



## BACnet Protocol Implementation Conformance Statement (PICS)

Date: August 2010  
Vendor Name: ELESTA building automation GmbH  
Vendor ID: 308  
Product Name: Controlesta RCO D  
Product Model Number: RCO 5XX D-X  
Applications Software Version: 0-0-29, 16. Juli 2010, 12:39:11  
Firmware Revision: 0-0-29  
BACnet Protocol Revision: 5

Product Description: Freely programmable DDC-Controller

### BACnet Standardized Device Profile (Annex L):

BACnet Building Controller (B-BC)

### List all BACnet Interoperability Building Blocks Supported (Annex K):

#### Data Sharing BIBB's

- DS-RP-A
- DS-RP-B
- DS-RPM-A
- DS-RPM-B
- DS-WPM-B
- DS-WP-A
- DS-WP-B
- DS-COV-A
- DS-COV-B

#### Alarm and Event Management BIBB's

- AE-N-I-B
- AE-ACK-B
- AE-ESUM-B
- AE-INFO-B

#### Scheduling BIBB's

- SCHED-I-B
- SCHED-E-B

#### Trending BIBB's

- T-VMT-I-B
- T-ATR-B
- T-VMT-A
- T-ATR-A

#### Device Management BIBB's

- DM-DDB-A
- DM-DDB-B
- DM-DOB-A
- DM-DOB-B
- DM-DCC-B
- DM-TS-B
- DM-UTC-B
- DM-RD-B
- DM-BR-B

#### Network Management BIBB's

- NM-CE-A



## Standard Object Types Supported:

Analog Input  
Analog Output  
Analog Value  
Binary Input  
Binary Output  
Binary Value  
Calendar  
Device  
Event Enrollment  
File  
Multi-state Value  
Notification Class  
Schedule  
Trend Log  
Accumulator

## Segmentation Capability:

- Segmented requests supported
- Segmented responses supported

Window Size 16  
Window Size 16



## Standard Object Types Supported:

- 1) Whether objects of this type are dynamically creatable using the CreateObject service - NOT SUPPORTED
- 2) Whether objects of this type are dynamically deletable using the DeleteObject service - NOT SUPPORTED
- 3) List of the optional properties supported
- 4) List of all properties that are writable where not otherwise required by this standard

Object type	Optional properties supported	Writable properties
Analog-Input	DESCRIPTION, COV_INCREMENT, TIME_DELAY, NOTIFICATION_CLASS, HIGH_LIMIT, LOW_LIMIT, DEADBAND, LIMIT_ENABLE, EVENT_ENABLE, ACKED_TRANSITIONS, NOTIFY_TYPE, EVENT_TIME_STAMPS	UNITS, LIMIT_ENABLE
Analog-Output	DESCRIPTION, COV_INCREMENT, TIME_DELAY, NOTIFICATION_CLASS, HIGH_LIMIT, LOW_LIMIT, DEADBAND, LIMIT_ENABLE, EVENT_ENABLE, ACKED_TRANSITIONS, NOTIFY_TYPE, EVENT_TIME_STAMPS	PRESENT_VALUE, UNITS, LIMIT_ENABLE
Analog-Value	DESCRIPTION, COV_INCREMENT, TIME_DELAY, NOTIFICATION_CLASS, HIGH_LIMIT, LOW_LIMIT, DEADBAND, LIMIT_ENABLE, EVENT_ENABLE, ACKED_TRANSITIONS, NOTIFY_TYPE, EVENT_TIME_STAMPS	PRESENT_VALUE, UNITS, LIMIT_ENABLE
Binary-Input	INACTIVE_TEXT, ACTIVE_TEXT, TIME_DELAY, NOTIFICATION_CLASS, ALARM_VALUE, EVENT_ENABLE, ACKED_TRANSITIONS, NOTIFY_TYPE, EVENT_TIME_STAMPS, DESCRIPTION	ALARM_VALUE
Binary-Output	INACTIVE_TEXT, ACTIVE_TEXT, DESCRIPTION	PRESENT_VALUE
Binary-Value	INACTIVE_TEXT, ACTIVE_TEXT, TIME_DELAY, NOTIFICATION_CLASS, ALARM_VALUE, EVENT_ENABLE, ACKED_TRANSITIONS, NOTIFY_TYPE, EVENT_TIME_STAMPS, DESCRIPTION	PRESENT_VALUE, ALARM_VALUE
Calendar	DESCRIPTION	DATE_LIST
Device	LOCATION, DESCRIPTION, MAX_SEGMENTS_ACCEPTED, LOCAL_TIME, LOCAL_DATE, UTC_OFFSET, DAYLIGHT_SAVINGS_STATUS, APDU_SEGMENT_TIMEOUT, MAX_MASTER, MAX_INFO_FRAMES, CONFIGURATION_FILES, LAST_RESTORE_TIME, BACKUP_FAILURE_TIMEOUT, ACTIVE_COV_SUBSCRIPTIONS	OBJECT_IDENTIFIER, UTC_OFFSET, DAYLIGHT_SAVINGS_STATUS, APDU_SEGMENT_TIMEOUT, APDU_TIMEOUT, NUMBER_OF_APDU_RETRIES, MAX_MASTER, MAX_INFO_FRAMES, BACKUP_FAILURE_TIMEOUT
Event-Enrollment	DESCRIPTION	EVENT_PARAMETERS
File	DESCRIPTION	FILE_SIZE, ARCHIVE
Multi-State-Value	TIME_DELAY, NOTIFICATION_CLASS, EVENT_ENABLE, ACKED_TRANSITIONS, NOTIFY_TYPE, EVENT_TIME_STAMPS, ALARM_VALUES, FAULT_VALUES, DESCRIPTION	PRESENT_VALUE
Notification-Class	DESCRIPTION	RECIPIENT_LIST
Schedule	WEEKLY_SCHEDULE, EXCEPTION_SCHEDULE, DESCRIPTION	WEEKLY_SCHEDULE, EXCEPTION_SCHEDULE, PRIORITY_FOR_WRITING
Trend-Log	DESCRIPTION, START_TIME, STOP_TIME, LOG_DEVICE_OBJECT, LOG_INTERVAL, NOTIFICATION_THRESHOLD, RECORDS_SINCE_NOTIFICATION, LAST_NOTIFY_RECORD, NOTIFICATION_CLASS	LOG_ENABLE, START_TIME, STOP_TIME, LOG_INTERVAL, RECORD_COUNT



