

## BACnet® Software License for *Quantum* Shades

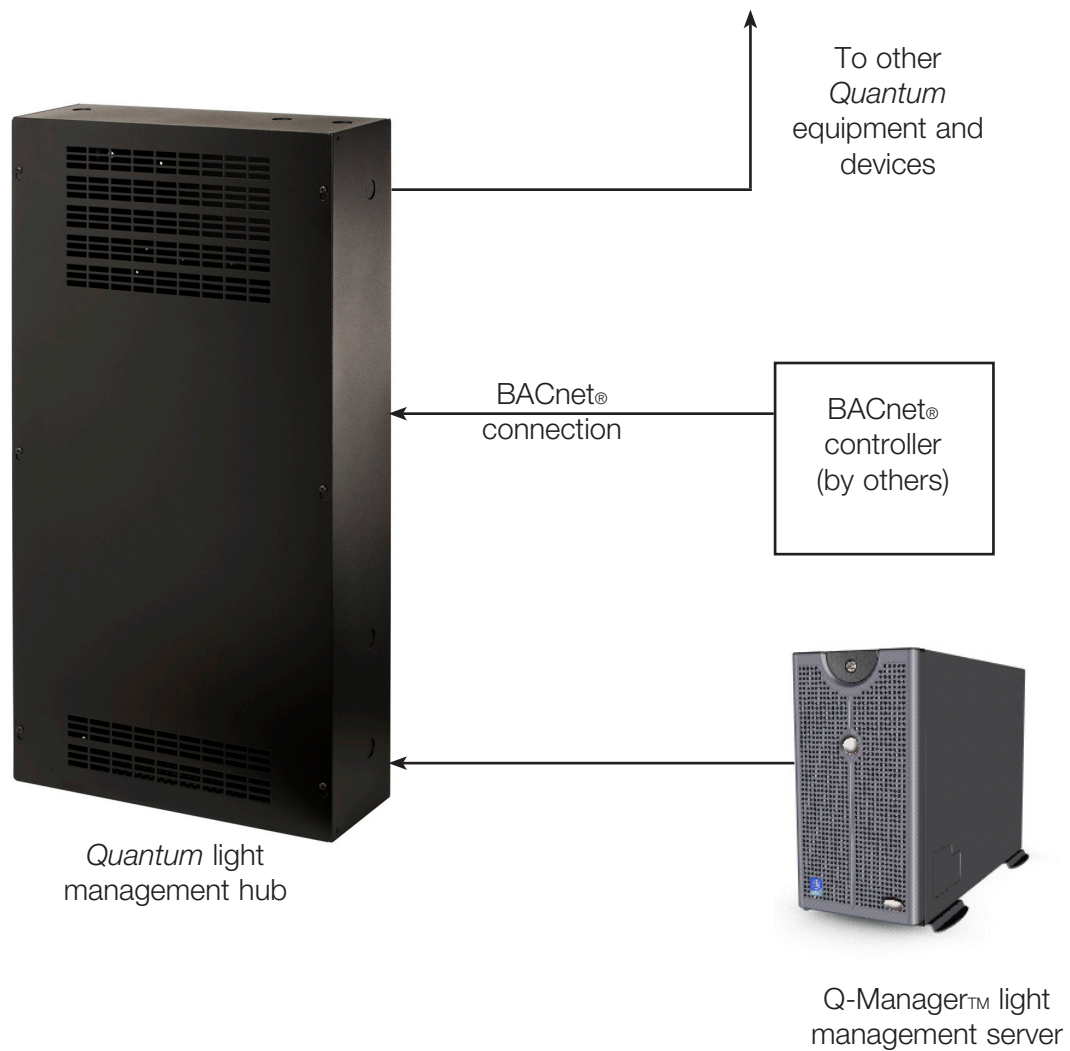


### Description

This license for *BACnet* software enables a building management system to control, monitor, and manage energy for shades in the *Quantum* system. This license must be activated by a Lutron Field Service Engineer. One license is required for each processor.

### System Network Diagram

Note: Requires use of Q-Admin™ software package



Job Name:	Model Numbers:
Job Number:	

**BACnet® Protocol Implementation Conformance Statement (PICS)**

Date: September 10, 2008

Vendor Name: Lutron Electronics Co., Inc.

