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 BACnet International website.

Listing Information (BTL-30565)

Vendor		Listing Status
GFR - Gesellschaft für Regelungstechnik und Energieeinsparung mbH Kapellenweg 42 33415 Verl Germany		Listed Product
Test Requirements	BACnet Protocol Revision	Date Tested
Requirements as of May 2018	Revision 15	February 2020

Product Name	Model Numbers	Firmware version
ems5 building controller	ems5.CP05E	ems5-BACnet 1.3

Device Profiles

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

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-B	DS-WPM-B
	Change Of Value-A	DS-COV-A
	Change Of Value-B	DS-COV-B
	Change Of Value Property-B	DS-COVP-B
	Change Of Value Unsubscribed-A	DS-COVU-A

Alarm and Event Notification	Notification Internal-B	AE-N-I-B
	Notification External-B	AE-N-E-B
	Acknowledge-B	AE-ACK-B
	Alarm Summary-B	AE-ASUM-B
	Enrollment Summary-B	AE-ESUM-B
	Information-B	AE-INFO-B
	Configurable Recipient Lists-B	AE-CRL-B

Scheduling	Internal-B	SCHED-I-B
	External-B	SCHED-E-B

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
	Automated Multiple Value Retrieval-B	T-AMVR-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
	TimeSynchronization-B	DM-TS-B
	UTCTimeSynchronization-B	DM-UTC-B
	ReinitializeDevice-B	DM-RD-B
	Backup and Restore-B	DM-BR-B
	List Manipulation-B	DM-LM-B
	Object Creation and Deletion-B	DM-OCD-B

Object Type Support

Accumulator	Analog Input	Analog Output
Analog Value	Binary Input	Binary Output
Binary Value	Calendar	Device
Event Enrollment	File	Loop
Multi-State Input	Multi-State Output	Multi-State Value
Notification Class	Pulse Converter	Schedule
Structured View	Trend Log	Trend Log Multiple

Data Link Layer Options

Media	Options
MS/TP Master	9600, 19200, 38400
BACnet/IP (Annex J)	BACnet/IP, 'DIX' Ethernet

Character Set Support

ISO 10646 (UTF-8)