

**INTERPRETATION IC 135-2016-26 OF
ANSI/ASHRAE STANDARD 135-2016 BACnet® -
A Data Communication Protocol for Building
Automation and Control Networks**

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Request from: Carl Neilson, BACnet International, 61 Seagirt Road, Sooke, BC, V9Z 1A3.

Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 135-2016, regarding the ability to read property values.

Background: The standard also provides an optional mechanism for dealing with all large requests and responses, segmentation.

Depending on the size of property values, the services that a device supports for reading of its property values, the level of segmentation the device supports, and the data links in use, there are certain limits on the size of property values that the device is able to return in response to ReadProperty and ReadPropertyMultiple requests.

The standard does not explicitly state that all properties within a device must be readable across their whole value range, but this is at least partially implied by the nature of the standard itself.

Consider a couple of cases:

- 1) A device does not support segmentation, but contains a fixed string property which cannot be transmitted in a single ReadProperty response. For example, the Object_Name of an object is unreadable due to its size, and the value cannot be changed.
- 2) A device supports numerous COV subscriptions, so many that the value of the Active_COV_Subscriptions property overflows the maximum number of segments that the device can return a response in, but the device does not support execution of ReadRange.

The problem is exacerbated when a device supports multiple data links. A device in case 1 might be able to return the property value over BACnet/IP, but not over MS/TP.

Interpretation: This problem was not considered when the standard was developed and is thus an oversight. While it is a best practice that devices restrict property values to those which can be read, the standard does not currently require that property values be restricted to sizes that can be read.

Question: Is this Interpretation correct?

Answer: Yes

Comments: The committee will address this issue in a future addendum.