



Network Sensors: eZS-T100

Description

The eZS-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, CO₂ and motion options, the eZS also offers a choice of backlit colors to provide additional user feedback and esthetic appeal.

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



Application

The eZS 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 eZS 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%

CO₂ 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.)

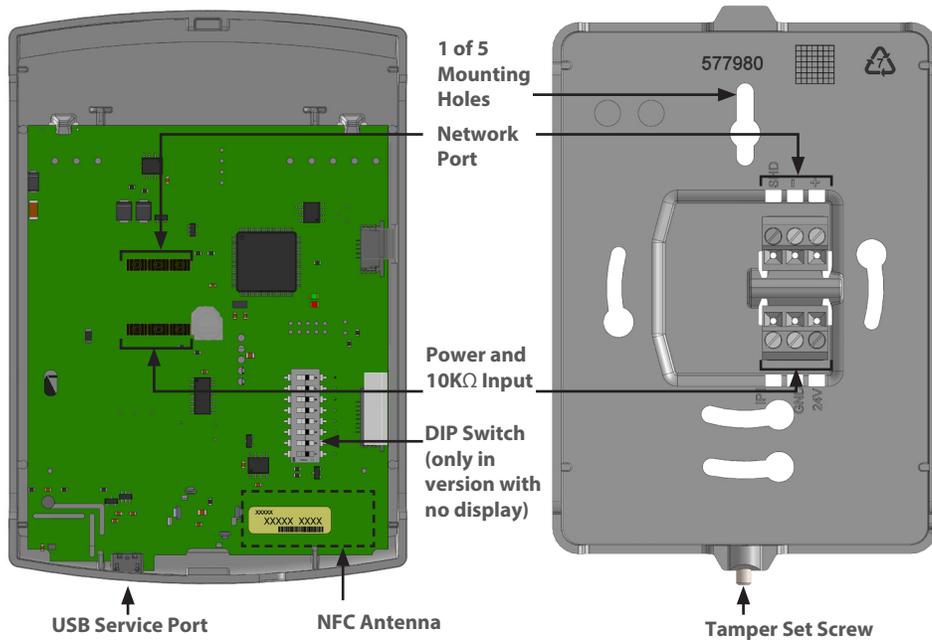
Coverage: 100° Horizontal

Inputs

1 10kΩ input (16 bit A/D)



eZS-T100: Board Layout Diagram



Specifications (Continued)

Technology

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

Communications

RS-485 port
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 CO₂ sensor

Ambient

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

Dimensions

With R (non-CO₂) and SM backplate: 5.3 x 3.6 x 0.9 in. (13.3 x 9.3 x 2.3 cm)
With R (CO₂) 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

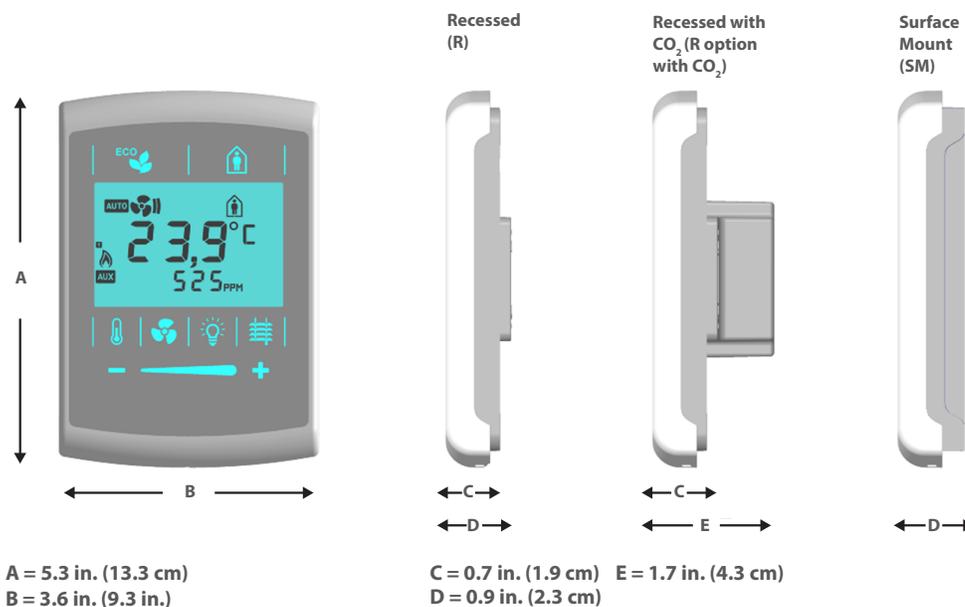
CE
FCC Class B

Listings

UL 916

Subject to change without notice.

eZS-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) E = 1.7 in. (4.3 cm)
D = 0.9 in. (2.3 cm)