Protocol Implementation Conformance Statement (PICS)

CCLP-BACnet

Vendor Name:	Cristal Controls Ltd
Product Name:	CCLP-BACnet
Product Model Number:	CCLP-1664-BIP/CCLP-1664-MSTP/CCLP-1664-ETH
Product Version:	3.3.1
BACnet Protocol Revision:	13
Product Description:	The Cristal Controls lighting panels can be used with any Building Management System using the BACnet protocol. Seven models are available from 8 to 64 relays. The CCLP–BACnet controller is the BACnet communication add–on for Cristal Controls lighting panels. This is a natural upgrade to our CCLS–4016 relay scanner.
	Relays, programmable inputs and groups settings are available through common BACnet objects. This controller features makes lighting control easy to set: ON only, OFF only, flick warnings, automatic OFF timer and relay swipe on communication timeout.

Solutions énergétiques éclairées

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Standardized Device Profile (Annex L)

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

Interoperability Building Blocks (Annex K)

Data Sharing	
ReadProperty-B	DS-RP-B
WriteProperty-B	DS-WP-B
ReadPropertyMultiple-B	DS-RPM-B
COV-B	DS-COV-B
Device and Network Management	
Dynamic Device Binding-B	DM-DDB-B
Dynamic Object Binding-B	DM-DOB-B
DeviceCommunicationControl-B	DM-DCC-B
ReinitializeDevice-B	DM-RD-B
TimeSynchronization-B	DM-TS-B

Segmentation Capability

Not supported	
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Object Types Supported

Object Type	Required Properties	Optional Properties
Binary Input	Object_Identifier	Description
	Object_Name	Reliability
	Object_Type	Active_Text
	Present_Value	Inactive_Text
	Status_Flags	
	Event_State	
	Out_Of_Service (W)	
	Polarity	
Binary Output	Object_Identifier	Description
	Object_Name	Reliability
	Object_Type	Active_Text
	Present_Value (W)	Inactive_Text
	Status_Flags	
	Event_State	
	Out_Of_Service (W)	
	Polarity	
	Priority_Array	
	Relinquish_Default	
Binary Value	Object_Identifier	Description
	Object_Name	Active_Text
	Object_Type	Inactive_Text
	Present_Value (W)	Priority_Array
	Status_Flags	Relinquish_Default
	Event_State	
	Out_Of_Service	
Analog Value	Object_Identifier	Description
5	Object_Name	Reliability
	Object_Type	COV_Increment
	Present_Value (W)	
	Status_Flags	
	Event_State	
	Out_Of_Service (W)	
	Units	

Device	Object_Identifier (W)	Description	
	Object_Name (W)	Local_Time	
	Object_Type	Local_Date	
	System_Status	Max_Master (W)	
	Vendor_Name	Max_Info_Frames (W)	
	Vendor_Identifier	Configuration_Files	
	Model_Name	Last_Restore_Time	
	Firmware_Revision	Backup_Failure_Timeout (W)	
	Application_Software_Version	Active_COV_Subscriptions	
	Protocol_Version	Last_Restart_Reason	
	Protocol_Revision	Time_Of_Device_Restart	
	Protocol_Services_Supported	Restart_Notification_Recipients	
	Protocol_Object_Types_Supported	Backup_And_Restore_State	
	Object_List	Backup_Preparation_Time	
	Max_APDU_Length_Accepted	Restore_Preparation_Time	
	Segmentation_Supported	Restore_Completion_Time	
	APDU_Timeout (W)	MSTP_MAC (W) (Proprietary 512)	
	Number_Of_APDU_Retries (W)		
	Device_Address_Binding		
	Database_Revision		
File	Object_Identifier	Description	
	Object_Name		
	Object_Type		
	File_Type		
	File_Size		
	Modification_Date		
	Archive (W)		
	Read_Only		
	File_Access_Method		

(W) = Writable property

Data Link Layer Options

BACnet IP, (Annex J)	X
BACnet IP, (Annex J), Foreign Device	\boxtimes
SO 8802-3, Ethernet (Clause 7)(10Base2, 10Base5, 10BaseT, Fiber)	\boxtimes
MS/TP Master (Clause 9), Baud Rate(s): 9600, 19200, 38400, and 76800	\boxtimes
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	

Device Address Binding

Is static device binding supported?

Networking Options

Router	
Annex H, BACnet Tunneling	
BACnet/IP Broadcast Management Device (BBMD)	
Does the BBMD Support Registrations by Foreign Devices?	

Character Sets

Indicating support for multiple characters sets does not imply that Maximum supported string length is 64 bytes (any character set).

ANSI X3.4 (UTF-8)	\boxtimes
IBM/Microsoft DBCS	
JIS C 6226	
ISO 10646 (UCS-4)	
ISO 10646 (UCS2)	
ISO 8859-1	

BACnet Objects list

Object	Instance	Name	Min Value	Max Value	Default	Description
Device		CCLP-1664	0	4194302		
BI	0-15	INPUT 01-16	0 = 0FF	1 = ON	0 = 0FF	Current state of the programmable inputs.
BI	16-79	RELAY FB 01-64	0 = 0FF	1 = ON	0 = OFF	Actual state of a relay.
BO	0-63	RELAY CMD 01-64	0 = 0FF	1 = ON	0 = 0FF	Send a command to a relay.
BO	64-127	RELAY FLK 01-64	0 = 0FF	1 = ON	0 = 0FF	Send a flick warning command to a relay.
BV	0-7	GROUP CMD 01-08	0 = 0FF	1 = ON	0 = 0FF	Send command to multiple relays.
BV	8-15	GROUP FLK 01-08	0 = 0FF	1 = ON	0 = 0FF	Send a flick warning command to multiple relays.
BV	16	CAN-GATEWAY	0 = Disabled	1 = Enabled	0	Enable CCLS-4016 communication across panels.
AV	0-7	GROUP FB 01-07	0.0%	100.0%	0.0%	Feedback for the relays of a group. 0% = OFF, 100% = ON, other = mixed.
AV	8-11	CCLS ADDR 01-04	1	127	Auto	Can address of CCLS-4016 I/O boards.