

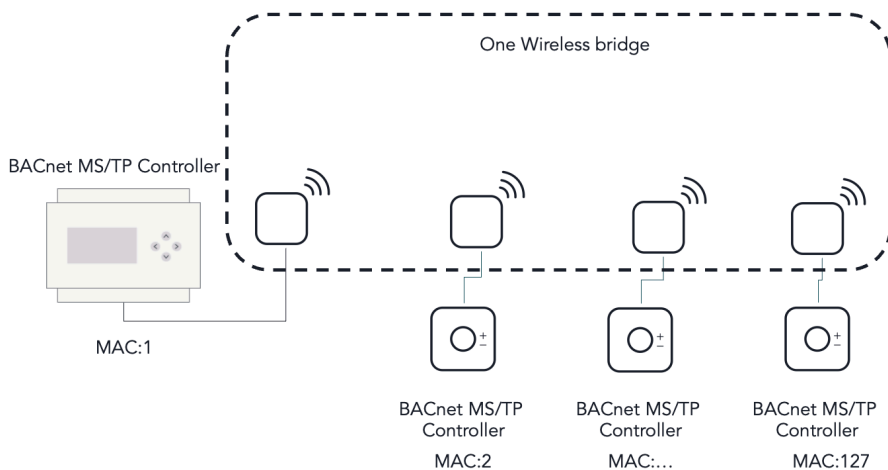
**INTERPRETATION IC 135-2024-1 OF  
ANSI/ASHRAE STANDARD 135-2024 BACnet® -  
A Data Communication Protocol for Building  
Automation and Control Networks**

Approval Date: February 8, 2025

**Request from:** Carl Wäppling, LumenRadio AB, Johan Willins Gata 6, Gothenburg, Västra Götaland 416 64.

**Reference:** This request for interpretation refers to ANSI/ASHRAE Standard 135-2024, Sections 3.2 and 4.2, pertaining to use of the term **bridge**. Specifically, how a wireless bridge would interoperate on an MS/TP segment as defined in Clause 9.

**Background:** The BACnet standard does not define which mediums that are allowed or not allowed within the concept of a network bridge, only that they connect two or more segments at the physical and data link layers. This interpretation request aims to get a clearer definition of how a bridge is permitted to operate within the confines of a MS/TP network segment. The following is an example of a schematic of a wireless mesh network within the concept of a bridge.



In Section 3.2 on page 13 in ASHRAE 135-2020, the term bridge is defined as follows: “**bridge:** a device that connects two or more segments at the physical and data link layers. This device may also perform message filtering based upon MAC layer addresses.”. It is not mandated by the standard that a bridge is required to include a BACnet Device Object or even a BACnet application layer. There are no profiles listed in the Annex A PICS for bridge-only devices.

**Interpretation No.1:** The standard does not prohibit an MS/TP network bridge from emulating the MS/TP maintenance frames (token, poll for manager, etc.) in a single BACnet MS/TP network.

**Question No.1:** Is this Interpretation correct?

**Answer No.1:** Yes

**Interpretation No.2:** The standard does not prohibit bridges from using the reply postponed frame as a mechanism for releasing the token as defined in Clause 9.5.6.9.

**Question No.2:** Is this Interpretation correct?

**Answer No.2:** Yes

**Interpretation No.3:** The standard does not rule that bridges must contain an application entity and therefore are not required to contain the required objects as defined by Clause 22.1.5.

**Question No.3:** Is this Interpretation correct?

**Answer No.3:** Yes