

Date: 10/05/2016 Vendor Name: OEMCtrl Product Name: Unitary Protocol Converter Product Model Number: UPC Applications Software Version: <depends on application> Firmware Revision: 6.00a BACnet Protocol Revision: 9

### **Product Description:**

The UPC (Unitary Protocol Converter) can convert between two open protocols, or from a proprietary protocol to an open protocol to integrate with virtually any Building Automation System. One of the unique things about the UPC is the ability to select the open protocol you want with the simple flip of a DIP switch. Choose from BACnet, Modbus, N2 Bus, or LonWorks. The UPC also offers the ability to plug in an optional backlit LCD display/keypad to allow you to view any of the points in your system. The UPC may be used on a BACnet MS/TP or ARCnet 156Kbps network.

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

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

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

DS-RP-A	AE-N-I-B	SCHED-I-B	T-VMT-I-B	DM-DDB-A
DS-RP-B	AE-ACK-B	SCHED-E-B	T-ATR-B	DM-DDB-B
DS-RPM-A	AE-ASUM-B			DM-DOB-A
DS-RPM-B	AE-ESUM-B			DM-DOB-B
DS-RR-B	AE-INFO-B			DM-DCC-B
DS-WP-A				DM-PT-A
DS-WP-B				DM-PT-B
DS-WPM-A				DM-TS-A
DS-WPM-B				DM-TS-B
DS-COV-A				DM-UTC-A
DS-COV-B				DM-UTC-B
DS-COVU-A				DM-RD-B
DS-COVU-B				DM-LM-B
				DM-R-B
				DM-ATS-A

### Segmentation Capability:

Able to transmit segmented messages	Window Size
Able to receive segmented messages	Window Size



### Standard Object Types Supported:

An object type is supported if it may be present in the device. For each standard Object Type supported provide the following data:

- 1) Whether objects of this type are dynamically creatable using the CreateObject service
- 2) Whether objects of this type are dynamically deletable using the DeleteObject service
- 3) List of the optional properties supported
- 4) List of all properties that are writable where not otherwise required by this standard
- 5) List of all properties that are conditionally writable where not otherwise required by this standard.
- 6) List of proprietary properties and for each its property identifier, datatype, and meaning
- 7) List of any property range restrictions

(List of object types starts on page 4 ...)



### **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, EIA-485 ARCNET (Clause 8), baud rate(s): 156Kbps
⊠ MS/TP master (Clause 9), baud rate(s): 9600, 19200, 38400, 76800\_
□ 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): \_\_\_\_\_\_
□ Point-To-Point, modem, (Clause 10), baud rate(s): \_\_\_\_\_\_
□ BACnet/Zigbee (Annex O) \_\_\_\_\_\_\_
□ 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.)  $\boxtimes$  Yes  $\square$  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	$\boxtimes$ IBM <sup>TM</sup> /Microsoft <sup>TM</sup> DBCS	🗵 ISO 8859-1
⊠ISO 10646 (UCS-2)	⊠ISO 10646 (UCS-4)	区JIS C 6226

If this product is a communication gateway, describe the types of non-BACnet equipment/networks(s) that the gateway supports: None.

#### **Network Security Options:**

Non-secure Device – is capable of operating without BACnet Network Security
 Secure Device – is capable of using BACnet Network Security (NS-SD BIBB)
 Multiple Application-Specific Keys
 Supports encryption (NS-ED BIBB)
 Key Server (NS-KS BIBB)



## Analog Input (ASVI\_CS):

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported:

acked-transitions cov-increment deadband description device-type event-enable event-time-stamps high-limit limit-enable low-limit notification-class notify-type reliability

- resolution time-delay
- 4. Writeable properties:

cov-increment deadband description device-type event-enable high-limit limit-enable low-limit notification-class notify-type out-of-service time-delay units

5. Proprietary properties:

cs-comb-algorithm	optional/writable
cs-disp-source	optional/writable
cs-sens-enable-arr	optional/writable
cs-corrected-value-arr	optional/
cs-sens-status-arr	optional
cs-sens-calib-arr	optional/writable

