

SS IEC 62541-100 : 2019
IEC 62541-100:2015, IDT
(ICS 25.040.40; 35.100)

SINGAPORE STANDARD

OPC unified architecture

– Part 100 : Device interface



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National Foreword

This Singapore Standard was prepared by the Working Group on Smart Manufacturing Readiness Level set up by the Technical Committee on Smart Manufacturing under the purview of MSC.

This standard is identical with IEC 62541-100:2015, “OPC unified architecture – Part 100: Device Interface”, published by the International Electrotechnical Commission.

NOTE – Reference to International Standards are replaced by applicable Singapore Standards and Technical References.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

OPC UNIFIED ARCHITECTURE –

Part 100: Device Interface

FOREWORD

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International Standard IEC 62541-100 has been prepared by subcommittee 65E: Devices and integration in enterprise systems, of IEC technical committee 65: Industrial-process measurement, control and automation.

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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.

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

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,
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OPC UNIFIED ARCHITECTURE –

Part 100: Device Interface

1 Scope

This part of IEC 62541 is an extension of the overall OPC Unified Architecture standard series and defines the information model associated with *Devices*. This part of IEC 62541 describes three models which build upon each other as follows:

- the (base) Device Model is intended to provide a unified view of devices irrespective of the underlying device protocols;
- the Device Communication Model adds Network and Connection information elements so that communication topologies can be created;
- the Device Integration Host Model finally adds additional elements and rules required for host systems to manage integration for a complete system. It allows reflecting the topology of the automation system with the devices as well as the connecting communication networks.

2 Reference documents

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.

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*

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*

NAMUR Recommendation NE107: *Self-monitoring and diagnosis of field devices*