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## BACnet Testing Laboratories Product Listing

*BACnet functionality in each Listed product has been successfully tested at a Recognized BACnet Testing Organization utilizing the industry standard BTL test suite and test policies that were current at the time it was tested. For Listings with multiple products, some products may have less functionality than is indicated by the Listing document. The PICS document provides information on the specific functionality of each product. Note that PICS documents on the BTL Listings site are provided by the manufacturer and are not independently verified by BTL.*

### Listing Information (BTL-31590)

|                                                                                                          |                          |                |
|----------------------------------------------------------------------------------------------------------|--------------------------|----------------|
| Vendor                                                                                                   |                          | Listing Status |
| Ingenieurgesellschaft für Gebäudeautomation mbH<br>(INGA mbH)<br>Laaker Weg 7<br>31785 Hameln<br>Germany |                          | Listed Product |
| Test Requirements                                                                                        | BACnet Protocol Revision | Date Tested    |
| Requirements as of November 2025                                                                         | Revision 22 (135-2020)   | May 2026       |

|                                 |               |         |
|---------------------------------|---------------|---------|
| Product Name                    | Model Numbers | Version |
| iBMS Building Management System | iBMS v11      | 11.5.2  |

### Device Profiles

|                                              |               |
|----------------------------------------------|---------------|
| Profile                                      | Model Numbers |
| BACnet Advanced Operator Workstation (B-AWS) | All models    |

## BIBBs Supported

|                              |                                      |             |
|------------------------------|--------------------------------------|-------------|
| Data Sharing                 | ReadProperty-A                       | DS-RP-A     |
|                              | ReadProperty-B                       | DS-RP-B     |
|                              | ReadPropertyMultiple-A               | DS-RPM-A    |
|                              | ReadPropertyMultiple-B               | DS-RPM-B    |
|                              | WriteProperty-A                      | DS-WP-A     |
|                              | WriteProperty-B                      | DS-WP-B     |
|                              | WritePropertyMultiple-A              | DS-WPM-A    |
|                              | WritePropertyMultiple-B              | DS-WPM-B    |
|                              | Change Of Value-A                    | DS-COV-A    |
|                              | Change Of Value-B                    | DS-COV-B    |
|                              | Change Of Value Property-A           | DS-COVP-A   |
|                              | Change Of Value Property-B           | DS-COVP-B   |
|                              | Change Of Value Unsubscribed-A       | DS-COVU-A   |
|                              | View-A                               | DS-V-A      |
|                              | Advanced View-A                      | DS-AV-A     |
|                              | Modify-A                             | DS-M-A      |
|                              | Advanced Modify-A                    | DS-AM-A     |
|                              | Life Safety Advanced View-A          | DS-LSAV-A   |
|                              | Life Safety Advanced Modify-A        | DS-LSAM-A   |
|                              | Access Control View-A                | DS-ACV-A    |
|                              | Access Control Advanced View-A       | DS-ACAV-A   |
|                              | Access Control Modify-A              | DS-ACM-A    |
|                              | Access Control Advanced Modify-A     | DS-ACAM-A   |
|                              | Access Control Access Door-A         | DS-ACAD-A   |
|                              | Lighting Output -A                   | DS-LO-A     |
|                              | Lighting Output Status-A             | DS-LOS-A    |
|                              | Advanced Lighting Output-A           | DS-ALO-A    |
|                              | Lighting View-A                      | DS-LV-A     |
|                              | Lighting Advanced View-A             | DS-LAV-A    |
|                              | Lighting Modify-A                    | DS-LM-A     |
|                              | Lighting Advanced Modify-A           | DS-LAM-A    |
|                              | Elevator View-A                      | DS-EV-A     |
|                              | Elevator Advanced View-A             | DS-EAV-A    |
|                              | Elevator Modify-A                    | DS-EM-A     |
|                              | Elevator Advanced Modify-A           | DS-EAM-A    |
| Alarm and Event Notification | Notification-A                       | AE-N-A      |
|                              | Acknowledge-A                        | AE-ACK-A    |
|                              | View Notifications-A                 | AE-VN-A     |
|                              | Advanced View Notifications-A        | AE-AVN-A    |
|                              | View and Modify-A                    | AE-VM-A     |
|                              | Advanced View and Modify-A           | AE-AVM-A    |
|                              | Alarm Summary View-A                 | AE-AS-A     |
|                              | Event Log View-A                     | AE-ELV-A    |
| Scheduling                   | Event Log View and Modify-A          | AE-ELVM-A   |
|                              |                                      |             |
| Scheduling                   | Advanced View and Modify-A           | SCHED-AVM-A |
|                              | View and Modify-A                    | SCHED-VM-A  |
| Trending                     |                                      |             |
|                              | Automated Trend Retrieval-A          | T-ATR-A     |
|                              | Automated Multiple Value Retrieval-A | T-AMVR-A    |
|                              | View-A                               | T-V-A       |
|                              | Advanced View and Modify-A           | T-AVM-A     |
| Trending                     | Archival-A                           | T-A-A       |
|                              |                                      |             |

|                   |                                  |           |
|-------------------|----------------------------------|-----------|
| Device Management | Dynamic Device Binding-A         | DM-DDB-A  |
|                   | Dynamic Device Binding-B         | DM-DDB-B  |
|                   | Dynamic Object Binding-B         | DM-DOB-B  |
|                   | DeviceCommunicationControl-A     | DM-DCC-A  |
|                   | Text Message-B                   | DM-TM-B   |
|                   | TimeSynchronization-A            | DM-TS-A   |
|                   | UTCTimeSynchronization-A         | DM-UTC-A  |
|                   | ReinitializeDevice-A             | DM-RD-A   |
|                   | ReinitializeDevice-B             | DM-RD-B   |
|                   | Backup and Restore-A             | DM-BR-A   |
|                   | Restart-A                        | DM-R-A    |
|                   | List Manipulation-A              | DM-LM-A   |
|                   | List Manipulation-B              | DM-LM-B   |
|                   | Object Creation and Deletion-A   | DM-OCDA   |
|                   | Automatic Network Mapping-A      | DM-ANM-A  |
|                   | Automatic Device Mapping-A       | DM-ADM-A  |
|                   | Automatic Time Synchronization-A | DM-ATS-A  |
|                   | Manual Time Synchronization-A    | DM-MTS-A  |
|                   | Dynamic Device Assignment-A      | DM-DDA-A  |
|                   | BBMD Configuration-B             | NM-BBMD-B |
|                   | Foreign Device Registration-A    | NM-FDR-A  |
|                   | Secure Connect Direct Connect-A  | NM-SCDC-A |
|                   | Secure Connect Direct Connect-B  | NM-SCDC-B |

## Object Type Support

|                   |                   |                    |
|-------------------|-------------------|--------------------|
| Analog Input      | Analog Output     | Analog Value       |
| Binary Input      | Binary Output     | Binary Value       |
| Device            | Multi-State Input | Multi-State Output |
| Multi-State Value | Network Port      |                    |

## Data Link Layer Options

| Media               | Options                           |
|---------------------|-----------------------------------|
| BACnet/IP (Annex J) | BBMD<br>BACnet/IP, 'DIX' Ethernet |
| BACnet/SC           |                                   |

## Character Set Support

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