6. Range restrictions:

description device-type notification-class time-delay limited to 50 octets in length limited to 50 octets in length must be valid notification-class 0 to 4294967295



# Analog Value (AVP\_CS):

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported:

acked-transitions cov-increment deadband description event-enable event-time-stamps high-limit limit-enable low-limit notification-class notify-type priority-array reliability relinquish-default time-delay

4. Writeable properties:

cov-increment deadband description event-enable high-limit limit-enable low-limit notification-class notify-type out-of-service present-value relinquish-default time-delay units

- 5. Proprietary properties: None
- 6. Range restrictions:

description present-value relinquish-default notification-class time-delay limited to 50 octets in length limited by min and max set via the microblock limited by min and max set via the microblock must be valid notification-class 0 to 4294967295



### Analog Value (AVP\_CS\_Setpoint):

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported:

cov-increment description reliability

4. Writeable properties:

cov-increment description out-of-service present-value units

5. Proprietary properties: 4174 4175

Private-edit-range-min Private-edit-range-max optional optional

 Range restrictions: description present-value

limited to 50 octets in length limited by min and max set via the microblock

# Analog Value (AVS\_CS\_Setpoint):

- 1. Creatable? NO
- 2. Deletable? NO
- Optional properties supported: cov-increment description reliability
- 4. Writeable properties: cov-increment description out-of-service units
- 5. Proprietary properties: None
- 6. Range restrictions:
  - description

limited to 50 octets in length

# Analog Value (PAR):

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported:



acked-transitions cov-increment deadband description event-enable event-time-stamps high-limit limit-enable low-limit notification-class notify-type priority-array reliability relinquish-default time-delay cov-increment deadband description event-enable high-limit limit-enable low-limit

Writeable properties: 4.

> notification-class notify-type out-of-service present-value relinquish-default time-delay units

- Proprietary properties: None 5.
- 6. Range restrictions:

description present-value relinquish-default notification-class time-delay

limited to 50 octets in length limited by min-pres-value and max-pres-value properties limited by min-pres-value and max-pres-value properties must be valid notification-class 0 to 4294967295

# **Analog Value (PID):**

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported: description reliability
- Writeable properties: 4. description

5. Proprietary properties: None



6. Range restrictions: None

## Analog Value (STAT):

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported:

acked-transitions cov-increment deadband description event-enable event-time-stamps high-limit limit-enable

low-limit

notification-class

notify-type

reliability

time-delay

4. Writeable properties:

cov-increment deadband

description

event-enable

high-limit

limit-enable

low-limit

notification-class

notify-type

out-of-service

time-delay

units

5. Proprietary properties: None

6. Range restrictions:

description notification-class time-delay limited to 50 octets in length must be valid notification-class 0 to 4294967295



## **Binary Value (BVP\_CS):**

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported:

acked-transitions active-text alarm-value change-of-state-count change-of-state-time description elapsed-active-time event-enable event-time-stamps inactive-text minimum-off-time minimum-on-time notification-class notify-type priority-array reliability relinquish-default time-delay time-of-active-time-reset time-of-state-count-reset Writeable properties: active-text alarm-value change-of-state-count description elapsed-active-time event-enable inactive-text minimum-off-time

minimum-on-time minimum-on-time notification-class notify-type out-of-service present-value relinquish-default time-delay

- 5. Proprietary properties: None
- 6. Range restrictions:

4.

active-text change-of-state-count description

limited to 50 octets in length 0 to 4294967295 limited to 50 octets in length



elapsed-active-time inactive-text minimum-off-time minimum-on-time notification-class time-delay 0 to 4294967295 limited to 50 octets in length 0 to 4294967295 0 to 4294967295 must be valid notification-class 0 to 4294967295

## **Binary Value (BVP\_CS\_Momentary):**

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported:

acked-transitions active-text alarm-value change-of-state-count change-of-state-time description elapsed-active-time event-enable event-time-stamps inactive-text minimum-off-time minimum-on-time notification-class notify-type priority-array reliability relinquish-default time-delay time-of-active-time-reset time-of-state-count-reset 4. Writeable properties: active-text alarm-value change-of-state-count description elapsed-active-time event-enable inactive-text notification-class notify-type out-of-service

present-value relinquish-default

time-delay



5. Proprietary properties: 4176

6.

