

Network Sensors: eZNS-T100

Description

The eZNS-T100 network sensor offers building occupants an intuitive touch-interface to adjust individual comfort levels while tailoring to the needs of their specific market. Along with a temperature sensor with humidity, CO_2 and motion options, the eZNS also offers a choice of backlit colors to provide additional user feedback and esthetic appeal.

The eZNS sensor's NFC technology allows installers to use NFC-enabled mobile devices to configure the eZNS and enable enteliWEB integration.



Application

The eZNS is suitable for a wide range of sensing applications, from basic temperature monitoring, to indoor air quality and occupancy sensing. A customizable interface allows for intuitive user interaction.

An available external input allows for additional zone monitoring such as window or door contact, temperature averaging or other dry contact sensor information.

When paired with an application controller, the eZNS supports advanced control strategies such as demand control ventilation, energy savings based on occupancy and optimal user comfort.

Features

- ▶ RGB backlight allows choice of colors to indicate conditions, alarms and night mode
- ► LCD screen displays users' button and device mode selections
- Capacitive touch zones allow custom button sizes
- Multiple button layout options. Simple one-touch buttons, or two-touch buttons for added functionality
- ► Slider to quickly adjust setpoint or tap for precise changes
- ► Fully programmable in GCL+
- ► USB Service port, software enabled or disabled. Service tool not required.
- Smartphone and tablet integration and set up using NFC technology
- Recessed mount for minimal profile or surface mount backplate options
- ► Fits most electrical boxes worldwide
- 2-piece design with tamper set screw lock

Specifications

LCD

2-line custom segmented display with icons

Buttons

2 rows of 4 capacitive touch zones, allowing up to 8 individual buttons or combined to form larger buttons

Backlight (Optional)

Optional RGB LED backlight for multicolor LCD and button illumination

Temperature

Digital Temperature Sensor +/- 0.2° C (+/- 0.36°F)

Humidity Sensor (Optional) Accuracy +/- 3%

CO, Sensor (Optional)

Dual Beam, Self Calibrating NDIR Detection

Range: 0-2000 ppm

Accuracy $@77^{\circ}F (25^{\circ}C): \pm 50ppm + 2\%$ of value

Temperature Dependence: 2ppm/°C

(1 ppm/ °F) typical

Pressure Dependence: 0.13% of reading

per mm Hg

Stability: 20 ppm/year (typical)

Occupancy Sensor (Optional)

Passive infrared motion (PIR) sensor

Range: 5m (16.4 ft.)

Inputs

1 10kΩ input (16 bit A/D)

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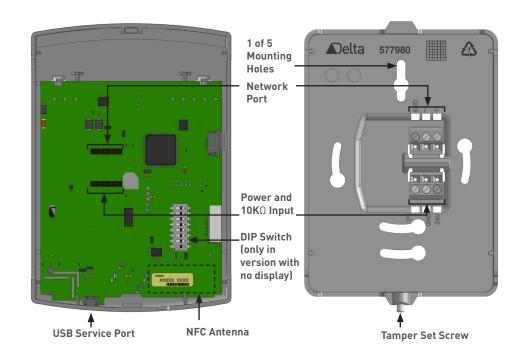
BACnet is a registered trademark of the American Society of Heating, Refridgerating and Air Conditioning Engineers Inc.

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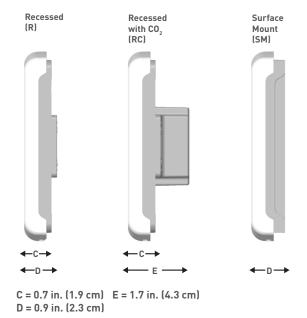
eZNS-T100: Board Layout Diagram



eZNS-T100: Back Plates Dimensions



A = 5.3 in. (13.3 cm) B = 3.6 in. (9.3 in.)



Specifications (Continued)

Technology

32-bit processor Internal A/D, Flash and RAM

Communications

RS-485 port Delta LINKnet (up to 76800 bps)

USB Service Port

Used as virtual Com port to connect the BACnet® network to a workstation

Near Field Communication (NFC)
Passive 2-way short range

Connectors

Screw-type terminal connectors

Wiring Class

Class 2 / SELV

Power

24V AC/DC 3 VA

Ambient

32° to 131°F (0° to 55°C) 10 - 90% RH (non-condensing)

Dimensions

With R and SM back plate: $5.3 \times 3.6 \times 0.9$ in. $\{13.3 \times 9.3 \times 2.3 \text{ cm}\}$ With RC back plate: $5.3 \times 3.6 \times 1.7$ in. $\{13.3 \times 9.3 \times 4.3 \text{ cm}\}$

Mounted Surface Profile

Recessed (R and RC back plate): 0.75 in. (1.9 cm)
Surface Mount (SM back plate): 0.9 in. (2.3 cm)

Compliance

CE (Pending)

FCC Class B (Pending)

Listings

UL 916 (Pending)

Subject to change without notice.



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eZNS-T100: Standard Button Overlay Options







Overlay 05



Overlay 09



Overlay 45



Overlay 46



Overlay 47



Overlay 53

eZNS-T100: Color Options



WWG: White Button Overlay, White Front, Grey Back



GWG: Grey Button Overlay, White Front, Grey Back



BBB: Black Button Overlay, Black Front, Black Back



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Ordering

The product number of the eZNS-T100 is eZNS-T100aaa-bb-cc-ddd-eee where the letters correspond to the different options listed below:

Sensor Options (aaa-)

С	CO ₂
Н	Humidity
М	Motion
СН	CO ₂ and Humidity
СНМ	CO ₂ , Humidity and Occupancy
НМ	Humidity and Motion

Display Options (-bb-)

В	RGB Backlit Display / Buttons
NB	No Backlighting
ND	No Display

Back Plate Options (-cc-)

R	Recessed
RC	Recessed CO ₂ ¹
SM	Surface Mount

Button Overlay Options (-ddd-)

###	Standard Button Overlay Number ²
###	Library Button Overlay Number ³
999	Custom Button Overlay ³

Button Overlay and Plastic Color Options (-eee-)

WWG	White Button Overlay, White Front with Grey Back Plate (default)
GWG	Grey Button Overlay, White Front with Grey Back Plate
ВВВ	Black Button Overlay, Black Front with Black Back Plate

 $^{1}\mathrm{RC}$ back plate option required for $\mathrm{CO}_{2}\mathrm{sensor}$ options.

²See eZNS Button Overlay Design Guide or online orders for numbers and options.

³Contact inside sales for more information.

