

Health informatics - Personal health device
communication - Part 10442: Device specialization -
Strength fitness equipment (ISO/IEEE
11073-10442:2015, Corrected version 2017-11-01)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 11073-10442:2017 sisaldab Euroopa standardi EN ISO 11073-10442:2017 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 11073-10442:2017 consists of the English text of the European standard EN ISO 11073-10442:2017.
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English Version

Health informatics - Personal health device
communication - Part 10442: Device specialization -
Strength fitness equipment (ISO/IEEE 11073-10442:2015,
Corrected version 2017-11-01)

Informatique de santé - Communication entre
dispositifs de santé personnels - Partie 10442:
Spécialisation des dispositifs - Équipement de mise en
forme musculaire (ISO/IEEE 11073-10442:2015,
Version corrigée 2017-11-01)

Medizinische Informatik - Kommunikation von Geräten
für die persönliche Gesundheit - Teil 10442:
Gerätespezifikation - Fitnessgeräte für das
Krafttraining (ISO/IEEE 11073-10442:2015,
korrigierte Fassung 2017-11-01)

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European foreword

The text of ISO/IEEE 11073-10442:2015, Corrected version 2017-11-01 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 11073-10442:2017 by Technical Committee CEN/TC 251 “Health informatics” the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2017, and conflicting national standards shall be withdrawn at the latest by August 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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Endorsement notice

The text of ISO/IEEE 11073-10442:2015, Corrected version 2017-11-01 has been approved by CEN as EN ISO 11073-10442:2017 without any modification.

Contents

1. Overview	1
1.1 Scope	1
1.2 Purpose	1
1.3 Context	2
2. Normative references.....	2
3. Definitions, acronyms, and abbreviations	2
3.1 Definitions	2
3.2 Acronyms and abbreviations	3
4. Introduction to ISO/IEEE 11073 personal health devices	3
4.1 General	3
4.2 Introduction to IEEE 11073-20601 modeling constructs	4
5. Strength fitness device concepts and modalities.....	4
5.1 General concepts.....	4
5.2 Set.....	5
5.3 Repetition	5
5.4 Repetition count.....	5
5.5 Resistance.....	5
5.6 Exercise position.....	5
5.7 Exercise laterality	5
5.8 Exercise grip.....	5
5.9 Exercise movement.....	5
6. Strength fitness domain information model	5
6.1 Overview	5
6.2 Class extensions.....	5
6.3 Object instance diagram	6
6.4 Types of configuration.....	7
6.5 Medical device system object.....	7
6.6 Numeric objects.....	10
6.7 Real-time sample array objects.....	14
6.8 Enumeration objects	14
6.9 PM Store objects.....	20
6.10 Scanner objects	20
6.11 Strength fitness information model extensibility rules	20
7. Strength fitness service model.....	20
7.1 General	20
7.2 Object access services.....	20
7.3 Object access event report services	22

8. Strength fitness communication model	22
8.1 Overview	22
8.2 Communications characteristics	22
8.3 Association procedure	22
8.4 Configuring procedure	24
8.5 Operating procedure	24
8.6 Time synchronization	24
9. Test associations	25
10. Conformance	25
10.1 Applicability	25
10.2 Conformance specification	25
10.3 Levels of conformance	25
10.4 Implementation conformance statements	26
Annex A (informative) Bibliography	30
Annex B (normative) Any additional ASN.1 definitions	31
Annex C (normative) Allocation of identifiers	32
Annex D (informative) Use cases	38
Annex E (informative) Examples	40

Health informatics—Personal health device communication

Part 10442: Device specialization— Strength fitness equipment

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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 personal strength fitness devices 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 optionality in base frameworks in favor of interoperability. This standard defines a common core of communication functionality for personal telehealth strength fitness devices. In this context, strength fitness devices are being used broadly to cover strength fitness devices that measure musculo-skeletal strength-conditioning activities.

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 managers (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.

IEEE Std 11073-10442-2008
Health informatics—Personal health device communication
Part 10442: Device specialization—Strength fitness equipment

1.3 Context

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

This document, IEEE Std 11073-10442 defines the device specialization for the strength fitness device, being a specific agent type, and it provides a description of the device concepts, its capabilities, and its implementation according to this standard.

This standard is based on IEEE Std 11073-20601, which in turn draws information from both ISO/IEEE 11073-10201:2004 [B3]¹ and ISO/IEEE 11073-20101:2004 [B4]. The medical device encoding rules (MDER) used within this standard are fully described in IEEE Std 11073-20601.

This standard reproduces relevant portions of the nomenclature found in ISO/IEEE 11073-10101:2004 [B2] and adds new nomenclature codes for the purposes of this standard. Between this standard and IEEE Std 11073-20601, all required nomenclature codes for implementation are documented.

NOTE—In this standard, IEEE Std 11073-104zz is used to refer to the collection of device specialization standards that utilize IEEE Std 11073-20601, where zz can be any number from 01 to 99, inclusive.²

2. Normative references

The following referenced documents are indispensable for the application of this document (i.e., they must be understood and used, so that each referenced document is cited in text and its relationship to this document is explained). For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments or corrigenda) applies.

IEEE Std 11073-20601™-2008, Health informatics—Personal health device communication—Part 20601: Application profile—Optimized exchange protocol.^{3, 4}

See Annex A for all informative material referenced by this standard.

3. Definitions, acronyms, and abbreviations

3.1 Definitions

For the purposes of this standard, the following terms and definitions apply. The *Authoritative Dictionary of IEEE Standards Terms* [B1] should be referenced for terms not defined in this clause.

3.1.1 agent: A node that collects and transmits personal health data to an associated manager.

3.1.2 class: In object-oriented modeling, a class describes the attributes, method, and events that objects instantiated from the class utilize.

3.1.3 compute engine: *See:* manager.

3.1.4 device: A term used to refer to a physical apparatus implementing either an agent or a manager role.

¹ The numbers in brackets correspond to those of the bibliography in Annex A.

² Notes in text, tables, and figures are given for information only and do not contain requirements needed to implement the standard.

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