Range restrictions: active-text change-of-state-count description elapsed-active-time inactive-text notification-class time-delay

#### cs\_momentary\_state

optional

limited to 50 octets in length 0 to 4294967295 limited to 50 octets in length 0 to 4294967295 limited to 50 octets in length must be valid notification-class 0 to 4294967295

## **Binary Value (CLOCK):**

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported:

acked-transitions active-text alarm-value change-of-state-count change-of-state-time description elapsed-active-time event-enable

event-time-stamps

inactive-text minimum-off-time

minimum-on-time

notification-class

notify-type

priority-array

reliability

relinquish-default

time-delay

time-of-active-time-reset

time-of-state-count-reset

4. Writeable properties:

active-text alarm-value change-of-state-count description elapsed-active-time

event-enable

inactive-text

minimum-off-time

minimum-on-time

notification-class



notify-type out-of-service present-value relinquish-default time-delay 5. Proprietary properties: None Range restrictions: active-text change-of-state-count description elapsed-active-time inactive-text minimum-off-time minimum-on-time notification-class

limited to 50 octets in length 0 to 4294967295 limited to 50 octets in length 0 to 4294967295 limited to 50 octets in length 0 to 4294967295 0 to 4294967295 must be valid notification-class 0 to 4294967295

## **Binary Value (MODULE ALARM):**

1. Creatable? NO

6.

- 2. Deletable? NO
- 3. Optional properties supported:

time-delay

acked-transitions alarm-value description event-enable

event-time-stamps

notification-class

notify-type

time-delay

4. Writeable properties: alarm-value event-enable notification-class

notify-type out-of-service

time-delay

- 5. Proprietary properties: None
- 6. Range restrictions:

notification-class time-delay

must be valid notification-class 0 to 4294967295

## **Binary Value (PAR):**

- 7. Creatable? NO
- 8. Deletable? NO
- 9. Optional properties supported:



acked-transitions active-text alarm-value change-of-state-count change-of-state-time description elapsed-active-time event-enable event-time-stamps inactive-text minimum-off-time minimum-on-time notification-class notify-type priority-array reliability relinquish-default time-delay time-of-active-time-reset time-of-state-count-reset 10. Writeable properties: active-text alarm-value change-of-state-count description elapsed-active-time event-enable inactive-text minimum-off-time minimum-on-time notification-class notify-type out-of-service present-value relinquish-default time-delay 11. Proprietary properties: None 12. Range restrictions: active-text change-of-state-count description elapsed-active-time inactive-text minimum-off-time minimum-on-time notification-class time-delay

limited to 50 octets in length 0 to 4294967295 limited to 50 octets in length 0 to 4294967295 limited to 50 octets in length 0 to 4294967295 0 to 4294967295 must be valid notification-class 0 to 4294967295



## **Binary Value (STAT):**

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported:

acked-transitions

active-text

alarm-value

change-of-state-count change-of-state-time

description

elapsed-active-time

event-enable

inactive-text

minimum-off-time

minimum-on-time

notification-class

notify-type

reliability

time-delay

time-of-active-time-reset

time-of-state-count-reset event-time-stamp

4. Writeable properties:

active-text alarm-value change-of-state-count description elapsed-active-time event-enable inactive-text minimum-off-time

minimum-on-time notification-class notify-type

out-of-service

time-delay

- 5. Proprietary properties: None
- 6. Range restrictions:

active-text change-of-state-count description elapsed-active-time inactive-text minimum-off-time minimum-on-time notification-class limited to 50 octets in length 0 to 4294967295 limited to 50 octets in length 0 to 4294967295 limited to 50 octets in length 0 to 4294967295 0 to 4294967295 must be valid notification-class



time-delay

0 to 4294967295

### **Calendar:**

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported: description
- 4. Writeable properties: date-list

description

- 5. Proprietary properties: None
- 6. Range restrictions:

date-list

description

limited to 30 BACnetCalendarEntrys limited to 50 octets in length

## **Device:**

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported:

active-cov-subscriptions active-vt-sessions align-intervals apdu-segment-timeout description interval-offset list-of-session-keys local-date local-time location max-segments-accepted vt-classes-supported utc-offset max-master max-info-frames last-restart-reason restart-notification-recipients time-of-device-restart time-synchronization-recipients time-synchronization-interval utc-time-synchronization-recipients 4. Writeable properties: object-identifier object-name location

