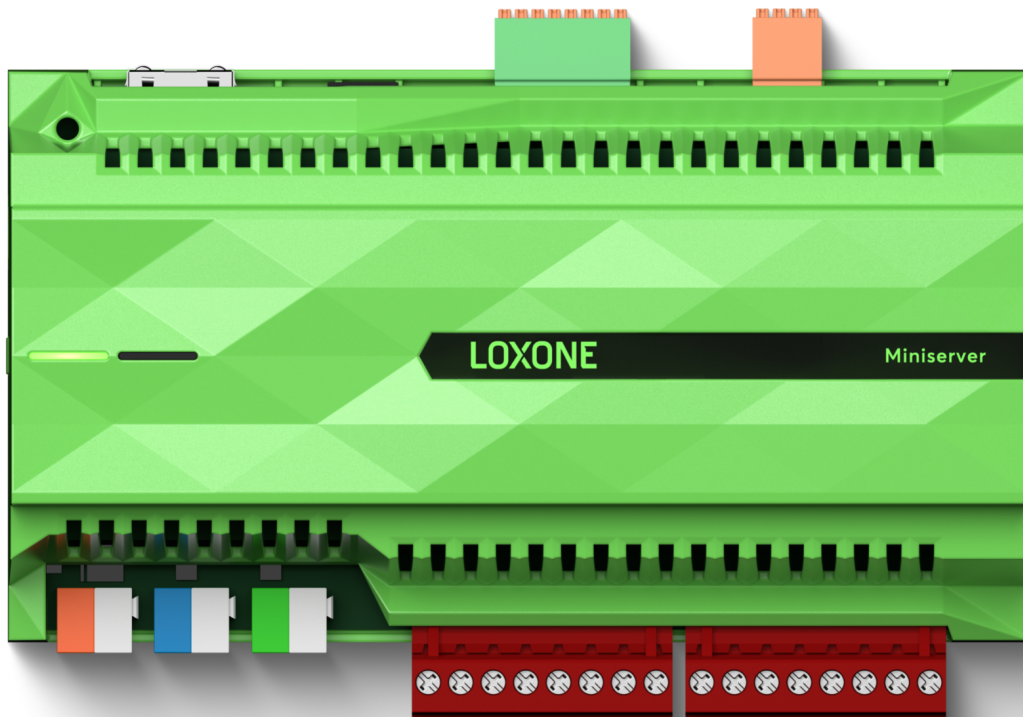


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BACnet PICS of Loxone Miniserver, Miniserver Go & Miniserver Compact





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1 BACnet Protocol Implementation Conformance Statement

Date: 14.08.2023

Vendor Name: Loxone Electronics GmbH

Product Name: Miniserver, Miniserver Go, Miniserver Compact

Product Model Number: 100335, 100336, 100512

Application Software Version: Same as Miniserver

Firmware Revision: N/A

BACnet Protocol Revision: 19

Product Description:

The Loxone Miniserver is the central control unit for all kinds of Loxone automation tasks. Via the BACnet interface, we provide in- and outputs for the central BACnet system.

1.1 BACnet Standardized Device Profiles Supported (Annex L)

X BACnet Smart Actuator (B-SA)
X BACnet Gateway (B-GW)

2 BACnet Interoperability Building Blocks Supported (Annex K)

2.1 Data-Sharing BIBBs

- X Data Sharing ReadProperty-B (DS-RP-B)
- X Data Sharing ReadPropertyMultiple-B (DS-RPM-B)
- X Data Sharing WriteProperty-B (DS-WP-B)
- X Data Sharing WritePropertyMultiple-B (DS-WPM-B)
- X Data Sharing Change Of Value-B (DS-COV-B)
- X Data Sharing Change Of Value Property-B (DS-COVP-B)

2.2 Device Management BIBBs

- X Device Management-Dynamic Device Binding-B (DM-DDB-B)
- X Device Management-Dynamic Object Binding-B (DM-DOB-B)
- X Device Management-ReinitializeDevice-B (DM-RD-B)

