



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. BTL is a registered trademark of BACnet International.

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-24447-1)

Vendor		Listing Status
SungHan. Co., Ltd. & Laboratory 2nd Floor Hosan Building 495-4, Gung-dong, Yuseong-gu, Daejeon, 305-335 Republic of Korea		Listed Product
Test Requirements	BACnet Protocol Revision	Date Tested
Requirements as of August 2012	Revision 7	March 2013

Product Name	Model Number(s)	Software Version
SmartBEN Controller	SmartBEN-EM	1.0

Device Profiles

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

BIBBs Supported

Data Sharing	ReadProperty-A	DS-RP-A
	ReadProperty-B	DS-RP-B
	WriteProperty-A	DS-WP-A
	WriteProperty-B	DS-WP-B
	ReadPropertyMultiple-A	DS-RPM-A
	ReadPropertyMultiple-B	DS-RPM-B
	WritePropertyMultiple-A	DS-WPM-A
	WritePropertyMultiple-B	DS-WPM-B
	COV-A	DS-COV-A
	COV-B	DS-COV-B
	View-A	DS-V-A
	Modify-A	DS-M-A

Alarm and Event Management	Alarm and Event-Notification-A	AE-N-A
	Alarm and Event-Notification Internal-B	AE-N-I-B
	Alarm and Event-ACK-A	AE-ACK-A
	Alarm and Event-ACK-B	AE-ACK-B
	Alarm and Event-Alarm Summary-B	AE-ASUM-B
	Alarm and Event-Enrollment Summary-B	AE-ESUM-B
	Alarm and Event-Information-B	AE-INFO-B
	Alarm and Event-View Notifications-A	AE-VN-A
Alarm and Event-View and Modify-A	AE-VM-A	

Scheduling	Scheduling-View and Modify-A	SCHED-VM-A
	Scheduling Internal-B	SCHED-I-B
	Scheduling External-B	SCHED-E-B

Trending	Trending-Viewing-A	T-V-A
	Viewing and Modifying Trends Internal-B	T-VMT-I-B
	Viewing and Modifying Trends External-B	T-VMT-E-B
	Automated Trend Retrieval-A	T-ATR-A
	Automated Trend Retrieval-B	T-ATR-B

Device and Network 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
	Automatic Device Mapping-A	DM-ADM-A
	Automatic Network Mapping-A	DM-ANM-A
	Automatic TimeSynchronization-A	DM-ATS-A
	Manual TimeSynchronization-A	DM-MTS-A
	DeviceCommunicationControl-B	DM-DCC-B
	TimeSynchronization-B	DM-TS-B
	UTC TimeSynchronization-B	DM-UTC-B
	ReinitializeDevice-B	DM-RD-B
	Backup and Restore-B	DM-BR-B
	List Manipulation-A	DM-LM-A
	List Manipulation-B	DM-LM-B

Object Type Support

Analog Input	Analog Output	Analog Value
Binary Input	Binary Output	Binary Value
Calendar	Device	File
Loop	Notification Class	
Multi-state Input	Multi-state Output	Multi-state Value
Schedule	Trend Log	Structured View

Data Link Layer Options

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

Character Set Support

ANSI X3.4 ISO 8859-1 ISO 10646 (UCS-2)
--

Networking Options

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