- description
- local-time



local-date utc-offset apdu-segment-timeout apdu-timeout number-of-apdu-retries max-master max-info-frames last-restart-reason restart-notification-recipients align-intervals time-synchronization-interval interval-offset time-synchronization-recipients utc-time-synchronization-recipients auto-identity-scheme auto-identity-base active-locale-code module-configuration archive-now-trigger lon-works-enable-metric-conversion ccn-address-element ccn-address-bus

#### 5. Proprietary properties: Prop

I I I I I I I I I I I I I I I I I I I		
perty no.	Property name	
4145	active-locale-index	
4149	auto-identity-scheme	
4150	auto-identity-base	
4151	supported-locale-codes	
4152	active-locale-code	
4153	serial-number	
4154	module-configuration	
4161	array-of-mstp-baud-rates	
4162	test-mode	
4166	download-id	
4167	file-store-size	
4801	ccn-address-element	
4802	ccn-address-bus	
4901	archive-valid-status	
4902	archive-now-trigger	
4920	lon-works-enable-metric-conversion	

#### **Data Type** unsigned enumerated unsigned array of unsigned unsigned char string octet string array of unsigned enumerated char string unsigned unsigned unsigned enumerated bool bool

#### 6. Range restrictions: **Property** n

no.	Property name	<b>Property Restric</b>
	object-identifier	must be a valid of
	object-name	limited to 50 oct
	location	limited to 50 oct
	description	limited to 50 oct
	utc-offset	-780 to 780
	apdu-segment-timeout	0 to 4294967295
	apdu-timeout	0 to 4294967295
	number-of-apdu-retries	0 to 255
	max-master	1 to 127
	max-info-frames	0 to 65535

#### ctions

device identifier tets in length tets in length tets in length 5 5

### Data Type

object identifier char string char string char string integer unsigned unsigned unsigned unsigned unsigned



4149	auto-identity-scheme
4150	auto-identity-base
4152	active-locale-code
4154	module-configuration
4801	ccn-address-element
4802	ccn-address-bus

0 to 255 0 to 4294967295

0 to 16 in length 0 to 255 0 to 255 enumerated unsigned unsigned octet string unsigned unsigned

### File:

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported: description
- 4. Writeable properties:
  - archive description file-type

file-size modification-date

- read-only
- 5. Proprietary properties: None
- 6. Range restrictions:

description file-type limited to 50 octets in length limited to 50 octets in length

## Loop Object (BACnet PID):

- 1. Creatable? No
- 2. Deletable? No
- 3. Optional properties supported: Description Update\_interval Proportional\_constant Proportional\_constant\_units Integral\_constant Integral\_constant Derivative\_constant Derivative\_constant\_units Bias
  - COV\_increment
  - Writable properties: description

4.

Update\_interval

Action

- Proportional\_constant
- Integral\_constant
- Derivative\_constant

Bias

5. Proprietary properties: Continuous\_proportional



6.	Deadband Ramp_time Range Restriction: <b>Property no.</b> 4163 4164	<b>Property name</b> Continuous_proportional Deadband	Property Restrictions Can only be 0 or 1 Must be >=0	<b>DataType</b> Boolean Real
	4165	Ramp_time	Must be $\geq =0$ Must be $\geq =0$	Real
		1 -		

### Multi-State Value (PAR):

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported:

acked-transitions

alarm-values description

event-enable

event-time-stamps

fault-values

notification-class

notify-type

priority-array reliability

relinquish-default

state-text

time-delay

4. Writeable properties:

alarm-values description

event-enable

fault-values

notification-class

notify-type

out-of-service

present-value

- relinquish-default
- time-delay
- 5. Proprietary properties: None
- 6. Range restrictions: description

notification-class present-value relinquish-default time-delay limited to 50 octets in length must be valid notification-class must be valid state must be valid state 0 to 4294967295