2.3 Network Management BIBBs

- X Network Management - Foreign Device Registration - A (NM-FDR-A)

2.4 Gateway BIBBs

- X Gateway Embedded Objects (GW-EO-B)



3 Standard Object Types Supported

Object Type	Dynamically Creatable	Dynamically Deletable
Device	☐	☐
Network Port Object	☐	☐
Analog Input	☐	☐
Analog Output	☐	☐
Binary Input	☐	☐
Binary Output	☐	☐

3.1 List of Proprietary Properties

Name	Identifier	Datatype	Meaning
Room	513	Character String	Room defined in Loxone Config for the object
Category	514	Character String	Category defined in Loxone Config for the object

3.2 Property Range Restrictions

General implementation details on the property list:

- All properties are listed with their data types and conformance code as specified in the BACnet standard.
- Read/Write access is identified by “R” for read-only properties, “W” represents writable properties.
- If not otherwise specified, all properties support the required ranges defined in the BACnet standard.
- All CharacterString properties support up to 255 characters.

3.3 Object Types

A detailed description of all supported properties is shown in the following tables.

Properties marked with “R” are read-only and may be read from the device using standard BACnet services.

Properties marked with “W” may be configured to be writable by standard BACnet services.

3.3.1 Analog Input

Property	Data type	Readable/Writable
Object_Identifier	BACnetObjectIdentifier	R
Object_Name	CharacterString	R
Object_Type	BACnetObjectType	R
Present_Value	REAL	R
Status_Flags	BACnetStatusFlags	R
Out_Of_Service	BOOLEAN	R
COV_Increment	REAL	R
Units	BACnetEngineeringUnits	R
Property_List	BACnetARRAY[N] of BACnetPropertyIdentifier	R
Room	CharacterString	R
Category	CharacterString	R

3.3.2 Analog Output

Property	Data type	Readable/Writable
Object_Identifier	BACnetObjectIdentifier	R
Object_Name	CharacterString	R
Object_Type	BACnetObjectType	R
Present_Value	REAL	W

Status_Flags	BACnetStatusFlags	R
Out_Of_Service	BOOLEAN	W
Units	BACnetEngineeringUnits	R
Priority_Array	BACnetPriorityArray	R
Current_Command_Priority	UNSIGNED	R
Relinquish_Default	REAL	R
COV_Increment	REAL	R
Property_List	BACnetARRAY[N] of BACnetPropertyIdentifier	R
Room	CharacterString	R
Category	CharacterString	R

3.3.3 Binary Input

Property	Data type	Readable/Writable
Object_Identifier	BACnetObjectIdentifier	R
Object_Name	CharacterString	R
Object_Type	BACnetObjectType	R
Present_Value	BOOL	R
Status_Flags	BACnetStatusFlags	R
Out_Of_Service	BOOLEAN	R
Polarity	BACnetPolarity	R
Property_List	BACnetARRAY[N] of BACnetPropertyIdentifier	R
Room	CharacterString	R
Category	CharacterString	R

3.3.4 Binary Output

Property	Data type	Readable/Writable
Object_Identifier	BACnetObjectIdentifier	R

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Object_Name	CharacterString	R
Object_Type	BACnetObjectType	R
Present_Value	BACnetBinaryPV	W
Status_Flags	BACnetStatusFlags	R
Out_Of_Service	BOOLEAN	W
Polarity	BACnetPolarity	R
Property_List	BACnetARRAY[N] of BACnetPropertyIdentifier	R
Priority_Array	BACnetPriorityArray	R
Current_Command_Priority	UNSIGNED	R
Relinquish_Default	BACnetBinaryPV	R
Room	CharacterString	R
Category	CharacterString	R