Product Name: *Quantum* BACnet® Integration

Product Model Number: QSW-BAC-L-PP-A

Applications Software Version:

Firmware Revision:

BACnet® Protocol Revision: 2

**Product Description**

License for *Quantum* light management hub to enable *BACnet* IP Integration. Allows control of *Quantum* system components. *BACnet* IP is embedded in the *Quantum* light management hub.

**BACnet® Interoperability Building Blocks Supported (Annex K):**

K.1.1 BIBB	Data Sharing	ReadProperty-B (DS-RP-B)
K.1.8 BIBB	Data Sharing	WriteProperty-B (DS-WP-B)
K.1.4 BIBB	Data Sharing	ReadPropertyMultiple-B (DS-RPM-B)
K.1.10 BIBB	Data Sharing	WritePropertyMultiple-B (DS-WPM-B)
K.1.12 BIBB	Data Sharing	COV-B (DS-COV-B)
K.5.2 BIBB	Device Management	DynamicDeviceBinding-B (DM-DDB-B)
K.5.6 BIBB	Device Management	DeviceCommunicationControl-B (DM-DCC-B)

**BACnet® Standardized Device Profile (Annex L):**

BACnet® Application Specific Controller (B-ASC)

**Segmentation Capability:**Segmented requests supported? **No.**

Window Size: n/a

Segmented responses supported? **No.**

Window Size: n/a

**Non-Standard Application Services:**

Non-standard application services are not supported.

**Standard Object Types Supported:***Device*

1. Dynamically creatable using *BACnet*'s CreateObject service? **No.**
2. Dynamically deletable using *BACnet*'s DeleteObject service? **No.**
3. List of optional properties supported: **None.**
4. List of all properties that are writable where not otherwise required by this standard: **None.**
5. List of proprietary properties: **None.**
6. List of any property value range restrictions: **None.**

<b>Job Name:</b>	<b>Model Numbers:</b>
<b>Job Number:</b>	

**Analog Value**

1. Dynamically creatable using *BACnet*'s CreateObject service? **No.**
2. Dynamically deletable using *BACnet*'s DeleteObject service? **No.**
3. List of optional properties supported: **Min, Max.**
4. List of all properties that are writable where not otherwise required by this standard: **None.**
5. List of proprietary properties: **None.**
6. List of any property value range restrictions: **See Table.**

**Analog Input**

1. Dynamically creatable using *BACnet*'s CreateObject service? **No.**
2. Dynamically deletable using *BACnet*'s DeleteObject service? **No.**
3. List of optional properties supported: **None.**
4. List of all properties that are writable where not otherwise required by this standard: **None.**
5. List of proprietary properties: **None.**
6. List of any property value range restrictions: **See Table.**

**Multi-State Value**

1. Dynamically creatable using *BACnet*'s CreateObject service? **No.**
2. Dynamically deletable using *BACnet*'s DeleteObject service? **No.**
3. List of optional properties supported: **None.**
4. List of all properties that are writable where not otherwise required by this standard: **None.**
5. List of proprietary properties: **None.**
6. List of any property value range restrictions: **See Table.**

**Data Link Layer Options:***BACnet* IP**Device Address Binding:**Is static device binding supported? **No.****Networking Options:**

None

**Character Sets Supported:**

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

ANSI X3.4

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

The device is a communication gateway between the *BACnet* protocol and EcoSystem® ballasts and modules in Lutron's *Quantum* light control system.

<b>Job Name:</b>	<b>Model Numbers:</b>
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<b>BACnet® Objects</b>										
Area Device	Description	Read	Write	Type	Instance	{Area Name}	Units	Min PV	Max PV	State Text
Shade Group Position	Control/ Monitor the position of a shade group in an area.	X	X	AV	2000 - 2999	{GroupName} Level	%	0	100	
Shade Group Preset	Control/ Monitor the preset positions for a shade group in an area.	X	X	MSV	3000 - 3999	{GroupName} Preset	--			{Preset Name}

AV = Analog Value

MSV = Multi-State Value

PV = Present Value

{ } = names specified in the system by Lutron

<b>Job Name:</b>	<b>Model Numbers:</b>
<b>Job Number:</b>	