Revision to add a new sub-document - Mapping of the Specific Device Model for a Generic Equipment Networked Sensor - to SEMI E54.9 Specification for Sensor/Actuator Network Communication for Modbus/TCP over TCP/IP

1. Table of contens
   1. Specific Device Model for a Generic Equipment Networked Sensor – these sections detail the network mapping required to support the Specific Device Model for Generic Equipment Networked Sensor Devices. Table 1 summarizes the Generic Equipment Networked Sensor Object types. The Table 2 to Table 4 detail the instance attributes and services with each Generic Equipment Networked object type.

ADDON GENSen Sensor Objects

|  |  |  |
| --- | --- | --- |
| SDM Object Identifier | Object Name | Modbus Class ID |
| GENSen1 | Device Manager (DM) | 01 |
| GENSen2 | Sensor Actuator Controller (SAC) | 02 |
| GENSen3 | Assembly-GENSen (ASM-GENSen) | 03 |
| GENSen4 | Sensor Analog Input-GENSen (SAI-GENSen) | 33 |
| GENSen5 | Context-GENSen (CTX-GENSen) | 163 |

* + 1. Assembly-GENSen – The presentation of the Assembly Generic Equipment Networked Sensor (ASM-GENSen) object instance attributes as indicated in Table 2.

see table

Assembly-GENSen Attributes

|  |  |  |
| --- | --- | --- |
| Assembly-GENSen  ClassID=3, InstanceID=1 | | |
| Attributes | | |
| ID | Attribute Name | SDM Tag |
| 01 | Data | ASM-GENSenA01 |
| 04 | NamesArray | ASM-GENSenA02 |
| 05 | DataTypeArray | ASM-GENSenA03 |
| 17 | DeviceEnableReportRate | ASM-GENSenA04 |
| 18 | DeviceReportInhibitTimer | ASM-GENSenA05 |
| 19 | DeviceReportRate | ASM-GENSenA06 |

* + 1. Sensor-AI-GENSen – The presentation of the Sensor Analog Input Generic Equipment Networked Sensor (SAI-GENSen) object instance attributes as indicated in Table 3.

Sensor Analog Input GENSen Attributes

|  |  |  |
| --- | --- | --- |
| Sensor-AI-GENSen  ClassID=33, InstanceID=01 through r | | |
| Attributes | | |
| ID | Attribute Name | SDM Tag |
| 01 | Name | SAI-GENSenA01 |
| 16 | Value | SAI-GENSenA16 |
| 66 | DataType | SAI-GENSenA66 |

* + 1. CTX-GENSen – The presentation of the Context Generic Equipment Networked Sensor (CTX-GENSen) object instance attributes and services as indicated in Table 4.

Context-GENSen Attributes

|  |  |  |
| --- | --- | --- |
| Context-GENSen  ClassID=163, InstanceID=01 through r | | |
| Attributes | | |
| ID | Attribute Name | SDM Tag |
| 01 | SubstIDList | CTX-GENSenA01 |
| 02 | LotID | CTX-GENSenA02 |
| 03 | SubstLocID | CTX-GENSenA03 |
| 04 | SubstProcState | CTX-GENSenA04 |
| 05 | RecipeID | CTX-GENSenA05 |
| 06 | RecipeStep | CTX-GENSenA06 |
| Services | | |
| ID | Service Name | SDM Tag |
| 07 | Get Attribute | CTX-GENSenS04 |
| 09 | Set Attribute | CTX-GENSenS05 |