

**SLOVENSKI STANDARD**  
**SIST EN ISO 11073-10441:2017**  
**01-september-2017**

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**Zdravstvena informatika - Komunikacija osebnih medicinskih naprav - 10441. del:  
Specialne naprave - Monitor aktivnost in kardiovaskularni fitnes (ISO / IEEE 11.073  
-10.441: 2015)**

Health informatics - Personal health device communication - Part 10441: Device  
specialization - Cardiovascular fitness and activity monitor (ISO/IEEE 11073-  
10441:2015)

Medizinische Informatik - Kommunikation von Geräten für die persönliche Gesundheit -  
Teil 10441: Gerätespezifikation - Monitor für die Herz-Kreislauf-Fitness und -Aktivität  
(ISO/IEEE 11073-10441:2015)

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Informatique de santé - Communication entre dispositifs de santé personnels - Partie  
10441: Spécialisation des dispositifs - Moniteur d'activité et de forme cardiovasculaire  
(ISO/IEEE 11073-10441:2015)

**Ta slovenski standard je istoveten z: EN ISO 11073-10441:2017**

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**ICS:**

11.040.55	Diagnostična oprema	Diagnostic equipment
35.240.80	Uporabniške rešitve IT v zdravstveni tehniki	IT applications in health care technology

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EUROPEAN STANDARD

EN ISO 11073-10441

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2017

ICS 11.040.55; 35.240.80

English Version

Health informatics - Personal health device  
communication - Part 10441: Device specialization -  
Cardiovascular fitness and activity monitor (ISO/IEEE  
11073-10441:2015)

Informatique de santé - Communication entre  
dispositifs de santé personnels - Partie 10441:  
Spécialisation des dispositifs - Moniteur d'activité et de  
forme cardiovasculaire (ISO/IEEE 11073-10441:2015)

Medizinische Informatik - Kommunikation von Geräten  
für die persönliche Gesundheit - Teil 10441:  
Gerätespezifikation - Monitor für die Herz-Kreislauf-  
Fitness und -Aktivität (ISO/IEEE 11073-10441:2015)

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The text of ISO/IEEE 11073-10441:2015 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 11073-10441:2017 by Technical Committee CEN/TC 251 “Health informatics” the secretariat of which is held by NEN.

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**INTERNATIONAL STANDARD**      **ISO/IEEE**  
**11073-10441**

First edition  
2015-03-01

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

**Part 10441:  
Device specialization — Cardiovascular  
fitness and activity monitor**

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*Informatique de santé — Communication entre dispositifs de santé  
personnels —*

*Partie 10441. Spécialisation des dispositifs — Moniteur d'activité et de  
forme cardiovasculaire*

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## Foreword

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ISO/IEEE 11073-10441 was prepared by the 11073 Committee of the Engineering in Medicine and Biology Society of the IEEE (as IEEE 11073-10441-2013). 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. IEEE is responsible for the maintenance of this document with participation and input from ISO member bodies.

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 00103: Overview*
- *Part 10101: (Point-of-care medical device communication) Nomenclature*
- *Part 10102: (Point-of-care medical device communication) Nomenclature — Annotated ECG*
- *Part 10103: (Point-of-care medical device communication) — Nomenclature — Implantable device, cardiac*
- *Part 10201: (Point-of-care medical device communication) Domain information model*
- *Part 10404: Device specialization — Pulse oximeter*

## ISO/IEEE 11073-10441:2015(E)

- Part 10406: Device specialization — Basic electrocardiograph (ECG) (1- to 3-lead ECG)
- Part 10407: Device specialization — Blood pressure monitor
- Part 10408: Device specialization — Thermometer
- Part 10415: Device specialization — Weighing scale
- Part 10417: Device specialization — Glucose meter
- Part 10418: Device specialization — International Normalized Ratio (INR) monitor
- Part 10420: Device specialization — Body composition analyzer
- Part 10421: Device specialization — Peak expiratory flow monitor (peak flow)
- Part 10441: Device specialization — Cardiovascular fitness and activity monitor
- Part 10442: (Point-of-care medical device communication) Device specialization — Strength fitness equipment
- Part 10471: Device specialization — Independent living activity hub
- Part 10472: Device specialization — Medication monitor
- Part 20101: (Point-of-care medical device communication) Application profiles — Base standard
- Part 20601: 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
- Part 30400: (Point-of-care medical device communication) Interface profile — Cabled Ethernet
- Part 90101: (Point-of-care medical device communication) Analytical instruments — Point-of-care test
- Part 91064: (Standard communication protocol) Computer-assisted electrocardiography
- Part 92001: (Medical waveform format) — Encoding rules

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Health Informatics—Personal health device communication

# Part 10441: Device specialization— Cardiovascular fitness and activity monitor

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**IEEE Std 11073-10441™-2013**  
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**Health informatics—Personal health device communication**

# **Part 10441: Device specialization— Cardiovascular fitness and activity monitor**

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Approved 6 February 2013

**IEEE-SA Standards Board**

**Abstract:** Within the context of the ISO/IEEE 11073 family of standards for device communication, a normative definition of communication between personal telehealth cardiovascular fitness and activity monitor devices and managers (e.g., cell phones, personal computers, personal health appliances, and set top boxes) is established in this standard in a manner that enables plug-and-play interoperability. Appropriate portions of existing standards are leveraged including ISO/IEEE 11073 terminology, information models, application profile standards, and transport standards. The use of specific term codes, formats, and behaviors in telehealth environments restricting optionality in base frameworks in favor of interoperability is specified. A common core of communication functionality for personal telehealth cardiovascular fitness and activity monitor devices is defined in this standard.

**Keywords:** activity monitor, cardiovascular fitness, IEEE 11073-10441™, medical device communication, personal health devices

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