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Industriell processtyrning – Trådlösa nät och kommunikationsprofiler – WIA-PA

*Industrial communication networks –
Wireless communication network and communication profiles –
WIA-PA*

Som svensk standard gäller europastandarden EN 62601:2016. Den svenska standarden innehåller den officiella engelska språkversionen av EN 62601:2016.

Nationellt förord

Europastandarden EN 62601:2016

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Box 1284
164 29 Kista
Tel 08-444 14 00
www.elstandard.se

English Version

**Industrial networks - Wireless communication network and
communication profiles - WIA-PA
(IEC 62601:2015)**

Réseaux industriels - Réseau de communications sans fil et
profils de communication - WIA-PA
(IEC 62601:2015)

Industrielle Kommunikationsnetze - Kommunikationsnetze
und Kommunikationsprofile - WIA-PA
(IEC 62601:2015)

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

European foreword

The text of document 65C/821/FDIS, future edition 2 of IEC 62601, prepared by SC 65C "Industrial networks" of IEC/TC 65 "Industrial process measurement, control and automation" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62601:2016.

The following dates are fixed:

- latest date by which the document has to be (dop) 2016-10-13
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standard or by endorsement
- latest date by which the national (dow) 2019-01-13
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document have to be withdrawn

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The text of the International Standard IEC 62601:2015 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61804-2	NOTE	Harmonized as EN 61804-2.
IEC 61499-1	NOTE	Harmonized as EN 61499-1.
IEC 61499-2	NOTE	Harmonized as EN 61499-2.
ISO 3166-1	NOTE	Harmonized as EN ISO 3166-1.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO/IEC 9899	-	Information technology - Programming languages - C	-	-
ISO 3166-1	-	Codes for the representation of names of countries and their subdivisions - Part 1: Country codes	EN ISO 3166-1	-
IEEE 802.15.4	2011 ¹⁾	IEEE Standard for Local and metropolitan area networks - Part 15.4: Low-Rate Wireless Personal Area Networks (LR-WPANs)	-	-

¹⁾ Superseded by IEEE 802.15.4-2015.

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**INDUSTRIAL NETWORKS –
WIRELESS COMMUNICATION NETWORK
AND COMMUNICATION PROFILES –
WIA-PA****FOREWORD**

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This second edition cancels and replaces the first edition published in 2011. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- changed IEEE STD 802.15.4-2006 to IEEE STD 802.15.4-2011 and added common modification for IEEE STD 802.15.4-2011 MAC profile, PHY profile and IEEE STD 802.15.4-2011 related references;
- added common modifications for regional adoption and added Annex D and Annex E;

- deleted extended MAC management services and added two DLSL management services;
- added specific state machines for DLSL and NL;
- unified representation of frame format and packet format;
- changed format of definition of data types;
- added detailed description of technologies for clearer understanding;
- provided support for CCA modes 1, 2, and 3.

The reader's attention is drawn to the fact that Annex E lists all of the “in-some-country” clauses on differing practices of a less permanent nature relating to the subject of this standard.

The text of this standard is based on the following documents:

FDIS	Report on voting
65C/821/FDIS	65C/833/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INDUSTRIAL NETWORKS – WIRELESS COMMUNICATION NETWORK AND COMMUNICATION PROFILES – WIA-PA

1 Scope

This International Standard specifies the system architecture and the communication protocol of Wireless networks for Industrial Automation – Process Automation (WIA-PA) that is built on IEEE STD 802.15.4-2011.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 9899, *Information technology – Programming languages – C*

ISO 3166-1, *Codes for the representation of names of countries and their subdivisions – Part 1: Country codes*

IEEE STD 802.15.4-2011, *IEEE Standard for Local and metropolitan area networks – Part 15.4: Low-Rate Wireless Personal Area Networks (LR-WPANs)*