471:2010 has been prepared by Technical Committee ISO/TC 215 “Health informatics” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 11073-10471:2011 by Technical Committee CEN/TC 251 “Health informatics” the secretariat of which is held by NEN.

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INTERNATIONAL STANDARD

ISO/IEEE 11073-10471

First edition
2010-05-01

Health informatics — Personal health device communication —

Part 10471: Device specialization — Independant living activity hub

Informatique de santé — Communication entre dispositifs de santé personnels —

Partie 10471: Spécialisation des dispositifs — Concentrateur d'activité vivante indépendante

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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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ISO/IEEE 11073-10471 was prepared by the 11073 Committee of the Engineering in Medicine and Biology Society of the IEEE (as IEEE Std 11073-10471-2008). 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*

— *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*

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[a] and describes a specific, interoperable communication approach for independent living activity hubs. 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.

Health informatics — Personal health device communication —

Part 10471: Device specialization — Independant living activity hub

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1. Overview

1.1 Scope

Within the context of the ISO/IEEE 11073 family of standards for device communication, this standard establishes a normative definition of the communication between independent living activity hubs and managers (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 and information models. It specifies the use of specific term codes, formats, and behaviors in telehealth environments restricting ambiguity in base frameworks in favor of interoperability. This standard defines a common core of communication functionality for independent living activity hubs. In this context, independent living activity hubs are defined as devices that communicate with simple situation monitors (binary sensors), normalize information received from the simple environmental monitors, and provide this normalized information to one or more managers. This information can be examined (for example) to determine when a person's activities/behaviors have deviated significantly from what is normal for them such that relevant parties can be notified. Independent living activity hubs will normalize information from the following simple situation monitors (binary sensors) for the initial release of the proposed standard: fall sensor, motion sensor, door sensor, bed/chair occupancy sensor, light switch sensor, smoke sensor, (ambient) temperature threshold sensor, personal emergency response system (PERS), and enuresis sensor (bed-wetting).