

BACNET PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT

Date: Oct 15,2008
Vendor Name: ESAC srl
Product Name: eBACgw-Mitsubishi
Product Model Number:
Product Version: 1.0
BACnet Protocol Revision: 3

Product Description:

eBACgw is a BACnet gateway to Mitsubishi *G50A/AG150 Air-conditioner Network System Centralized Controller*,

based on a high reliability 32 bit architecture.

Automatic configuration detection allows the device to operate with minimal user effort for configuration.

The following items of each conditioner group can be controlled via BACnet:

- air conditioner ON/OFF
- working mode
- air direction
- fan speed
- temperature set
- temperature measure
- change filter signal
- unit error signal
- remote control features lock/unlock

BACnet Standardized Device Profile (Annex L):

- BACnet Operator Workstation (B-OWS)
- BACnet Building Controller (B-BC) (except DM-DOB-A)
- BACnet Advanced Application Controller (B-AAC)
- BACnet Application Specific Controller (B-ASC)
- BACnet Smart Sensor (B-SS)
- BACnet Smart Actuator (B-SA)

BACNET PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT

BACnet Interoperability Building Blocks Supported (Annex K):

BACnet Interoperability Building Block	Supported
Data Sharing	
Data Sharing-ReadProperty-A (DS-RP-A)	<input checked="" type="checkbox"/>
Data Sharing-ReadProperty-B (DS-RP-B)	<input checked="" type="checkbox"/>
Data Sharing-ReadPropertyMultiple-A (DS-RPM-A)	<input type="checkbox"/>
Data Sharing-ReadPropertyMultiple-B (DS-RPM-B)	<input checked="" type="checkbox"/>
Data Sharing-ReadPropertyConditional-A (DS-RPC-A)	<input type="checkbox"/>
Data Sharing-ReadPropertyConditional-B (DS-RPC-B)	<input type="checkbox"/>
Data Sharing-WriteProperty-A (DS-WP-A)	<input checked="" type="checkbox"/>
Data Sharing-WriteProperty-B (DS-WP-B)	<input checked="" type="checkbox"/>
Data Sharing-WritePropertyMultiple-A (DS-WPM-A)	<input type="checkbox"/>
Data Sharing-WritePropertyMultiple-B (DS-WPM-B)	<input type="checkbox"/>
Data Sharing-COV-A (DS-COV-A)	<input type="checkbox"/>
Data Sharing-COV-B (DS-COV-B)	<input type="checkbox"/>
Data Sharing-COVP-A (DS-COVP-A)	<input type="checkbox"/>
Data Sharing-COVP-B (DS-COVP-B)	<input type="checkbox"/>
Data Sharing-COV-Unsolicited-A (DS-COVU-A)	<input type="checkbox"/>
Data Sharing-COV-Unsolicited-B (DS-COVU-B)	<input type="checkbox"/>
Scheduling	
Scheduling-A (SCHED-A)	<input type="checkbox"/>
Scheduling-Internal-B (SCHED-I-B)	<input type="checkbox"/>
Scheduling-External-A (SCHED-E-B)	<input type="checkbox"/>
Trending	
Trending-Viewing and Modifying Trends-A (T-VMT-A)	<input type="checkbox"/>
Trending-Viewing and Modifying Trends-Internal-B (T-VMT-I-B)	<input type="checkbox"/>
Trending-Viewing and Modifying Trends-External-B (T-VMT-E-B)	<input type="checkbox"/>
Trending-Automated Trend Retrieval-A (T-ATR-A)	<input type="checkbox"/>
Trending-Automated Trend Retrieval-B (T-ATR-B)	<input type="checkbox"/>
Network Management	
Network Management-Connection Establishment-A (NM-CE-A)	<input type="checkbox"/>
Network Management-Connection Establishment-B (NM-CE-B)	<input type="checkbox"/>
Network Management-Router Configuration-A (NM-RC-A)	<input type="checkbox"/>

