CAN2GO

CAN2GO for Building Automation Systems
Case study - Office building

Situation

- Open space and closed offices.
- Existing BACnet IP system.
- Newly installed VAV boxes.
- No local or centralized control over the VAV boxes.

Objectives

- Local and centralized control of VAV boxes to improve energy consumption and confort occupants.
- Bring new control points into existing BACnet system with minimal cost and downtime.

Diagnosis

- Combine wired and wireless technologies for efficient control and cost-effective installation.
- Use a solution providing bidirectional integration of wired and wireless end-devices into BACnet IP - without prohibitive gateway and software costs.

Wired and Wireless Solution

CAN2GO programmable controllers

BACnet IP integration

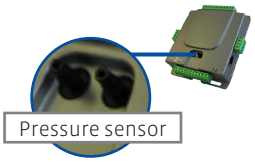
- Controller embedded BACnet server.
- Controller embedded BACnet gateway.
- Ethernet port on coordinator node.

Networking between controllers

- Wireless mesh networking in the ceiling plenum.

VAV box control

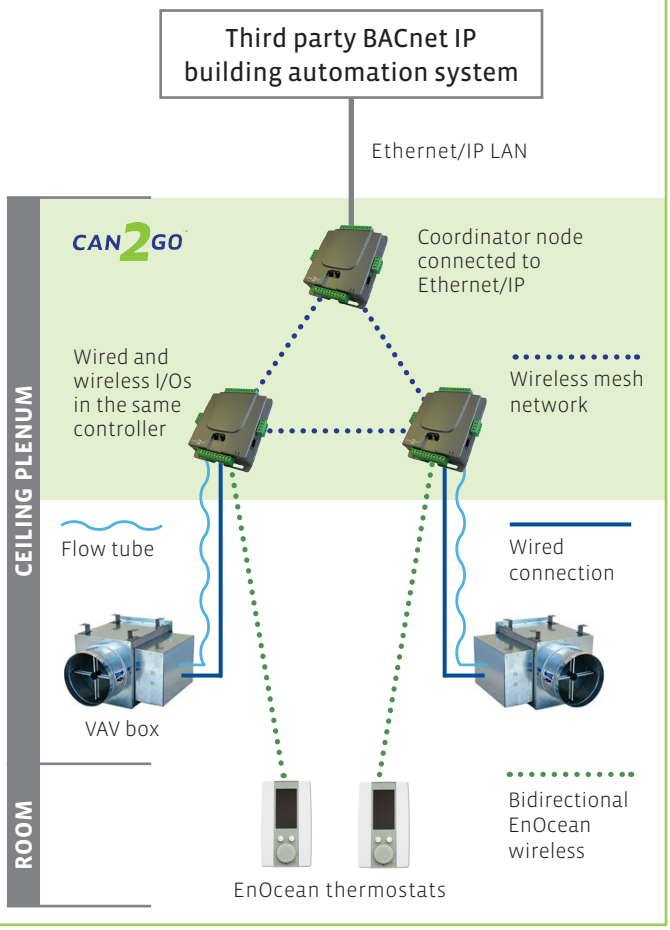
- Wired I/O connection.
- Pressure sensor.



EnOcean thermostat control

- Bidirectional EnOcean wireless connection.

EnOcean Thermostat
- No wires
- No batteries



Result

A solution maximizing the advantages of both wired and wireless technologoies

› BACnet IP integration to third party system

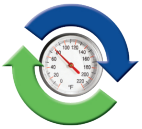
› Complete integration without gateways, servers or software, thanks to CAN2GO's controller-embedded BACnet gateway and server technology.

› The wireless advantage

› Wireless networking between controllers reduces labor costs.

› Installing wireless, battery-less EnOcean thermostats, instead of wired thermo-stats, reduces labor costs.

› The wired advantage



› Wired connection to nearby VAV boxes.

› Essential flow tube connection to nearby VAV boxes for precise control via pressure sensors integrated in the controllers.

In the field

Networking between CAN2GO controllers (C)
› 100% wireless, ZigBee wireless mesh network.

Connection to EnOcean thermostats (E)
› 100% wireless, bidirectional EnOcean wireless.

Connections to VAV boxes (V)
› Wired I/O between controllers and VAV boxes.
› Flow tube for pressure sensors.

(M) CAN2GO controller connected to the LAN

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