

**SS IEC 62541-8:2022**  
**IEC 62541-8:2020, IDT**  
(ICS 25.040.40; 35.100.05)

**SINGAPORE STANDARD**  
**OPC unified architecture**  
– Part 8 : Data access

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SINGAPORE STANDARD

### **OPC unified architecture**

– Part 8 : Data access

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## **National Foreword**

This Singapore Standard was prepared by the Working Group on Open Platform Communications unified architecture set up by the Technical Committee on Smart Manufacturing under the purview of the Manufacturing Standards Committee.

This standard is a revision of SS IEC 62541-8:2019 and is an identical adoption of IEC 62541-8:2020, “OPC unified architecture – Part 8 : Data access”, published by the International Electrotechnical Commission.

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# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



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**OPC unified architecture –  
Part 8: Data access**

**Architecture unifiée OPC –  
Partie 8: Accès aux données**





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IEC Central Office  
 3, rue de Varembe  
 CH-1211 Geneva 20  
 Switzerland

Tel.: +41 22 919 02 11  
[info@iec.ch](mailto:info@iec.ch)  
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# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



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**OPC unified architecture –  
Part 8: Data access**

**Architecture unifiée OPC –  
Partie 8: Accès aux données**

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International Standard IEC 62541-8 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 new VariableTypes for AnalogItems;
- b) added an Annex that specifies a recommended mapping of OPC UA Dataaccess to OPC COM DataAccess;
- c) changed the ambiguous description of "Bad\_NotConnected";
- d) updated description for EUInformation to refer to latest revision of UNCEFACT units.

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

FDIS	Report on voting
65E/708/FDIS	65E/726/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.

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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.

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## OPC UNIFIED ARCHITECTURE –

### Part 8: Data access

#### 1 Scope

This part of IEC 62541 is part of the overall OPC Unified Architecture (OPC UA) standard series and defines the information model associated with Data Access (DA). It particularly includes additional *VariableTypes* and complementary descriptions of the *NodeClasses* and *Attributes* needed for Data Access, additional *Properties*, and other information and behaviour.

The complete address space model, including all *NodeClasses* and *Attributes* is specified in IEC 62541-3. The services to detect and access data are specified in IEC 62541-4.

#### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC TR 62541-1, *OPC Unified Architecture – Part 1: Overview and Concepts*

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*

UN/CEFACT: UNECE Recommendation N° 20, *Codes for Units of Measure Used in International Trade*, available at  
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