

A Data Communication Protocol for Building Automation & Control Network

The Steffes BACNet control is a device used to interface Steffes heating systems with building automation and control networks. It allows the building automation system to maintain tight, precise, & flexible control of the heating system(s) without the need for other controls such as thermostats, outdoor temperature sensors, and/or peak control devices.

The Steffes BACNet Communication Interface Control shows up as a Delta room controller on the building automation systems and communicates through a MODbus gateway to the Steffes heating system. Each Steffes heating system requires one BACNet controller which handles read-only and write-only analog value (AV) objects.



FEATURES AND BENEFITS

- MSTP (Master/Slave Token Pass) Communication Protocol
- Powered with 24 VAC.
- Communicates common outdoor temperature to all systems, thus eliminating the need to install an outdoor temperature sensor with each heater.
- Adjustable outdoor temperature control allows the system operator greater flexibility to make changes to the operation of the heating system immediately and as frequently as needed.
- Eliminates peak control wiring and provides much higher level of control.
- Write commands are recognized immediately upon reaching the BACNet Interface Control.
- Read-only information commands refresh every 15 seconds. This information can also be accessed at the interface control display.
- Allows variable heat call commands allowing the heating systems to provide greater comfort in the building and help conserve energy.
- Provides operating feedback to system operator, including, but not limited to:
 - Amount of energy stored in heater's brick core (current core temperature)
 - Current activation level of heating elements
 - Current heater output system activation
 - Error code messages within heater inhibiting its operation

FEATURES AND BENEFITS (Continued)

- Provides the ability to do a higher level of demand side management such as demand controlling the load in the building and/or variable level charging.
- Allows system operator to detect possible shortage of heat storage before comfort issues arise.
- Ability to do trend logging for performance feedback, preventative maintenance and equipment troubleshooting (software dependant).
- Enables off-site diagnostics of system.
- Allows system operator to make heat storage level adjustments based on building demand to maximize system service life. Some key factors influencing storage heat level adjustment decisions:
 - Increased cold freight entering the building
 - Production ovens operating
 - Unoccupied times
 - Recovery from unoccupied times
 - Make-up air requirements
 - Wind generation availability
- Provides future control flexibility.
- Simplifies output temperature regulation.

SYSTEM REQUIREMENTS

- Steffes heating system in which the processor control board is programmed with software version 2.03 or greater
- Requires one Steffes BACNet Interface per Steffes heating system
- Not recommended to use BACNet control in conjunction with the Steffes Power Line Carrier Control. Since both systems provide peak and automatic charge control information, the redundancy in this information may result in operational confusion for the Steffes Heating Systems.

ORDERING INFORMATION		
ITEM #	Application	Steffes Heating Systems
1301013	Control BACNet V3.33	6100, 7100, 8100, and 9100 Series
1301015	Control BACNet V3.40	6100, 7100, 8100, and 9100 Series

Limited Three Year Manufacturer's Warranty