BACNET PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT

BACnet Interoperability Building Block	Supported
Network Management-Router Configuration-B (NM-RC-B)	<input type="checkbox"/>
Alarm and Event Management	
Alarm and Event-Notification-A (AE-N-A)	<input checked="" type="checkbox"/>
Alarm and Event-Notification Internal-B (AE-N-I-B)	<input checked="" type="checkbox"/>
Alarm and Event-Notification External-A (AE-N-E-B)	<input type="checkbox"/>
Alarm and Event-ACK-A (AE-ACK-A)	<input type="checkbox"/>
Alarm and Event-ACK-B (AE-ACK-B)	<input type="checkbox"/>
Alarm and Event-Alarm Summary-A (AE-ASUM-A)	<input type="checkbox"/>
Alarm and Event-Alarm Summary-B (AE-ASUM-B)	<input type="checkbox"/>
Alarm and Event-Enrollment Summary-A (AE-ESUM-A)	<input type="checkbox"/>
Alarm and Event-Enrollment Summary-B (AE-ESUM-B)	<input type="checkbox"/>
Alarm and Event-Information-A (AE-INFO-A)	<input type="checkbox"/>
Alarm and Event-Information-B (AE-INFO-B)	<input type="checkbox"/>
Alarm and Event-LifeSafety-A (AE-LS-A)	<input type="checkbox"/>
Alarm and Event-LifeSafety-B (AE-LS-B)	<input type="checkbox"/>
Device Management	
Device Management-Dynamic Device Binding-A (DM-DDB-A)	<input checked="" type="checkbox"/>
Device Management-Dynamic Device Binding-B (DM-DDB-B)	<input checked="" type="checkbox"/>
Device Management-Dynamic Object Binding-A (DM-DOB-A)	<input type="checkbox"/>
Device Management-Dynamic Object Binding-B (DM-DOB-B)	<input type="checkbox"/>
Device Management-DeviceCommunicationControl-A (DM-DCC-A)	<input type="checkbox"/>
BACnet Interoperability Building Block	
Device Management-DeviceCommunicationControl-B (DM-DCC-B)	<input checked="" type="checkbox"/>
Device Management-Private Transfer-A (DM-PT-A)	<input type="checkbox"/>
Device Management-Private Transfer-B (DM-PT-B)	<input type="checkbox"/>
Device Management-Text Message-A (DM-TM-A)	<input type="checkbox"/>
Device Management-Text Message-B (DM-TM-B)	<input type="checkbox"/>
Device Management-TimeSynchronization-A (DM-TS-A)	<input type="checkbox"/>
Device Management-TimeSynchronization-B (DM-TS-B)	<input checked="" type="checkbox"/>
Device Management-UTCTimeSynchronization-A (DM-UTC-A)	<input type="checkbox"/>
Device Management-UTCTimeSynchronization-B (DM-UTC-B)	<input type="checkbox"/>
Device Management-ReinitializeDevice-A (DM-RD-A)	<input type="checkbox"/>
Device Management-ReinitializeDevice-B (DM-RD-B)	<input checked="" type="checkbox"/>

BACNET PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT

BACnet Interoperability Building Block	Supported
Device Management-Backup and Restore-A (DM-BR-A)	<input type="checkbox"/>
Device Management-Backup and Restore-B (DM-BR-B)	<input type="checkbox"/>
Device Management-List Manipulation-A (DM-LM-A)	<input type="checkbox"/>
Device Management-List Manipulation-B (DM-LM-B)	<input type="checkbox"/>
Device Management-Object Creation and Deletion-A (DM-OCD-A)	<input type="checkbox"/>
Device Management-Object Creation and Deletion-B (DM-OCD-B)	<input type="checkbox"/>
Device Management-Virtual Terminal-A (DM-VT-A)	<input type="checkbox"/>
Device Management-Virtual Terminal-B (DM-VT-B)	<input type="checkbox"/>

Segmentation Capability:

Segmented Requests Supported Window Size: -
 Segmented Responses Supported Window Size: 1

Standard Object Types Supported:

Object-Type	Supported	Optional Properties Supported	Writable Properties
Analog Input	<input checked="" type="checkbox"/>	Description, Reliability, Notification Class, High Limit, Low Limit, Deadband, Limit Enable, Event Enable, Notify Type, Time Delay	Object Name, Description, Reliability, Out of Service, Notification Class, High Limit, Low Limit, Deadband, Limit Enable, Event Enable, Notify Type, Time Delay
Analog Output	<input type="checkbox"/>		
Analog Value	<input checked="" type="checkbox"/>	Description, Reliability, Priority Array, Relinquish Default, Notification Class, High Limit, Low Limit, Deadband, Limit Enable, Event Enable, Notify Type, Time Delay	Object Name, Description, Reliability, Out of Service, Notification Class, High Limit, Low Limit, Deadband, Limit Enable, Event Enable, Notify Type, Time Delay, Relinquish Default, Priority Array
Averaging	<input type="checkbox"/>		
Binary Input	<input type="checkbox"/>		
Binary Output	<input type="checkbox"/>		

