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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 33863.11-2021

OPC unified architecture - Part 11: Historical access

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Foreword

GB/T 33863 "OPC Unified Architecture" is divided into the following 13 parts.

---Part 1.Overview and concepts;

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---Part 6.Mapping;

---Part 7.Rules and Regulations;

---Part 8.Data Access;

---Part 9.Alarms and conditions;

---Part 10.Procedure;

---Part 11.Historical visits;

---Part 12.Discovery;

---Part 13.Aggregation.

This part is Part 11 of GB/T 33863.

This section was drafted in accordance with the rules given in GB/T 1.1-2009.

The translation method used in this part is equivalent to the adoption of IEC 62541-11.2015 "OPC Unified Architecture Part 11.Historical Access".

The Chinese documents that have a consistent correspondence with the international documents cited in this section are as follows.

---GB/T 33863.1-2017 OPC Unified Architecture Part 1.Overview and Concepts (IEC /T R62541-1.2010,

IDT);

---GB/T 33863.3-2017 OPC Unified Architecture Part 3.Address Space Model (IEC 62541-3.2010, IDT);

---GB/T 33863.4-2017 OPC Unified Architecture Part 4.Services (IEC 62541-4.2011, IDT);

---GB/T 33863.5-2017 OPC Unified Architecture Part 5.Information Model (IEC 62541-5.2011, IDT);

---GB/T 33863.8-2017 OPC Unified Architecture Part 8.Data Access (IEC 62541-8.2011, IDT);

---GB/T 33863.13-2021 OPC unified architecture part 13.aggregation (IEC 62541-13.2015, IDT).

This part was proposed by China Machinery Industry Federation.

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1 Scope

This part of GB/T 33863 defines the information model related to historical access (HA), especially including sections required for historical access.

Additional supplementary descriptions of point types and attributes, additional standard features, and other information and behaviors.

The complete address space model is specified in IEC 62541-3, including all node classes and attributes. IEC 62541-5 defines predetermined

The definition of information model, IEC 62541-4 specifies the service of detecting and accessing historical data and events, as well as the description of the extended parameter types.

This part includes functions to calculate and return aggregates, such as maximum, minimum, average, etc. The information model is defined in IEC 62541-13

Specific work of type and aggregation.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article

Pieces. For undated reference documents, the latest version (including all amendments) is

applicable to this document.

IEC /T R62541-1 OPC Unified Architecture Part 1.Overview and Concepts (OPCunified Architecture-Part 1.

Overviewandconcepts)

IEC 62541-3 OPC Unified Architecture Part 3.Address Space Model (OPCunifiedarchitecture-Part 3.

Addressspacemodel)

IEC 62541-4 OPC Unified Architecture Part 4.Services (OPCunifiedarchitecture-Part 4.Services)

IEC 62541-5 OPC Unified Architecture Part 5.Information Model (OPCunifiedarchitecure-Part 5.Information

model)

IEC 62541-8 OPC Unified Architecture Part 8.Data Access (OPCunifiedarchitecture-Part 8.Dataaccess)

IEC 62541-13 OPC Unified Architecture Part 13.Aggregates (OPCunifiedarchitecture-Part 13.Aggregates)

3.1 Terms and definitions

The following terms and definitions defined by IEC /T R62541-1, IEC 62541-3, IEC 62541-4 and IEC 62541-13 apply to this document.

3.1.1

Annotation

At a certain time, the metadata associated with an item on a given example.

Note. Annotations are metadata associated with items on a given example at a certain time. There is no need to have a stored value at that time,

3.1.2

BoundingValue

The value associated with the start and end time.

Note. When reading from the historical database, the boundary value is the value related to the start and end time of the specified processing interval. When requesting the original

When starting data, the client may need boundary values to determine the start and end values. If the original data exists at the beginning or end point, then even if the data