

Protocol Implementation Conformance Statement



Date: November 30, 2006				
Vendor Name: Lithonia Ligh	nting			
Product Name: Synergy				
Product Model Number: SY	SC MLX			
Applications Software Versio	n:	Firmware Revision:	2.66	
BACnet Protocol Revision:	1.0			

Product Description:

Synergy is a unique event driven lighting control system that integrates all aspects of lighting control into a single system platform. Synergy combines architectural dimming, low voltage switching, lighting automation and lighting energy management functions into a single scalable package capable of meeting the requirements of virtually any lighting control application.

BACnet Standardized Device Profile (Annex L)

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

List all BACnet Interoperability Building Blocks supported (see Annex K in BACnet Addendum 135d):

DS-RP-B Read Property

DS-RPM-B Read Property Multiple

DS-WP-B Write Property

DM-DDB-B Dynamic Device Binding

DM-DOB-B Dynamic Object Binding

DM-TS-B Time Synchronization

DM-RD-B Reinitialize Device

DM-DCC-B Device Communication Control

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DS-RP-A Read Property

DS-WP-A Write Property

DM-DDB-A Dynamic Device Binding

DM-DOB-A Dynamic Object Binding

DM-TS-A Time Synchronization

DM-RD-A Reinitialize Device

DM-DCC-A Device Communication Control

Which of the following device binding methods does the product support? (Check one or more)

Х	Send Who-Is, receive I-Am (BIBB DM-DDB-A)
Х	Receive Who-Is, send I-Am (BIBB DM-DDB-B)
	Send Who-Has, receive I-Have (BIBB DM-DOB-A)
Х	Receive Who-Has, send I-Have (BIBB DM-DOB-B)
Х	Manual configuration of recipient device's network number and MAC address
	None of the above

Standard Object Types Supported:

Analog Input Obje

- 1. Dynamically creatable using BACnet's CreateObject service? No
- 2. Dynamically deletable using BACnet's DeleteObject service? No
- 3. List of optional properties supported:

Description Reliability

4. List of all properties that are writable where not otherwise required by this standard

Present_Value

5. List of proprietary properties:

Property Identifier	Property Data Type	Meaning

6. List of any property value range restrictions:

Property Identifier	Restrictions
Present Value	0.0 – 100.0, resolution of 1.0.

Analog Output Object Type

- 1. Dynamically creatable using BACnet's CreateObject service? No
- 2. Dynamically deletable using BACnet's DeleteObject service? No
- 3. List of optional properties supported:

Description Reliability

4. List of all properties that are writable where not otherwise required by this standard

Strike_Count (512) – Resets the strike count and runtime hours to 0 regardless of value. Runtime_Hours (513) - Resets the strike count and runtime hours to 0 regardless of value.

5. List of proprietary properties:

Property Identifier	Property Data Type	Meaning
Strike_Count (512)	REAL	Number of OFF to ON transitions
Runtime Hours (513)	REAL	Number of hours present value is ON

6. List of any property value range restrictions:

Property Identifier	Restrictions
Present_Value	0.0 to 100.0, 1.0 resolution,
	128.0 = STOP,
	129.0 = LOWER,
	130.0 = RAISE,
	131.0 = BLINK,
	255.0 = NULL, and
	1000.0 * fade time (1/10 seconds) + level = FADE