3.3.5 Device

Property	Data type	Readable/Writable
Object_Identifier	BACnetObjectIdentifier	R
Object_Name	CharacterString	R
Object_Type	BACnetObjectType	R
System_Status	BACnetDeviceStatus	R
Vendor_Name	CharacterString	R
Vendor_Identifier	Unsigned16	R
Model_Name	CharacterString	R
Firmware_Revision	CharacterString	R
Application_Software_Version	CharacterString	R
Description	CharacterString	R
Protocol_Version	Unsigned	R
Protocol_Revision	Unsigned	R

Protocol_Services_Supported	BOOBACnetServicesSupportedL	R
Protocol_Object_Types_Supported	BACnetObjectTypesSupported	R
Object_List	BACnetARRAY[N] of BACnetObjectIdentifier	R
Max_APDU_Length_Accepted	Unsigned	R
Segmentation_Supported	BACnetSegmentation	R
APDU_Timeout	Unsigned	R
Number_Of_APDU_Retries	Unsigned	R
Device_Address_Binding	BACnetAddressBinding	R
Database_Revision	Unsigned	R
Active_COV_Subscriptions	List of BACnetCOVSubscription	R
Property_List	BACnetARRAY[N] of BACnetPropertyIdentifier	R

3.3.6 Network Port Object

Property	Data type	Readable/Writable
Object_Identifier	BACnetObjectIdentifier	R
Object_Name	CharacterString	R
Object_Type	BACnetObjectType	R
Status_Flags	BACnetStatusFlags	R
Reliability	BACnetReliability	R
Out_Of_Service	BOOLEAN	R
Network_Type	BACnetNetworkType	R
protocol-level	BACnetProtocolLevel	R
Network_Number	Unsigned	R
Network_Number_Quality	BACnetNetworkNumberQuality	R
Changes_Pending	Boolean	R
MAC_Address	Octet String	R



APDU_Length	Unsigned	R
BACnet_IP_Mode	BACnetIPMode	W
IP_Address	Octet String	R
BACnet_IP_UDP_Port	Unsigned	R
IP_Subnet_Mask	Octet String	R
IP_Default_Gateway	Octet String	R
IP_DNS_Server	Octet String	R
fd-bbmd-address	Context specific	W
fd-bbmd-subscriptionlifetime	Unsigned	W
Link_Speed	Unsigned	R

3.4 BACnet Data Link Layer Options

- ☐ ARCNET (ATA 878.1), 2.5 Mb. (Clause 8)
- ☐ ARCNET (ATA 878.1), EIA-485 (Clause 8), baud rate(s) _____

X BACnet IP, (Annex J)

- ☐ BACnet IP, (Annex J), BACnet Broadcast Management Device (BBMD)
- ☐ BACnet IP, (Annex J), Network Address Translation (NAT Traversal)
- ☐ BACnet IPv6, (Annex U)
- ☐ BACnet IPv6, (Annex U), BACnet Broadcast Management Device (BBMD)
- ☐ BACnet/ZigBee (Annex O) _____
- ☐ Ethernet, ISO 8802-3 (Clause 7)
- ☐ LonTalk, ISO/IEC 14908.1 (Clause 11), medium: _____
- ☐ MS/TP master (Clause 9)
- ☐ Point-To-Point, EIA 232 (Clause 10), baud rate(s):
- ☐ Point-To-Point, modem, (Clause 10), baud rate(s):
- ☐ BACnet Secure Connect (Annex AB)

Device Address Binding

Is static device binding supported? (This is currently necessary for two-way communication with MS/TP slaves and certain other devices.) ☐ Yes ☒ No

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Character Sets Supported

Indicating support for multiple character sets does not imply that they can all be supported simultaneously.

- | | | |
|--|---|-------------------------------------|
| X ISO 10646 (UTF-8) | ☐ IBM™/Microsoft™ DBCS | ☐ ISO 8859-1 |
| ☐ ISO 10646 (UCS-2) | ☐ ISO 10646 (UCS-4) | ☐ JIS X 0208 |

Gateway Options

If this product is a communication gateway, describe the types of non-BACnet equipment/networks(s) that the gateway supports:

With Loxone Link, Loxone Tree, Loxone Air and different IO Extensions various devices can be coupled to other BACnet devices.