# Multi-State Value (CLOCK):

1. Creatable? NO



- 2. Deletable? NO
- 3. Optional properties supported:

acked-transitions alarm-values description

event-enable

event-time-stamps

fault-values

notification-class

notify-type priority-array

reliability

relinquish-default

state-text

time-delay

4. Writeable properties:

alarm-values description event-enable fault-values notification-class notify-type

out-of-service

present-value

relinquish-default

time-delay

- 5. Proprietary properties: None
- 6. Range restrictions:
  - description notification-class present-value relinquish-default time-delay

limited to 50 octets in length must be valid notification-class must be valid state must be valid state 0 to 4294967295

# Multi-State Value (MSVP\_CS):

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported:

acked-transitions alarm-values description event-enable event-time-stamps fault-values notification-class notify-type



priority-array reliability

relinquish-default

state-text

time-delay

4. Writeable properties:

alarm-values description event-enable fault-values notification-class notify-type out-of-service present-value relinquish-default time-delay

# Multi-State Value (STAT):

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported:

acked-transitions

alarm-values

description

event-enable event-time-stamps

fault-values

notification-class

notify-type

reliability

state-text

- time-delay
- 4. Writeable properties:

alarm-values

description

event-enable

fault-values

notification-class

notify-type

out-of-service

- time-delay 5. Proprietary properties: None
- Range restrictions:

description notification-class present-value limited to 50 octets in length must be valid notification-class must be valid state



time-delay

0 to 4294967295

### **Notification Class:**

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported: description
- 4. Writeable properties: ack-required description

priority

- recipient-list
- 5. Proprietary properties: None
- 6. Range restrictions: None

description recipient-list limited to 50 octets in length limited to 5 BACnetDestinations

### **Program:**

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported:

description description-of-halt instance-of program-location reason-for-halt reliability

- 4. Writeable properties: description
  - program-change
  - program-location
- 5. Proprietary properties: None
- 6. Range restrictions: description program-location

limited to 50 octets in length limited to 50 octets in length

# Schedule (ENUM):

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported:
  - description
  - exception-schedule
  - weekly-schedule
- 4. Writeable properties:

description



effective-period exception-schedule priority-for-writing weekly-schedule list-of-prop-reference schedule-default reliability out-of-service Proprietary properties: schedule-names Range restrictions: description limited to 50 octets in length limited to 30 BACnetSpecialEvents, each being limited to 6 BACnetTimeValues exception-schedule present-value 0 to 4294967295 relinquish-default 0 to 4294967295 weekly-schedule limited to 6 BACnetTimeValues per BACnetDailySchedule schedule-default 0 to 4294967295 reliability limited to 4 BACnetReliability out-of-service limited to Boolean (557) schedule-names limited to 800 octets in length

### Schedule (UNS):

5.

6.

1	Creatable?	NO
1.	Cicatable !	INO

- 2. Deletable? NO
- Optional properties supported: description exception-schedule weekly-schedule
- 4. Writeable properties: description effective-period exception-schedule priority-for-writing weekly-schedule list-of-prop-reference schedule-default reliability out-of-service
- 5. Proprietary properties: schedule-names
- 6. Range restrictions:

description

exception-schedule present-value

limited to 50 octets in length limited to 30 BACnetSpecialEvents, each being limited to 6 BACnetTimeValues 0 to 4294967295



relinquish-default weekly-schedule schedule-default reliability out-of-service (557) schedule-names 0 to 4294967295 limited to 6 BACnetTimeValues per BACnetDailySchedule 0 to 4294967295 limited to 4 BACnetReliability limited to Boolean limited to 800 octets in length

# Trend-log (COV or polled):

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported:
  - acked-transitions client-cov-increment cov-resubscription-interval description event-enable event-time-stamps log-device-object-property log-interval notification-class notification-threshold notify-type
  - records-since-notification
  - start-time
  - stop-time
  - last-notify-record
  - align-intervals
  - interval-offset
  - reliability
- 4. Writeable properties:

buffer-size client-cov-increment cov-resubscription-interval Description event-enable log-enable log-interval notification-class notification-threshold