5) List of proprietary properties and for each its property identifier, datatype, and meaning – NOT SUPPORTED

6) List of any property range restrictions:

- DEVICE – UTC\_OFFSET: minimum -780; maximum 780
- DEVICE – APDU\_SEGMENT\_TIMEOUT: minimum 1500; maximum 65535
- DEVICE – APDU\_TIMEOUT: minimum 1500; maximum 65535
- DEVICE – NUMBER\_OF\_APDU\_RETRIES: minimum 1; maximum 255
- DEVICE – MAX\_MASTER: minimum 1; maximum 127
- DEVICE – MAX\_INFO\_FRAMES: minimum 1; maximum 15
- DEVICE – CONFIGURATION\_FILES: maximum length array: 1
- DEVICE – BACKUP\_FAILURE\_TIMEOUT: minimum 1; maximum 65535
- FILE – FILE\_SIZE: write only 0
- SCHEDULE – WEEKLY\_SCHEDULE: maximum entries per day: 20
- SCHEDULE – EXCEPTION\_SCHEDULE: maximum length array: 1
- TREND-LOG – LOG\_INTERVAL: minimum 100; maximum 8639900; resolution 100
- TREND-LOG – BUFFER\_SIZE minimum 1; maximum 10000
- TREND-LOG – RECORD\_COUNT: write only 0.

### Data Link Layer Options:

- 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)
- ANSI/ATA 878.1, RS-485 ARCNET (Clause 8), baud rate(s) \_\_\_\_\_
- MS/TP master (Clause 9), baud rate(s): 9600bit/s, 19 200bit/s, 38 400bit/s, 76 800 bit/s
- MS/TP slave (Clause 9), baud rate(s): 9600bit/s, 19 200bit/s, 38 400bit/s, 76 800 bit/s
- Point-To-Point, EIA 232 (Clause 10), baud rate(s): 9600bit/s, 57 600bit/s, 115 200 bit/s
- Point-To-Point, modem, (Clause 10), baud rate(s): 9600bit/s, 57 600bit/s, 115 200 bit/s
- LonTalk, (Clause 11), medium: \_\_\_\_\_
- Other:

### Device Address Binding:

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

### Networking Options:

- Router, Clause 6 - List all routing configurations, e.g., ARCNET-Ethernet, Ethernet-MS/TP, etc.
  - Annex H, BACnet Tunneling Router over IP
  - BACnet/IP Broadcast Management Device (BBMD)
- Does the BBMD support registrations by Foreign Devices?  Yes  No

### Character Sets Supported:

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

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