

# SENSORS

## NETWORK SENSORS



## NS8000

### SERIES NETWORK SENSORS

The NS Series Network Sensors function directly with Metasys® system Field Equipment Controllers (FECs), Metasys Network and Control Engines (NCEs), Advanced Application Field Equipment Controller (FACs), Metasys VAV Box Equipment Controllers (CVM) and General Purpose Application Controllers (CGM), VAV Modular Assembly (VMA16) Controllers, and Facility Explorer™ FX-PC Series Programmable Controllers (FX-PCGs, FX-PCVs, and FX-PCXs). The sensors are also compatible with Verasys® and Johnson Controls® Smart Equipment.

The NS Series Network Sensors monitor zone temperature, relative humidity (RH), carbon dioxide (CO<sub>2</sub>), motion, and local temperature setpoint adjustments. The sensor transmits this data to a controller on the Sensor/Actuator (SA) bus.

Some NS Series Network Sensors models include an onboard passive infrared (PIR) occupancy sensor that detects motion to determine if a space is occupied. This feature maximizes up to 30% energy savings in high-energy usage environments such as schools, dormitories, offices, hospitals, and hotels by adjusting the temperature of the space based on the occupancy status. In addition, the PIR occupancy sensor facilitates trending of floor space usage in these environments.

The full color graphical LCD models use the graphical user interface to set a unique BACnet® address for applications that require multiple sensors.

## FEATURES

- **BACnet MS/TP protocol communication** – Provides compatibility with Metasys system field controllers, Facility Explorer programmable controllers as well as Verasys and Johnson Controls Smart Equipment in a proven communication network.
- **Single and multifunctional sensors** – Choose temperature, RH, CO<sub>2</sub>, and occupancy sensing depending on HVAC needs.
- **Large backlit LCD fixed segment display or LCD full color graphical display on some models** – Provides real-time status of the environment with backlighting activated during user interaction.
- **Simple temperature setpoint adjustment or Warmer/Cooler mode available on display models** – Configure simple setpoint adjustment or Warmer/Cooler mode.
- **Onboard occupancy sensor available on PIR models** – Maximizes up to 30% energy savings in high-energy usage environments, and facilitates trending of floor space usage.
- **Temporary occupancy included on all display and Warmer/Cooler models** – Provides a timed override command, which initiates a temporary occupancy state.
- **Field-selectable default display setting on display models** – Toggle between temperature, RH or temperature setpoint on the display, and set the desired default for continuous viewing.

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### European Products Catalogue 01 2021

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- **Fahrenheit/Celsius (°F/°C) selectable on display models** - Display temperature in degrees Fahrenheit or degrees Celsius.
- **All display models meet California Energy Code (Title 24)** - Displays the required State of California Title 24 economizer fault conditions.
- **All display models include a screen lockout** - Prevents sensor tampering.
- **Serialized sensors and calibration certificates** - Obtain factory calibration certificates for all models.

## ORDERING INFORMATION

NS Series Network Sensor ordering information: temperature, humidity, and CO<sub>2</sub> models (3% RH)

CODES	DISPLAY & INTERFACE INFORMATION	JCI LOGO	COLOR	PIR OCCUPANCY SENSOR
NSB8BHC040-0	No display	■	■	---
NSB8BHC041-0		---	■	---
NSB8BHC042-0		■	■	---
NSB8BHC043-0		---	■	---
NSB8MHC040-0		■	■	■
NSB8MHC041-0		---	■	■
NSB8MHC042-0		■	■	■
NSB8MHC043-0		---	■	■
NSB8BHC240-0	Fixed segment display	■	■	---
NSB8BHC241-0		---	■	---
NSB8BHC242-0		■	■	---
NSB8BHC243-0		---	■	---
NSB8MHC240-0		■	■	■
NSB8MHC241-0		---	■	■
NSB8MHC242-0		■	■	■
NSB8MHC243-0		---	■	■
NSB8BHC340-0	Graphical user interface	■	■	---
NSB8BHC341-0		---	■	---

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### NS8000 SERIES NETWORK SENSORS



NS Series Network Sensor ordering information: temperature and humidity models (3% RH)

