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OPC Unified Architecture - Part 9: Alarms and conditions

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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EN IEC 62541-9

NORME EUROPÉENNE

EUROPÄISCHE NORM

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English Version

OPC Unified Architecture - Part 9: Alarms and Conditions (IEC 62541-9:2020)

Architecture unifiée OPC - Partie 9: Alarmes et Conditions
(IEC 62541-9:2020)

OPC Unified Architecture - Teil 9: Alarme und Zustände
(IEC 62541-9:2020)

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European foreword

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- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2021-04-23
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Annex ZA (normative)

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

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC/TR 62541-1	-	OPC unified architecture - Part 1: Overview and concepts	CLC/TR 62541-1	-
IEC 62541-3	-	OPC Unified Architecture - Part 3: Address Space Model	-	-
IEC 62541-4	-	OPC Unified Architecture - Part 4: Services	-	-
IEC 62541-5	-	OPC Unified Architecture - Part 5: Information Model	-	-
IEC 62541-6	-	OPC Unified Architecture - Part 6: Mappings	-	-
IEC 62541-7	-	OPC unified architecture - Part 7: Profiles	-	-
IEC 62541-8	-	OPC Unified Architecture - Part 8: Data Access	-	-
IEC 62541-11	-	OPC Unified Architecture - Part 11: Historical Access	-	-
IEC 62682	-	Management of alarms systems for the process industries	-	-
EEMUA 191	-	Alarm systems - A guide to design, management and procurement	-	-

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**OPC unified architecture –
Part 9: Alarms and Conditions**

**Architecture unifiée OPC –
Partie 9: Alarmes et Conditions**



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INTERNATIONAL STANDARD

NORME INTERNATIONALE



**OPC unified architecture –
Part 9: Alarms and Conditions**

**Architecture unifiée OPC –
Partie 9: Alarmes et Conditions**

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International standard IEC 62541-9 has been prepared by subcommittee 65E: Devices and integration in enterprise systems, of IEC technical committee 65: Industrial-process measurement, control and automation.

This third edition cancels and replaces the second edition published in 2015. This edition constitutes a technical revision.

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

- a) added optional engineering units to the definition of RateOfChange alarms;
- b) to fulfill the IEC 62682 model, the following elements have been added:
 - AlarmConditionType States: Suppression, Silence, OutOfService, Latched;
 - AlarmConditionType Properties: OnDelay, OffDelay, FirstInGroup, ReAlarmTime;

- New alarm types: DiscrepancyAlarm, DeviationAlarm, InstrumentDiagnosticAlarm, SystemDiagnosticAlarm.
- c) added Annex that specifies how the concepts of this OPC UA part maps to IEC 62682 and ISA 18.2;
- d) added new ConditionClasses: Safety, HighlyManaged, Statistical, Testing, Training;
- e) added CertificateExpiration AlarmType;
- f) added Alarm Metrics model.

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

FDIS	Report on voting
65E/709/FDIS	65E/727/RVD

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

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

Throughout this document and the other parts of the IEC 62541 series, certain document conventions are used:

Italics are used to denote a defined term or definition that appears in the "Terms and definition" clause in one of the parts of the IEC 62541 series.

Italics are also used to denote the name of a service input or output parameter or the name of a structure or element of a structure that are usually defined in tables.

The *italicized terms and names* are, with a few exceptions, written in camel-case (the practice of writing compound words or phrases in which the elements are joined without spaces, with each element's initial letter capitalized within the compound). For example the defined term is *AddressSpace* instead of Address Space. This makes it easier to understand that there is a single definition for *AddressSpace*, not separate definitions for Address and Space.

A list of all parts of the IEC 62541 series, published under the general title *OPC Unified Architecture*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://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.

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