

Group: McQuay Controls

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MicroTech II[®] Applied Rooftop Unit Controller and Applied Self-Contained Unit Controller

**Protocol Implementation Conformance Statement (PICS)
ANSI/ASHRAE 135-2001, BACnet[®]**

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This document contains the Protocol Implementation Conformance Statement (PICS) for the MicroTech II[®] Rooftop Unit Controller and for the MicroTech II Self-Contained Unit Controller from McQuay International as required by ANSI/ASHRAE (American National Standards Institute/American Society of Heating, Refrigeration, and Air Conditioning Engineers) Standard 135-2001, BACnet; A Data Communication Protocol for Building Automation and Control Networks.

Notice

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Limited Warranty

Consult your local McQuay Representative for warranty details. Refer to Form 933-430285Y. To find your local McQuay Representative, go to www.mcquay.com.

BACnet[®] Protocol Implementation Conformance Statement

Date:		September 2008
Vendor Name:		McQuay International
Product Name:	Rooftop Unit	Rooftop Unit Controller or
	Self-Contained Unit	Self-Contained Unit Controller
Product Model Number:	Rooftop Unit	MTII RUC
	Self-Contained Unit	MTII SCUC
Applications Software Version:	Rooftop Unit	2506010153
	Rooftop Unit, Six-Compressor	2506010209 (old)
	Self-Contained Unit	2506030128 & 2506030303
Firmware Revision:	All	5.3
BACnet Protocol Revision:		Version 1, Revision 2

Product Description

The MicroTech II Rooftop Unit Controller or Self-Contained Unit Controller with optional BACnet Communication Module is a microprocessor-based controller designed to operate McQuay International applied rooftop units or vertical self-contained units and be integrated into BACnet building automation systems.

The controller provides normal temperature, static pressure and ventilation control and alarm monitoring with alarm-specific component shutdown in critical system conditions. Access to temperatures, pressures, operating states, alarm messages, control parameters and schedules is available through an equipment-mounted keypad/display and the BACnet control network.

BACnet Standardized Device Profile

Based on BIBBs supported, the MicroTech II Rooftop Unit Controller or Self-Contained Unit Controller with optional BACnet Communication Module *is nearly* a BACnet Advanced Application Controller (B-AAC). Refer to the section below entitled BACnet Interoperability Building Blocks (BIBBs) Supported for a complete listing of BIBBS.

BACnet Interoperability Building Blocks (BIBBs) Supported

BIBB Name	Designation
Data Sharing – ReadProperty – A	DS-RP-A
Data Sharing – ReadProperty – B	DS-RP-B
Data Sharing – ReadPropertyMultiple – A	DS-RPM-A
Data Sharing – ReadPropertyMultiple – B	DS-RPM-B
Data Sharing – Write Property – A	DS-WP-A
Data Sharing – WriteProperty – B	DS-WP-B
Data Sharing – WritePropertyMultiple – A	DS-WPM-A
Data Sharing – WritePropertyMultiple – B	DS-WPM-B
Data Sharing – COV – Unsolicited – A	DS-COVU-A
Data Sharing – COV – Unsolicited – B	DS-COVU-B
Device Management – Dynamic Device Binding – A	DM-DDB-A
Device Management – Dynamic Device Binding – B	DM-DDB-B
Device Management – Dynamic Object Binding – A	DM-DOB-A
Device Management – Dynamic Object Binding – B	DM-DOB-B
Device Management – Private Transfer – A	DM-PT-A
Device Management – Private Transfer – B	DM-PT-B
Device Management – UTCTimeSynchronization – B	DM-UTC-B
Device Management – ReinitializeDevice – B	DM-RD-B
Device Management – List Manipulation – B	DM-LM-B
Device Management – Object Creation and Deletion – B	DM-OCD-B

Standard Object Types Supported

Object-Type	Creatable	Deleteable	Optional Properties Supported	Writable Properties Not Required To Be Writable
Analog Input	<input type="checkbox"/>	<input type="checkbox"/>	Description Reliability COV_Increment	Object_Name Present_Value Description Out_Of_Service Units COV_Increment
Analog Output	<input type="checkbox"/>	<input type="checkbox"/>	Description Reliability COV_Increment	Object_Name Present_Value Description Units Relinquish_Default COV_Increment
Analog Value	<input type="checkbox"/>	<input type="checkbox"/>	Description Reliability Relinquish_Default COV_Increment	Object_Name Present_Value Description Reliability Units Relinquish_Default COV_Increment
Binary Input	<input type="checkbox"/>	<input type="checkbox"/>	Description Reliability	Object_Name Present_Value Description Out_Of_Service
Binary Output	<input type="checkbox"/>	<input type="checkbox"/>	Description Reliability	Object_Name Present_Value Description Relinquish_Default
Binary Value	<input type="checkbox"/>	<input type="checkbox"/>	Description Reliability Relinquish_Default	Object_Name Present_Value Description Reliability Relinquish_Default
Calendar	<input type="checkbox"/>	<input type="checkbox"/>	Description	Object_Name Description Date_List
Device	<input type="checkbox"/>	<input type="checkbox"/>	Description Local_Time Local_Date UTC_Offset ADPU_Segment_Timeout	Object_Name Application_Software_Version Description Max_ADPU_Length_Accepted Local_Time Local_Date UTC_Offset Daylight_Saving_Status ADPU_Segment_Timeout APDU_Timeout Number_Of_APDU_Retries

Object-Type	Creatable	Deleteable	Optional Properties Supported	Writable Properties Not Required To Be Writable
Schedule	<input type="checkbox"/>	<input type="checkbox"/>	Description Weekly_Schedule Exception_Schedule	Object_Name Description Effective_Period Weekly_Schedule Exception_Schedule List_Of_Object_Property_Refs

Data Link Layer Options

- BACnet IP, (Annex J)
- MS/TP master (Clause 9), baud rate(s): 9600, 19200, 38400 bps

Segmentation Capability

- Segmented requests supported Window Size: 127
- Segmented responses supported Window Size: 127

Device Address Binding

- Static Device Binding Yes
- No

Character Sets Supported

- ANSI X3.4 IBM™/Microsoft™ DBCS ISO 8859-1
- ISO 10646 (UCS-2) ISO 10646 (UCS-4) JIS C 6226

Note: Support for multiple character sets does not imply they can be supported simultaneously.

This document contains the most current product information as of this printing. For the most current product information, please go to **www.mcquay.com**.