- notify-type
- record-count
- start-time
- stop-time
- stop-when-full
- 5. Proprietary properties: None
- 6. Range restrictions:



description log-interval notification-class notification-threshold record-count total-record-count reliability limited to 50 octets in length 0 to 4294967295 must be valid notification-class 0 to 4294967295 can only be written to 0 can only be written to 0 limited to 4 BACnetReliability

# Trend-log (of a non-BACnet property, COV or polled):

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported:

acked-transitions client-cov-increment cov-resubscription-interval description event-enable event-time-stamps last-notify-record log-interval notification-class notification-threshold notify-type records-since-notification start-time stop-time align-intervals interval-offset reliability

4. Writeable properties:

buffer-size client-cov-increment cov-resubscription-interval description event-enable log-enable log-interval notification-class notification-threshold notify-type record-count start-time stop-time stop-when-full



- 5. Proprietary properties: None
- 6. Range restrictions:
  - description log\_interval notification\_class notification\_threshold record\_count logging-type align-intervals interval-offset trigger reliability

limited to 50 octets in length 0 to 4294967295 must be valid notification\_class 0 to 4294967295 can only be written to 0 limited to 3 BACnetLoggingType limited to Boolean 0 to 4294967295 in hundredths of seconds limited to Boolean limited to 4 BACnetReliability

# Trend-log (of a non-BACnet property, triggered):

- 1. Creatable? NO
- 2. Deletable? NO
- 3. Optional properties supported:
  - acked-transitions client-cov-increment cov-resubscription-interval description event-enable event-time-stamps last-notify-record log-interval notification-class notification-threshold notify-type records-since-notification start-time stop-time reliability trigger
- 4. Writeable properties:
  - buffer-size client-cov-increment cov-resubscription-interval description event-enable log-enable notification-class notification-threshold notify-type record-count start-time stop-time



### stop-when-full trigger

- 5. Proprietary properties: None
- 6. Range restrictions:

description	limited to 50 octets in length
log_interval	0 to 4294967295
notification_class	must be valid notification_class
notification_threshold	0 to 4294967295
record_count	can only be written to 0
logging-type	limited to 3 BACnetLoggingType
align-intervals	limited to Boolean
interval-offset	0 to 4294967295 in hundredths of seconds
trigger	limited to Boolean
reliability	limited to 4 BACnetReliability

# **Proprietary Object, Network Port:**

- 1. Creatable? No
- 2. Deletable? No
- 3. Optional properties supported:
  - ip-multicast-address ip-subnet-mask ip-default-gateway max-master max-info-frames time-sync-interval
- 4. Writable properties:
  - network-number
  - mac-address
  - ip-multicast-address
  - ip-subnet-mask
  - ip-default-gateway
  - instance-of
  - auto-identity-base
  - auto-identity-scheme
  - network-port-base
  - max-master
  - max-info-frames
  - device-time-sync-mode
  - time-sync-interval
- 5. Conditionally writeable properties where not otherwise required by the standard: None
- 6. Proprietary properties:
  - network-type network-number mac-address ip-multicast-address ip-subnet-mask ip-default-gateway auto-identity-base



auto-identity-scheme network-port-base device-time-sync-mode

### 7. Range Restriction:

Property no.	<b>Property name</b>	<b>Property Restrictions</b>	DataType
624	network-type		Unsigned
622	network-number	0 - 65535	Unsigned
621	mac-address	limited to 6 octets in length	Chrstr
607	ip-multicast-address	limited to 4 octets in length	Chrstr
608	ip-subnet-mask	limited to 4 octets in length	Chrstr
601	ip-default-gateway	limited to 4 octets in length	Chrstr
4150	auto-identity-base	0 - 4294967295	Unsigned
4149	auto-identity-scheme	0 - 255	Enum
600	network-port-base		Chrstr
660	device-time-sync-mode	0 - 2	Enum