SLOVENSKI STANDARD
SIST EN IEC 63203-101-1:2021

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Nosljive elektronske naprave in tehnologije - 101-1. del: Terminologija (IEC 63203-101-1:2021)

Wearable electronic devices and technologies - Part 101-1: Terminology (IEC 63203-101-1:2021)

Tragbare elektronische Geräte und Technologien - Teil 101-1: Terminologie (IEC 63203-101-1:2021)

Technologies et dispositifs électroniques prêts-à-porter - Partie 101-1: Terminologie (IEC 63203-101-1:2021)

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01.040.31	Elektronika (Slovarji)	Electronics (Vocabularies)
31.020	Elektronske komponente na splošno	Electronic components in general
59.080.80	Inteligentne tekstilije	Smart textiles

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 63203-101-1

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English Version

Wearable electronic devices and technologies - Part 101-1: Terminology (IEC 63203-101-1:2021)

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

The text of document 124/144/FDIS, future edition 1 of IEC 63203-101-1, prepared by IEC/TC 124 “Wearable electronic devices and technologies” was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63203-101-1:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2022–05–03
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024–08–03

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In the official version, for Bibliography, the following note has to be added for the standard indicated:

ISO/TR 23383:2020 NOTE Harmonized as CEN ISO/TR 23383:2020 (not modified)

IEC 63203-101-1

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Wearable electronic devices and technologies – Part 101-1: Terminology

Technologies et dispositifs électroniques prêts-à-porter – Partie 101-1: Terminologie

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FOREWORD

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International Standard IEC 63203-101-1 has been prepared by TC 124: Wearable electronic devices and technologies.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
124/144/FDIS	124/147/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

A list of all parts in the IEC 63203 series, published under the general title *Wearable electronic devices and technologies*, can be found on the IEC website.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

WEARABLE ELECTRONIC DEVICES AND TECHNOLOGIES –

Part 101-1: Terminology

1 Scope

This document provides terminology frequently used in literature related to wearable electronic devices and technologies in the IEC 63203 series. This list includes wearable electronic devices and technologies, near-body wearable electronics, on-body wearable electronics, in-body wearable electronics, and electronic textiles.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1
wearable electronic device
electronic device intended to be located near to, on, or in, a human body

3.1.1
near-body wearable electronic device
near-body wearable electronics
wearable electronic device intended to be located near a human body but which does not make direct contact with its external surface

Note 1 to entry: Equipment that is not wearable (e.g. that operates in close proximity to the human body) is not considered to be near-body wearable electronics.

3.1.2
on-body wearable electronic device
on-body wearable electronics
wearable electronic device intended to be located on the external surface of a human body and which makes direct contact with it

Note 1 to entry: Portable equipment that is held in hand during use is not considered to be on-body wearable electronics.

3.1.3
in-body wearable electronic device
in-body wearable electronics
wearable electronic device intended to be located inside a human body

3.2
wearable electronic technology
technology related to the development of wearable electronic devices

Note 1 to entry: Examples: materials, applications, devices, components, systems or network.

3.3
electronic skin
wearable electronic device attached on human skin, the physical behaviour of which is close to that of human skin (i.e. flexible and elastic)

Note 1 to entry: Some electronic skins might mimic certain functionalities of human skin.

3.4
patchable electronics
wearable electronic device or component that can be attached to the human body

3.5
biodegradable electronics
electronic device and component that naturally dissolve after proper functioning

Note 1 to entry: Examples of functions: body monitoring, wound healing, therapy delivery.

3.6
ingestible electronics
in-body electronic device or component that is ingested orally

3.7
conformable wearable electronic device
wearable electronic device able to change form or shape in response to the external environment

3.8
stretchable electronic device
electronic device able to operate under stretched conditions and having an elastic behaviour

3.9
(electric) sensor
device which, when excited by a physical phenomenon, produces an electric signal characterizing the physical phenomenon

Note 1 to entry: Sensors such as touch sensors, temperature sensors, motion sensors, vital-voltage sensors, or electrocardiogram (ECG) sensors are specific types of sensors used in wearable devices.

[SOURCE: IEC 60050-151:2001, 151-13-48, modified – Note 1 to entry has been added.]

3.10
stretchable substrate
stretchable material
substrate or material able to recover original size and shape immediately after the removal of the extending force causing deformation

Note 1 to entry: In this document, the notion of "stretchability" is based on the elasticity of the substrate.

3.11
flexible substrate
flexible material
substrate or material able to be deformed under bending force to a certain point without causing breakage