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## BACnet Testing Laboratories Product Listing

*This product has been tested at a qualified BACnet Testing Laboratory 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 Products. 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 (BTL-30072)

Vendor		Listing Status
Johnson Controls Systems & Service GmbH Westendhof 8 45143 Essen Germany		Listed Product
Test Requirements	BACnet Protocol Revision	Date Tested
Requirements as of November 2014	Revision 12 (135-2010)	November 2016

Product Name	Model Numbers	Software Version
Network Automation Engine	MS-NAE35xx-xxx, MS-NAE45xx-xxx, MS-NAE55xx-1, MS-NAE55xx-2, MS-NAE55xx-3, MS-NAE551S-2, MS-NAE85xx-xxx	8.1.0.2572
Network Control Engine	MS-NCE25xx-xxx, NCE2566-x, MS-NCE2517-x	8.1.0.2572
Network Integration Engine	MS-NIEx9xx-xxx, MS-NIE85xx-x	8.1.0.2572

### Device Profiles

Profile	Model Numbers
BACnet Building Controller (B-BC) BACnet Router (B-RTR)	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-B	DS-WPM-B
	WritePropertyMultiple-A	DS-WPM-A
	COV-A	DS-COV-A
	COV-B	DS-COV-B
	COV-Unsubscribed-A	DS-COVU-A
	COV-Unsubscribed-B	DS-COVU-B

Alarm and Event Notification	Notification Internal-B	AE-N-I-B
	Notification External-B	AE-N-E-B
	ACK-A	AE-ACK-A
	ACK-B	AE-ACK-B
	Alarm Summary-B	AE-ASUM-B
	Enrollment Summary-B	AE-ESUM-B
	Information-B	AE-INFO-B

Scheduling	Internal-B	SCHED-I-B
	External-B	SCHED-E-B
	Weekly Schedule-A	SCHED-WS-A

Trending	Viewing and Modifying Trends Internal-B	T-VMT-I-B
	Viewing and Modifying Trends External-B	T-VMT-E-B
	Automated Trend Retrieval-B	T-ATR-B
	Viewing and Modifying Multiple Values Internal-B	T-VMMV-I-B

Device Management	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
	Manual TimeSynchronization-A	DM-MTS-A
	Automatic TimeSynchronization-A	DM-ATS-A
	TimeSynchronization-A	DM-TS-A
	TimeSynchronization-B	DM-TS-B
	UTCTimeSynchronization-A	DM-UTC-A
	UTCTimeSynchronization-B	DM-UTC-B
	ReinitializeDevice-B	DM-RD-B
	Backup and Restore-B	DM-BR-B
	Restart-A	DM-R-A
	Restart-B	DM-R-B
	Object Creation and Deletion-B	DM-OCD-B
	List Manipulation-A	DM-LM-A
List Manipulation-B	DM-LM-B	

Network Management	Router Control-B	NM-RC-B
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## Object Type Support

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

## Data Link Layer Options

Media	Options
BACnet/IP (Annex J)	BBMD
MS/TP Master	9600, 19200, 38400, 76800

## Networking Options

Networking Functionality	Media
Router	BACnet/IP (Annex J) - MS/TP
BBMD	BACnet/IP (Annex J)

## Character Set Support

ISO 10646 (UTF-8)
ISO 10646 (UCS-2)
Microsoft Double-Byte Character Set