

**INTERPRETATION IC 135-2004-17 OF  
ANSI/ASHRAE STANDARD 135-2004 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 135-2004, Section 12.25.14 regarding Log\_Buffer.

**Background:** The 2004 BACnet Standard does not explicitly state whether a value in the LogDatum portion of a BACnetLogRecord must be encoded to match the datatype of the object and property that the TrendLog monitors. When describing the meaning of monitored data value choices, Section 12.25.14 states that, "these choices represent data values read from the monitored object and property". Because the word "represent" is ambiguous, this description might allow an implementation that has a TrendLog object that monitors and collects values about the Present\_Value property of a BinaryValue object to encode these values using a Real datatype, rather than an Enumerated datatype.

There are two occurrences of the current description in the LogDatum description. The first occurrence appears in the description for the set of choices (boolean-value, real-value, enum-value, unsigned-value, signed-value, bitstring-value, null-value) and the second occurrence appears in the description for the any-value choice.

**Interpretation:** The encoding of a data value in the LogDatum portion of a BACnetLogRecord must match the datatype of the monitored object and property.

**Question:** Is this interpretation correct?

**Answer:** Yes

**Comments:** If the alternate functionality is desired, a Trend Log that does not have a Log\_DeviceObjectProperty property is allowed to monitor a BACnet property and coerce the data into any form required.