

# enteliZONE™

## 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. Onscreen 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
- ▶ 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<sub>2</sub> Sensor (Optional)

Dual Beam, Self Calibrating NDIR Detection

Range: 0-2000 ppm

Accuracy @ 77°F (25°C):  
± (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.)

Coverage: 100° Horizontal

#### Inputs

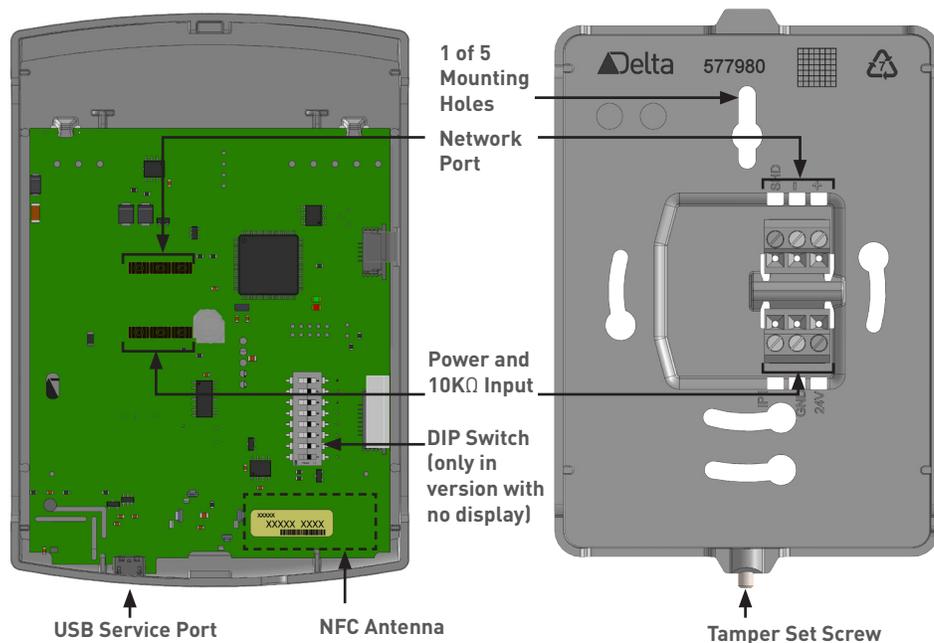
1 10kΩ input (16 bit A/D)

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

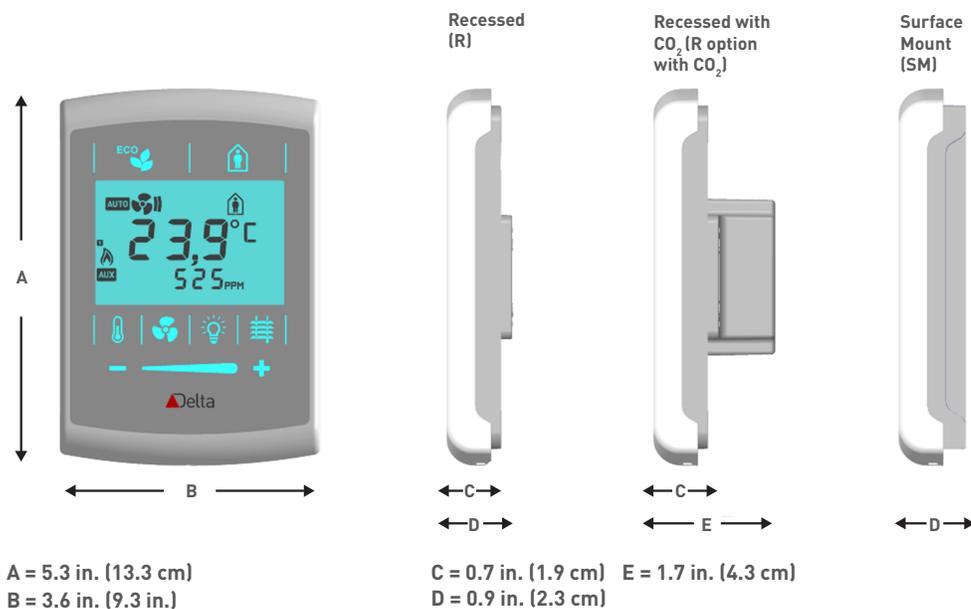
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## eZNS-T100: Board Layout Diagram



## eZNS-T100: Dimensions and Backplate Options



## 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

24 V AC/DC  
2 VA no backlight  
4 VA with backlight  
6 VA with backlight and CO<sub>2</sub> sensor

### Ambient

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

### Dimensions

With R (non-CO<sub>2</sub>) and SM backplate:  
5.3 x 3.6 x 0.9 in. (13.3 x 9.3 x 2.3 cm)  
With R (CO<sub>2</sub>) backplate:  
5.3 x 3.6 x 1.7 in. (13.3 x 9.3 x 4.3 cm)

### Mounted Surface Profile

Recessed (both R backplates):  
0.75 in. (1.9 cm)  
Surface Mount (SM backplate):  
0.9 in. (2.3 cm)

### Compliance

CE  
FCC Class B

### Listings

UL 916

Subject to change without notice.

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## eZNS-T100: Standard Button Overlay Options



Overlay 03



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-)

<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>R</b>	Recessed / Recessed CO <sub>2</sub> <sup>1</sup>
<b>SM</b>	Surface Mount

<sup>1</sup>CO<sub>2</sub> sensor options require recessed CO<sub>2</sub> backplate.

### Button Overlay Options (-ddd-)

<b>###</b>	Standard Button Overlay Number
<b>###</b>	Library Button Overlay Number <sup>2</sup>
<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.