Ana	log Value Object Type	using PACnot's CrootsOhi	oot convige? No		
	 Dynamically creatable u Dynamically deletable u 	ising BAChet's CreateObje ising BAChet's DeleteObje	ect service? No		
	3. List of optional propertie	es supported:			
	Description				
	Reliability Priority_Array				
	Relinquish_Default				
	4. List of all properties that	are writable where not of	herwise required by this standard		
	5. List of proprietary prope		N# courts or		
	Property Identifier	Property Data Type	Meaning		
	6. List of any property valu	io rango roctrictions:			
	Property Identifier	Restrictions			
	Present_Value	0.0 to 100.0, 1.0 resoluti	on,		
		128.0 = STOP,			
		129.0 = LOWER,			
		130.0 = RAISE, 131.0 = BLINK,			
		255.0 = NULL, and			
			seconds) + level = FADE		
		,			
3ina	ary Input Object Type				
	1. Dynamically creatable u				
	2. Dynamically deletable u		ect service? No		
	3. List of optional propertied Description	es supported:			
	Reliability				
	. rondomity				
	4. List of all properties that Present Value	t are writable where not of	herwise required by this standard		
	rieseii_vaiue				
	5. List of proprietary prope	artico:			
	Property Identifier	Property Data Type	Meaning		
		Troporty Butta Typo	induming .		
	6. List of any property valu	ue range restrictions:			
	Property Identifier	Restrictions			

Dynamically cleatable Dynamically deletable List of optional propert Description	e using BACnet's CreateOb using BACnet's DeleteOb ties supported:	ject service? No ject service? No
Reliability		
4. List of all properties th	at are writable where not c	otherwise required by this standard
		intime hours to 0 regardless of value. runtime hours to 0 regardless of value.
5. List of proprietary prop	perties:	
Property Identifier	Property Data Type	Meaning
Strike_Count (512)	REAL	Number of OFF to ON transitions
Runtime Hours (513)	REAL	Number of hours present value is ON
, ,		
6. List of any property va	alue range restrictions:	
Property Identifier	Restrictions	
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1. Dynamically creatable	using BACnet's CreateOb	
 Dynamically creatable Dynamically deletable 	using BACnet's DeleteObj	
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Dynamically creatable Dynamically deletable List of optional propert Description Reliability Priority_Array Relinquish_Default	using BACnet's DeleteObj ties supported:	ect service? No
Dynamically creatable Dynamically deletable List of optional property Description Reliability Priority_Array Relinquish_Default List of all properties th	using BACnet's DeleteObj ties supported:	
Dynamically creatable Dynamically deletable List of optional property Description Reliability Priority_Array Relinquish_Default	using BACnet's DeleteObj ties supported:	ect service? No
Dynamically creatable Dynamically deletable List of optional property Description Reliability Priority_Array Relinquish_Default List of all properties th	using BACnet's DeleteObj ties supported:	ect service? No
Dynamically creatable Dynamically deletable List of optional property Description Reliability Priority_Array Relinquish_Default List of all properties th	using BACnet's DeleteObj ties supported:	ect service? No
Dynamically creatable Dynamically deletable List of optional property Description Reliability Priority_Array Relinquish_Default List of all properties the Present_Value	e using BACnet's DeleteObj ties supported:	ect service? No
1. Dynamically creatable 2. Dynamically deletable 3. List of optional propert Description Reliability Priority_Array Relinquish_Default 4. List of all properties the Present_Value 5. List of proprietary prop	e using BACnet's DeleteObj ties supported:	ect service? No
1. Dynamically creatable 2. Dynamically deletable 3. List of optional propert Description Reliability Priority_Array Relinquish_Default 4. List of all properties the Present_Value 5. List of proprietary properties 5. List of proprietary properties 2. Dynamically creatable creatable contents 2. Dynamically creatable creatable creatable contents 3. List of proprietary properties 4. Dynamically creatable cre	e using BACnet's DeleteObj ties supported:	ect service? No
1. Dynamically creatable 2. Dynamically deletable 3. List of optional propert Description Reliability Priority_Array Relinquish_Default 4. List of all properties the Present_Value 5. List of proprietary properties 5. List of proprietary properties 2. Dynamically creatable creatable contents 2. Dynamically creatable creatable creatable contents 3. List of proprietary properties 4. Dynamically creatable cre	e using BACnet's DeleteObj ties supported:	ect service? No
1. Dynamically creatable 2. Dynamically deletable 3. List of optional property Description Reliability Priority_Array Relinquish_Default 4. List of all properties the Present_Value 5. List of proprietary property Identifier	e using BACnet's DeleteObjties supported: nat are writable where not concerties: Property Data Type	ect service? No
1. Dynamically creatable 2. Dynamically deletable 3. List of optional property Description Reliability Priority_Array Relinquish_Default 4. List of all properties the Present_Value 5. List of proprietary property Identifier 6. List of any property value	e using BACnet's DeleteObjties supported: nat are writable where not concerties: Property Data Type	ect service? No
1. Dynamically creatable 2. Dynamically deletable 3. List of optional propert Description Reliability Priority_Array Relinquish_Default 4. List of all properties th Present_Value 5. List of proprietary prop	e using BACnet's DeleteObjecties supported: nat are writable where not concerning the property Data Type alue range restrictions:	ect service? No

