

**INTERPRETATION IC 135-2008-3 OF
ANSI/ASHRAE STANDARD 135-2008 BACnet® -
A Data Communication Protocol for Building
Automation and Control Networks**

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Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 135-2008, Section 12, relating to the data type of the number of elements of an array when accessing an array property with array index 0.

Background: A question came up regarding what data type to be used for encoding the Property Value parameter in read and write services when reading or writing array element 0 (i.e. the size of the array).

In 135-2008, there is no explicit definition for this. In clause 12 on page 129 one can find "count of the number of elements".

One hint is the data type of the Number_Of_States property in Multi-state objects, which is Unsigned. This number corresponds with what is read from State_Text array element 0. Also, in all related services the Property Array Index parameter is of type Unsigned. The highest index corresponds to the value of array element 0.

In 135.1-2007, no explicit statement on this could be found.

Also, the BTL Implementation Guide is unspecific on this.

Interpretation: When reading or writing array element 0 (i.e. the number of elements of the array), the Property Value parameter of the respective read and write services shall be encoded as a primitive application tagged Unsigned value.

Question: Is this interpretation correct?

Answer: Yes.