

BACnet is a registered trademark of ASHRAE. ASHRAE does not endorse, approve or test products for compliance with ASHRAE standards. Compliance of listed products to the requirements of ASHRAE Standard 135 is the responsibility of BACnet International (BI). BTL is a registered trademark of BI.

# **BACnet Testing Labs Product Listing**

This product has been tested at the BACnet Testing Labs and found to comply with all the necessary interoperability requirements in place on the published test date. This listing represents the tested capability of the Listed Product. For information on additional functionality that was not covered in the test process, refer to the Manufacturer's PICS statement on the BI website.

### **Listing Information**

Vendor		Listing Status
Johnson Controls, Inc. 507 E. Michigan St Milwaukee, WI 53201 USA		Listed Product
Test Requirements	BACnet Protocol Revision	Date Tested
Requirements as of November 2014	Revision 12	November 2015

Product Name	Model Number	Software Version
Network Automation Engine	MS-NAE85xx-x	8.0
Network Integration Engine	MS-NIE85xx-x, MS-NIE89xx-x	8.0

#### **Device Profiles**

Profile	Model Numbers
BACnet Building Controller (B-BC)	All models

**BIBBs Supported** 

BIBBs Supported		
	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
Data Sharing	WriteProperty-B	DS-WP-B
	WritePropertyMultiple-A	DS-WPM-A
	WritePropertyMultiple-B	DS-WPM-B
	COV-A	DS-COV-A
	COV-B	DS-COV-B
	COV Unsubscribed-B	DS-COVU-B
	Notification Internal-B	AE-N-I-B
	ACK-A	AE-ACK-A
Alarm and Event	ACK-B	AE-ACK-B
Notification	Alarm Summary-B	AE-ESUM-B
	Enrollment Summary-B	AE-ESUM-B
	Information-B	AE-INFO-B
	Internal-B	SCHED-I-B
Scheduling	External-B	SCHED-E-B
	Weekly Schedule-A	SCHED-WS-A
	Viewing and Modifying Trends Internal-B	T-VMT-I-B
Trending	Viewing and Modifying Multiple Values Internal-B	T-VMMV-I-B
	Automated Trend Retrieval-B	T-ATR-B
-	Dynamic Device Binding-A	DM-DDB-A
-	Dynamic Device Binding-B	DM-DDB-B
-	Dynamic Object Binding-A	DM-DOB-A
	Dynamic Object Binding-B	DM-DOB-B
-	DeviceCommunicationControl-B	DM-DCC-B
_	TimeSynchronization-A	DM-TS-A
Device and Network	TimeSynchronization-B	DM-TS-B
	UTCTimeSynchronization-A	DM-UTC-A
	UTCTimeSynchronization-B	DM-UTC-B
Management	Manual TimeSynchronization-A	DM-MTS-A
	Automatic TimeSynchronization-A	DM-ATS-A
F		
	ReinitializeDevice-B	DM-RD-B
-	ReinitializeDevice-B Backup and Restore-B	DM-RD-B DM-BR-B
- -	Backup and Restore-B	DM-BR-B
_ _ _ _	Backup and Restore-B Restart-A	DM-BR-B DM-R-A
	Backup and Restore-B Restart-A Restart-B	DM-BR-B DM-R-A DM-R-B

### **Object Type Support**

Analog Input	Analog Output	Analog Value
Binary Input	Binary Output	Binary Value
Averaging	Calendar	Command
Device	Event Enrollment	File
Group	Loop	Notification Class
Multi-State Input	Multi-State Output	Multi-State Value
Schedule	Trend Log	Trend Log Multiple
Program	Integer Value	Positive Integer Value
	CharacterString Value	

## **Data Link Layer Options**

Media	Options
BACnet/IP	BBMD
MS/TP master	9600, 19200, 38400, 76800

### **Networking Options**

I	Networking Functionality	Media
	Router	BACnet/IP (Annex J), MS/TP

### **Character Set Support**

ISO 10646 (UTF-8)

ISO 10646 (UCS-2) Microsoft Double-Byte Character Set (DBCS)