BACNET PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT

Binary Value	<input checked="" type="checkbox"/>	Description, Reliability Active Text, Inactive Text, Priority Array, Relinquish Default, Time Delay, Notification Class, Alarm Value, Event Enable, Notify Type	Object Name, Description, Present Value, Reliability, Active Text, Inactive Text, Priority Array, Relinquish Default, Time Delay, Event Enable, Notify Type
Calendar	<input type="checkbox"/>		
Command	<input type="checkbox"/>		
Device	YES	Description, Location, APDU Seg Timeout, Local Time, Local Date Status	Object Name, Description, Location, Local Time, Local Date
Event Enrollment	<input type="checkbox"/>		
File	<input type="checkbox"/>		
Group	<input type="checkbox"/>		
Life Safety Point	<input type="checkbox"/>		
Life Safety Zone	<input type="checkbox"/>		
Loop	<input type="checkbox"/>		
Multi-state Input	<input type="checkbox"/>		
Multi-state Output	<input checked="" type="checkbox"/>	Description, Reliability, State Text, Time Delay, notification class, Feedback Value, Event Enable, Notify Type	Object Name Description, State Text, Priority Array, Relinquish Default, Time Delay, Event Enable, Notify Type
Multi-state Value	<input checked="" type="checkbox"/>	Description, Reliability, State Text, Priority Array, Relinquish Default, Time Delay, Notification Class, Alarm Values, Fault Values, Event Enable, Notify Type	Object Name, Description, Reliability, State Text, Priority Array, Relinquish Default, Time Delay, alarm Values, Fault Values, Event Enable, Notify Type
Notification Class	<input checked="" type="checkbox"/>	Description	Object Name Description Priority Recipient List
Program	<input type="checkbox"/>		
Schedule	<input type="checkbox"/>		

BACNET PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT

Trend Log	<input type="checkbox"/>		
-----------	--------------------------	--	--

Data Link Layer Options:

- BACnet IP, (Annex J)
- BACnet IP, (Annex J), Foreign Device
- ISO 8802-3, Ethernet (Clause 7) (10Base2, 10Base5, 10BaseT, Fiber)
- ANSI/ATA 878.1, 2.5 Mb. ARCNET (Clause 8)
- ANSI/ATA 878.1, RS-485 ARCNET (Clause 8), baud rate(s):
- MS/TP master (Clause 9), baud rate(s): 9600, 19200, 38400, 76800
- MS/TP slave (Clause 9), baud rate(s):
- Point-To-Point, EIA 232 (Clause 10), baud rate(s): 9600, 19200, 38400
- Point-To-Point, modem, (Clause 10), baud rate(s): 9600, 19200, 38400
- LonTalk, (Clause 11), medium:
- Other: Intelli-Net (Coax)

Device Address Binding:

Is static device binding supported? Yes No
 (Necessary for two-way communication with MS/TP slaves and certain other devices.)

Networking Options:

Router	<input type="checkbox"/>	
Annex H, BACnet Tunnelling	<input type="checkbox"/>	
BACnet/IP Broadcast Management Device (BBMD)	<input type="checkbox"/>	
Does the BBMD support registrations by Foreign Devices?	<input type="checkbox"/>	

Character Sets Supported:

Indicating support for multiple character sets does not imply that they can all be supported simultaneously.

- | | | | | | |
|-------------------|--------------------------|--------------------|--------------------------|------------|-------------------------------------|
| ANSI X3.4 | <input type="checkbox"/> | IBM/Microsoft DBCS | <input type="checkbox"/> | JIS C 6226 | <input type="checkbox"/> |
| ISO 10646 (ICS-4) | <input type="checkbox"/> | ISO 10646 (UCS2) | <input type="checkbox"/> | ISO 8859-1 | <input checked="" type="checkbox"/> |

If this product is a communication gateway, describe the types of non-BACnet equipment/networks(s) that the gateway supports:

This gateway fully supports the Mitsubishi G50A/AG150 XML web services protocol.