

**INTERNATIONAL  
STANDARD**

**ISO/IEEE  
11073-30200**

First edition  
2004-12-15

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**Health informatics — Point-of-care  
medical device communication —  
Part 30200:  
Transport profile — Cable connected**

*Informatique de santé — Communication entre dispositifs médicaux sur le  
site des soins —  
Partie 30200: Profil de transport — Connection par câble*



Reference number  
ISO/IEEE 11073-30200:2004(E)

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**Health informatics — Point-of-care  
medical device communication —  
Part 30200:  
Transport profile — Cable connected**

Sponsor

**IEEE 1073™ Standard Committee**

of the

**IEEE Engineering in Medicine and Biology Society**

Approved 30 January 2000

**IEEE-SA Standards Board**



**IEEE**

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**Abstract:** A connection-oriented transport profile and physical layer suitable for medical device communications in legacy devices is established. Communications services and protocols consistent with specifications of the Infrared Data Association are defined. These communication services and protocols are optimized for use in patient-connected bedside medical devices.

**Keywords:** bedside, Infrared Data Association, IrDA, legacy device, medical device, medical device communications, MIB, patient, SNTP

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*Print:* ISBN 0-7381-4519-X SH95303  
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Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75% of the member bodies casting a vote.

A pilot project between ISO and the IEEE has been formed to develop and maintain a group of ISO/IEEE standards in the field of medical devices as approved by Council resolution 43/2000. Under this pilot project, IEEE is responsible for the development and maintenance of these standards with participation and input from ISO member bodies.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. Neither ISO nor the IEEE shall be held responsible for identifying any or all such patent rights.

ISO/IEEE 11073-30200:2004(E) was prepared by IEEE 1073 Committee of the IEEE Engineering in Medicine and Biology Society.

## IEEE Introduction

This introduction is not part of ISO/IEEE 11073-30200:2004(E), Health informatics — Point-of-care medical device communication — Part 30200: Transport profile — Cable connected.

ISO/IEEE 11073 standards enable communication between medical devices and external computer systems. They provide automatic and detailed electronic data capture of patient vital signs information and device operational data. The primary goals are to:

- Provide real-time plug-and-play interoperability for patient-connected medical devices
- Facilitate the efficient exchange of vital signs and medical device data, acquired at the point-of-care, in all health care environments

“Real-time” means that data from multiple devices can be retrieved, time correlated, and displayed or processed in fractions of a second. “Plug-and-play” means that all the clinician has to do is make the connection — the systems automatically detect, configure, and communicate without any other human interaction.

“Efficient exchange of medical device data” means that information that is captured at the point-of-care (e.g., patient vital signs data) can be archived, retrieved, and processed by many different types of applications without extensive software and equipment support, and without needless loss of information. The standards are especially targeted at acute and continuing care devices, such as patient monitors, ventilators, infusion pumps, ECG devices, etc. They comprise a family of standards that can be layered together to provide connectivity optimized for the specific devices being interfaced.

ISO/IEEE 11073-30200:2004(E) defines a communications transport profile. This profile is for a cable-connected local area network (LAN) for the interconnection of computers and medical devices. This standard is suitable for new device designs, but is particularly targeted to modifications of legacy devices.

The term “legacy devices” refers to equipment that is

- Already in use in clinical facilities
- In active production at the facilities of medical device manufacturers, or
- Beyond the initial stages of engineering development

Specifically, this standard describes connection-oriented communications services and protocols consistent with standards of the Infrared Data Association (IrDA), adapted as appropriate for ISO/IEEE 11073 applications and optimized for use in patient-connected bedside medical devices.

ISO/IEEE 11073-30200:2004(E) is one part of the family of ISO/IEEE 11073 standards. It is compatible with the upper layer ISO/IEEE 11073 standards.

The primary users of this standard are technical personnel who are creating or interfacing with a medical device communications system. Familiarity with the ISO/IEEE 11073 family of standards is recommended. Familiarity with communications and networking technologies is also recommended.

This standard is intended to satisfy the following objectives:

- a) Allow compatibility with existing medical device communications designs to minimize design risk, contain product costs, and simplify field upgrades
- b) Specify hardware and software elements that are available from multiple vendors
- c) Make use of other computer industry communication technology to allow for continuous cost decreases
- d) Meet the requirements of IEEE Std 1073™-1996
- e) Be compatible with the current published and draft ISO/IEEE standard upper layers



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### Interpretations

Current interpretations can be accessed at the following URL: <http://standards.ieee.org/reading/ieee/interp/index.html>.

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