

STN	Zdravotná informatika Komunikácia s osobným zdravotným prístrojom Časť 10427: Špecializácia prístroja Monitor stavu napájania osobných zdravotníckych zariadení (ISO/IEEE 11073-10427: 2018)	STN EN ISO 11073-10427 84 8109
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Health informatics - Personal health device communication - Part 10427: Device specialization - Power status monitor of personal health devices(ISO/IEEE 11073-10427:2018)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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Health informatics - Personal health device
communication - Part 10427: Device specialization -
Power status monitor of personal health devices(ISO/IEEE
11073-10427:2018)

Informatique de santé - Communication entre
dispositifs de santé personnels - Partie 10427:
Spécialisation des dispositifs - Moniteur de l'état de
puissance des dispositifs de santé personnels
(ISO/IEEE 11073-10427:2018)

Medizinische Informatik - Kommunikation von Geräten
für die persönliche Gesundheit - Teil 10427:
Gerätespezifikation - Monitor für den Energiestatus
von persönlichen gesundheitsbezogenen Geräten
(ISO/IEEE 11073-10427:2018)

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EN ISO 11073-10427:2018 (E)

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European foreword

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ISO/IEEE 11073-10427

First edition
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Health informatics — Personal health device communication —

Part 10427:

Device specialization — Power status monitor of personal health devices

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

*Partie 10427: Spécialisation des dispositifs — Moniteur de l'état de
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Reference number
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IEEE Std 11073-10427™-2016

Health informatics—Personal health device communication

Part 10427: Device specialization— Power Status Monitor of Personal Health Devices

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IEEE Engineering in Medicine and Biology Society

Approved 22 September 2016

IEEE-SA Standards Board

Abstract: Guidelines for establishing criteria for application, performance, interchangeability, tests, life cycle costs, and safety requirements of traction power rectifier transformers are established in this standard. Set forth are the electrical, mechanical and thermal design, manufacturing, and testing requirements for traction power rectifier transformers for dc electrification systems. Covered in this standard are liquid-immersed and dry-type transformers, including those with cast coil and epoxy resin encapsulated windings.

Keywords: basic lightning impulse insulation, BIL, commutating impedance, design optimization, electrical requirements, factory tests, ferroresonance, heavy rail, hot spot, IEEE 1653.1™, light rail, load cycle, overvoltage transient, partial discharge (PD) service conditions, tests, traction power duty cycle, traction power rectifier transformers, transit application

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Introduction

This introduction is not part of IEEE Std 11073-10427-2016, Health Informatics—Personal health device communication—Part 10427: Device Specialization—Power Status Monitor of Personal Health Devices.

ISO/IEEE 11073 standards enable communication between medical devices and external computer systems. This document uses the optimized framework created in ISO/IEEE 11073-20601 and describes a specific, interoperable communication approach for power status monitor of personal health devices (PHDs). These standards align with and draw on the existing clinically focused standards to provide support for communication of data from clinical or PHDs.

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Health informatics—Personal health device communication

Part 10427: Device specialization— Power Status Monitor of Personal Health Devices

1. Overview

1.1 Scope

This standard establishes a normative definition of communication between devices containing a power source (agents) and managers (e.g., cell phones, personal computers, personal health appliances, set-top boxes) in a manner that enables plug-and-play interoperability. Using existing terminology, information profiles, application profile standards, and transport standards as defined in other ISO/IEEE 11073 standards, this standard defines a common core of communication functionality of personal health devices (PHDs) containing a battery, including: 1) current device power status (e.g., on mains or on battery); 2) power charge status (e.g., percent of full charge); and 3) estimated time remaining (e.g., minutes).

1.2 Purpose

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

1.3 Context

See ISO/IEEE 11073-20601:2016¹ for an overview of the environment within which this standard is written.

This standard defines the specialization for monitoring the power status of PHDs, as well as being a specific agent type. It also provides a description of the concepts, its capabilities, and its implementation according to this standard.

¹Information on references can be found in Clause 2.

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Health informatics—Personal health device communication—Part 10427: Device
specialization—Power Status Monitor of Personal Health Devices

This standard is based on ISO/IEEE 11073-20601:2016, ISO/IEEE 11073-20601a:2010, and IEEE Std 11073-20601-2008, which in turn draw information from both ISO/IEEE 11073-10201:2004 [B8] and ISO/IEEE 11073-20101:2004 [B9].² The medical device encoding rules (MDERs) used within this standard are fully described in Annex F of ISO/IEEE 11073-20601:2016.

This standard reproduces relevant portions of the nomenclature found in ISO/IEEE 11073-10101a:2015 [B6] and in ISO/IEEE 11073-10101:2004 [B7] and adds new nomenclature codes for the purposes of this standard. Together this standard, ISO/IEEE 11073-20601:2016, and IEEE Std 11073-20601a:2010 document all implementation required nomenclature codes.

NOTE 1—IEEE Std 11073-20601a:2010 is an amendment to IEEE Std 11073-20601:2008. It contains new material and corrections and does not copy the content of ISO/IEEE 11073-20601:2010. Any reference to ISO/IEEE 11073-20601:2016 refers to the document that is obtained after applying this new material and corrections to ISO/IEEE 11073-20601:2010.³

NOTE 2—In this standard, ISO/IEEE 11073-104zz is used to refer to the collection of device specialization standards that utilize ISO/IEEE 11073-20601:2016, where zz can be any number from 01 to 99, inclusive.

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. (Use with IEEE Std 11073-20601a-2010.)^{4,5}

ISO/IEEE 11073-20601:2016, Health informatics—Personal health device communication—Application profile—Optimized Exchange Protocol.⁶

ISO/IEEE 11073-20601a:2010, Health informatics—Personal health device communication—Application Profile—Optimized Exchange Protocol—Amendment 1.

koniec náhľadu – text ďalej pokračuje v platenej verzii STN