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_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
- 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 (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_2 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

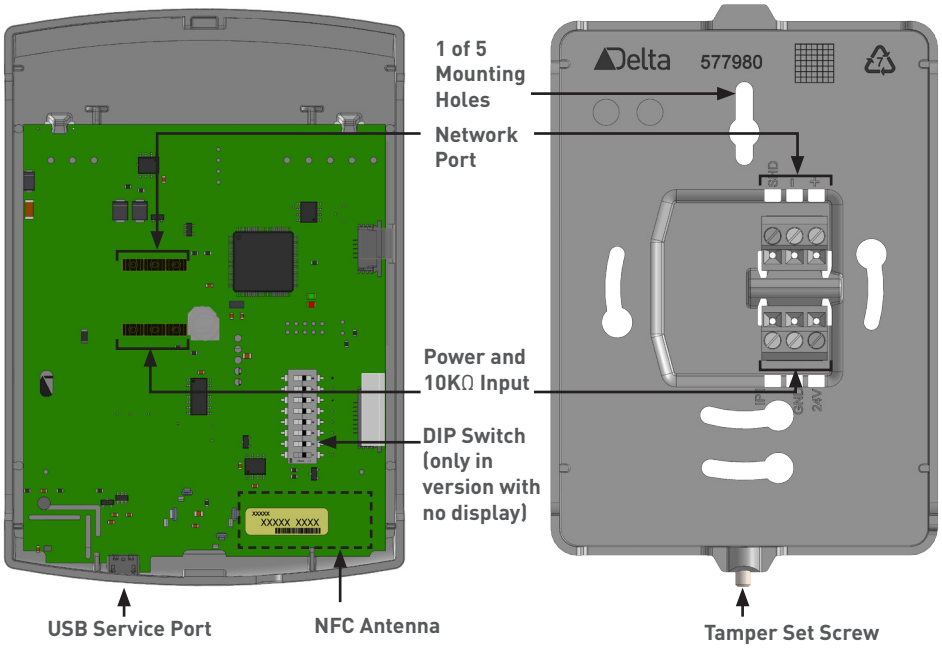
Inputs
1 10kΩ input (16 bit A/D)

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

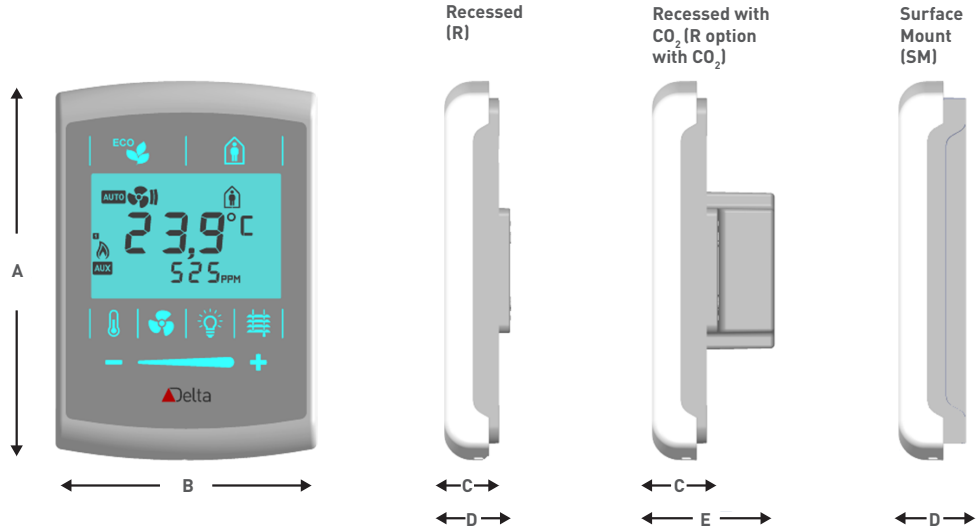
Updated in February 2016

enteliZONE™

eZNS-T100: Board Layout Diagram



eZNS-T100: Dimensions and Backplate Options



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

C = 0.7 in. (1.9 cm)
D = 0.9 in. (2.3 cm)

E = 1.7 in. (4.3 cm)

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_2 sensor

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

Dimensions
With R (non-CO_2) and SM backplate:
5.3 x 3.6 x 0.9 in. (13.3 x 9.3 x 2.3 cm)
With R (CO_2) 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)

IP Rating
IP20

Compliance
CE
FCC Class B

Listings
UL 916

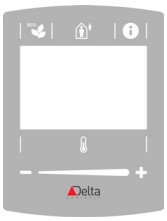
Subject to change without notice.

Copyright © 2016 Delta Controls. All rights reserved.

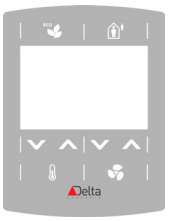
enteliZONE™

eZNS-T100: Standard Button Overlay Options

Overlay 000



Overlay 003

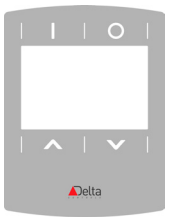


Overlay 005

Overlay 009

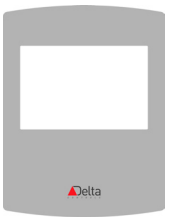
Overlay 045

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

enteliZONE™

eZNS-T100C-B-R-045-WWG

eZNS-T100M-ND-R-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-)

C	CO_2
H	Humidity
M	Motion
HM	Humidity and Motion
CH	CO_2 and Humidity
CM	CO_2 and Motion
CHM	CO_2, Humidity and Motion

Display Options (-bb-)

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

Backplate Options (-cc-)

R	Recessed / Recessed CO_2[1]
SM	Surface Mount

[1]CO_2 sensor options require recessed CO_2 backplate.

Button Overlay Options (-ddd-)

###	Standard Button Overlay Number
###	Library Button Overlay Number[2]
000	Blank Overlay (No Display)
999	Custom Button Overlay[3]

[2]See eZNS Button Overlay Design Guide. Expect up to 8 weeks for delivery. Additional charges apply.

Button Overlay and Plastic Color Options (-eee-)

WWG	White Button Overlay, White Front with Grey Backplate (default)
GWG	Grey Button Overlay, White Front with Grey Backplate
BBB	Black Button Overlay, Black Front with Black Backplate
Custom	Custom Color Options[3]

[3]Contact inside sales for pricing and more information.