



# ROOM SENSOR

TYPE eZNS



## 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. Featuring a standard temperature sensor with humidity, CO<sub>2</sub> 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
- Large easy-to-read LCD screen. On-screen visual feedback on button selection.
- 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 setup using NFC technology
- Fits most electrical boxes worldwide
- Two-piece design with tamper set screw lock

### Specifications

#### Inputs

1 10 kΩ input (16-bit A/D)

#### LCD (Optional)

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<sub>2</sub> Sensor (Optional)

Dual-channel NDIR detection

Range: 0–2000 ppm

Accuracy @ 25°C (77°F):  
± (30 ppm + 3% of value)

#### Occupancy Sensor (Optional)

Passive infrared motion (PIR) sensor

Range: 5 m (16.4 ft.)

Coverage: 100° horizontal

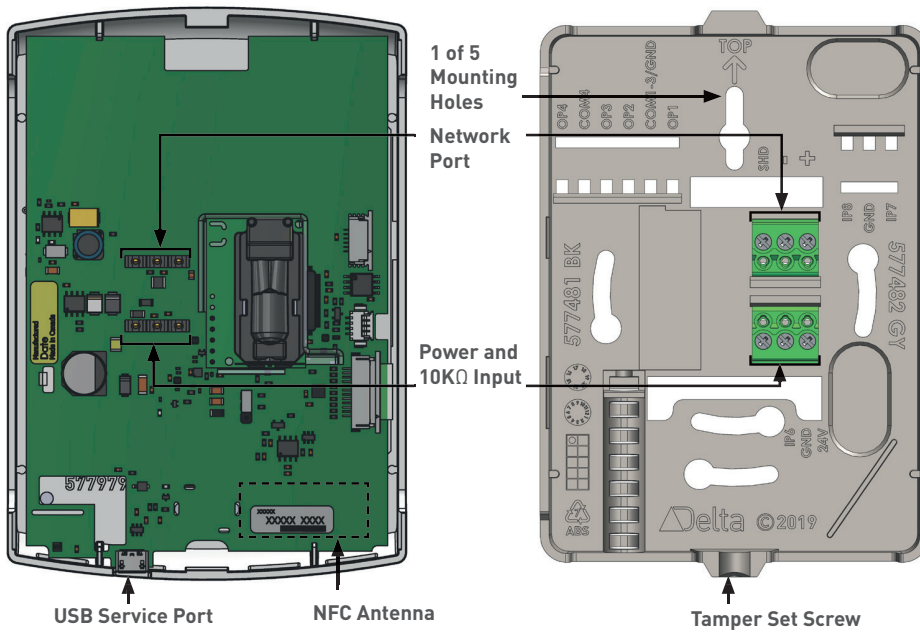
#### Connectors

Screw-type terminal connectors

#### Wiring Class

Class 2 / SELV

eZNS-T100: Board Layout Diagram



Specifications (Continued)

**Power**

- 24 V AC/DC
- 2 VA no backlight
- 4 VA with backlight (with or without CO<sub>2</sub> sensor)

**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

**Ambient**

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

**Dimensions**

- With SM or SC backplate: 133 × 93 × 23 mm (5.3 × 3.6 × 0.9 in.)

**Weight**

- 165 g (0.36 lb)

**IP Rating**

- IP20

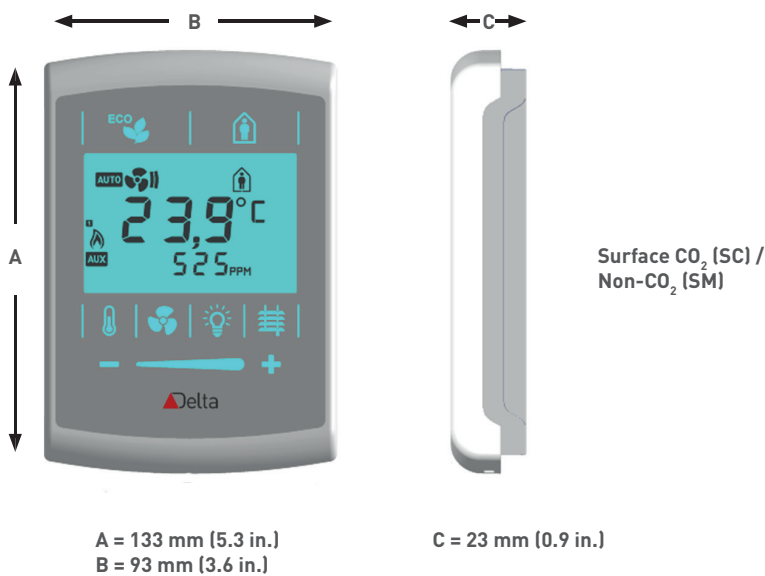
**Compliance**

- CE
- FCC Class B

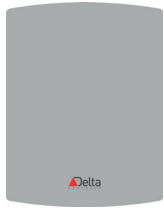
**Listings**

- UL 916 Listed

eZNS-T100: Dimensions and Backplate Options



## eZNS-T100: Standard Button Overlay Options



Overlay 000



Overlay 003



Overlay 005



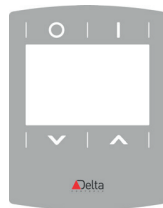
Overlay 009



Overlay 045



Overlay 046



Overlay 047



Overlay 053



Overlay 100

## 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



eZNS-T100-B-SC-044-WWG



eZNS-T100M-SM-000-WWG

### 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-)

<b>C</b>	CO <sub>2</sub>
<b>H</b>	Humidity
<b>M</b>	Motion
<b>HM</b>	Humidity and Motion
<b>CH</b>	CO <sub>2</sub> and Humidity
<b>CM</b>	CO <sub>2</sub> and Motion
<b>CHM</b>	CO <sub>2</sub> , Humidity and Motion

#### Display Options (-bb-)

<b>B</b>	RGB Backlit Display / Buttons
<b>NB</b>	No Backlighting
<b>ND</b>	No Display

#### Backplate Options (-cc-)

<b>SC</b>	Backplate for CO <sub>2</sub> models <sup>1</sup>
<b>SM</b>	Backplate for non-CO <sub>2</sub> models

<sup>1</sup>eZNS CO<sub>2</sub> models uses a CO<sub>2</sub> sensor that allows for flush wall mounting, however requires a SC backplate not compatible with the non-CO<sub>2</sub> SM backplate.

#### Button Overlay Options (-ddd-)

<b>###</b>	Standard Button Overlay Number
<b>###</b>	Library Button Overlay Number <sup>2</sup>
<b>000</b>	Blank Overlay (No Display)
<b>999</b>	Custom Button Overlay <sup>3</sup>

<sup>2</sup>See eZNS Button Overlay Design Guide. Expect up to 8 weeks for delivery. Additional charges apply.

#### Button Overlay and Plastic Color Options (-eee-)

<b>WWG</b>	White Button Overlay, White Front with Grey Backplate (default)
<b>GWG</b>	Grey Button Overlay, White Front with Grey Backplate
<b>BBB</b>	Black Button Overlay, Black Front with Black Backplate
<b>Custom</b>	Custom Color Options <sup>3</sup>

<sup>3</sup>Contact inside sales for pricing and more information.

#### Accessories

<b>400662</b>	eZNX Foam Back Insulator (For SM and SC Backplates)
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