e Object Type 1. Dynamically creatal 2. Dynamically deletal 3. List of optional prop	ble using BACnet's CreateObj	ject service? No ect service? No
Description	oraco cupportou.	
4. List of all properties File_Size	that are writable where not o	therwise required by this standard
5. List of proprietary p Property Identifier	roperties: Property Data Type	Meaning
vice Object Type 1. Dynamically creatal	ble using BACnet's CreateObj ble using BACnet's DeleteObj	ject service? No
3. List of optional prop		ect service? NO
Description Local Time		
Local_Date		
UTC_Offset Daylight_Savings_Sta		
APDU_Segment_Time Max Master	out	
Max_Info_Frames		
4. List of all properties	that are writable where not o	therwise required by this standard
5. List of proprietary p Property Identifier	roperties: Property Data Type	Meaning

Property Identifier	Property Data Type	Meaning
514	Time	Dawn
515	Time	Dusk

6. List of any property value range restrictions:

Property Identifier	Restrictions
Max_Info_Frames	1-255
Max_Master	0-127

Data Link Layer Options (check all that are supported):

Х	BACnet IP, (Annex J)	
	BACnet IP, (Annex J), Foreign Device	
	ISO 8802-3, Ethernet (Clause 7)	
	ANSI/ATA 878.1, 2.5 Mb. ARCNET (Clause 8)	
Х	ANSI/ATA 878.1, RS-485 ARCNET (Clause 8), baud rate(s):	156Kbps
Х	MS/TP master (Clause 9), baud rate(s):	9600, 19200, 38400
	MS/TP slave (Clause 9), baud rate(s):	
	Point-To-Point, EIA 232 (Clause 10), baud rate(s):	
	Point-To-Point, modem, (Clause 10), baud rate(s):	
	Lon Talk, (Clause 11), medium:	
	Other:	

Networking Options (check all that are supported):

Router, Clause 6 - List all routing configurations (e.g. ARCNET-Ethernet, Ethernet-MS/TP,			
Annex H.3, BACnet Tunneling Router over UDP/IP			
BACnet/IP Broadcast Management Device (BBMD)			
BBMD supports registrations by Foreign Devices			

Segmentation Capability (check all that apply):

		Window Size
Х	Segmented requests supported	16
Х	Segmented responses supported	16

Character Sets Supported (check all that apply):

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

mulcalli	ig support for multiple character sets does not imply that they can all be supported simultaneously.
Х	ANSI X3.4
	IBM /Microsoft DBCS
	ISO 8859-1
	ISO 10646 (UCS-2)
	ISO 10646 (ICS-4)
	JIS C 6226

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

ale	way supports.			
Ī	N/A			

Include any addition information about the product's BACnet capabilities relevant to interoperability:

Analog Value objects are group write objects such that they control a group of output objects. The values in the priority array will reflect the average value of the internal objects controlled by the analog value objects or the last value written if it controls no internal objects. This was done to accommodate the missing multiplexer object (group write).

Internal proprietary schedules write to objects at priority 10.

Binary Input and Analog Input objects that are bound to output objects write at priority 3 (Priority ON), priority 4 (priority OFF), priority 10 (priority NORMAL), and priority 13 (priority LOW).