CODES	DISPLAY & INTERFACE INFORMATION	JCI LOGO	COLOR	PIR OCCUPANCY SENSOR
NSB8BHN240-0	Fixed segment display	■	■	---
NSB8BHN241-0		---	■	---
NSB8BHN242-0		■	■	---
NSB8BHN243-0		---	■	---
NSB8MHN240-0		■	■	■
NSB8MHN241-0		---	■	■
NSB8MHN242-0		■	■	■
NSB8MHN243-0		---	■	■
NSB8BHN040-0 o	No display	■	■	---
NSB8BHN041-0		---	■	---
NSB8BHN042-0		■	■	---
NSB8BHN043-0		---	■	---
NSB8MHN040-0		■	■	■
NSB8MHN041-0		---	■	■
NSB8MHN042-0		■	■	■
NSB8MHN043-0		---	■	■
NSB8BHN140-0	Warmer/Cooler interface	■	■	---
NSB8BHN141-0		---	■	---
NSB8BHN142-0		■	■	---
NSB8BHN143-0		---	■	---
NSB8BHN340-0	Graphical user interface	■	■	---
NSB8BHN341-0		---	■	---

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NS Series Network Sensor ordering information: temperature and CO<sub>2</sub> models

CODES	DISPLAY & INTERFACE INFORMATION	JCI LOGO	COLOR	PIR OCCUPANCY SENSOR
NSB8BTC040-0	No display	■	■	---
NSB8BTC041-0		---	■	---
NSB8BTC042-0		■	■	---
NSB8BTC043-0		---	■	---
NSB8MTC040-0		■	■	■
NSB8MTC041-0		---	■	■
NSB8MTC042-0		■	■	■
NSB8MTC043-0		---	■	■
NSB8BTC240-0	Fixed segment display	■	■	---
NSB8BTC241-0		---	■	---
NSB8BTC242-0		■	■	---
NSB8BTC243-0		---	■	---
NSB8MTC240-0		■	■	■
NSB8MTC241-0		---	■	■
NSB8MTC242-0		■	■	■
NSB8MTC243-0		---	■	■
NSB8BTC340-0	Graphical user interface	■	■	---
NSB8BTC341-0		---	■	---

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NS Series Network Sensor ordering information: temperature only models

CODES	DISPLAY & INTERFACE INFORMATION	JCI LOGO	COLOR	PIR OCCUPANCY SENSOR
NSB8BTN240-0	Fixed segment display	■	■	---
NSB8BTN241-0		---	■	---
NSB8BTN242-0		■	■	---
NSB8BTN243-0		---	■	---
NSB8MTN240-0		■	■	■
NSB8MTN241-0		---	■	■
NSB8MTN242-0		■	■	■
NSB8MTN243-0		---	■	■
NSB8BTN040-0	No display	■	■	---
NSB8BTN041-0		---	■	---
NSB8BTN042-0		■	■	---
NSB8BTN043-0		---	■	---
NSB8MTN040-0		■	■	■
NSB8MTN041-0		---	■	■
NSB8MTN042-0		■	■	■
NSB8MTN043-0		---	■	■
NSB8BTN140-0	Warmer/Cooler interface	■	■	---
NSB8BTN141-0		---	■	---
NSB8BTN142-0		■	■	---
NSB8BTN143-0		---	■	---
NSB8BTN340-0	Graphical user interface	■	■	---
NSB8BTN341-0		---	■	---

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NS Series Network Sensor ordering information: CO<sub>2</sub> only models without display

CODES	JCI LOGO	COLOR
NSB8BNC040-0	■	□
NSB8BNC041-0	---	□
NSB8BNC042-0	■	■
NSB8BNC043-0	---	■

NS Series Network Sensor ordering information: temperature and humidity models (2% RH)

CODES	JCI LOGO	COLOR	DISPLAY AND INTERFACE INFORMATION
NSB8BPN240-0	■	□	Fixed segment display
NSB8BPN241-0	---	□	
NSB8BPN242-0	■	■	
NSB8BPN243-0	---	■	

## DIMENSIONS (in mm)

