

TZ200-LX User Room Sensor

ONYXX[®] LX-TZ | PRODUCT DATA SHEET

Designed and assembled in Canada

Description

- ✓ Room user digital IAQ sensor complementary to the controllers from the Onyx LX product line
- ✓ Displays user data and information such as time, temperature, and requests for heating and cooling through a backlit LCD display
- ✓ Communicates to the controllers using a proprietary RS-485 protocol. Up to 3 TZ100-LX or TZ200-LX room sensor per controller can be wired when used with the Onyx LX controllers
- ✓ Has a local BACnet MS/TP USB port for network access
- ✓ Requires an Onyx LX USB to RS-485 adapter to configure devices on the trunk with Onyx LX UI
- ✓ To order use part number as per table below:



ONYXX[®] LX
BY LYNXSPRING

| MODEL NUMBER | BUILT-IN HUMIDITY SENSOR | BUILT-IN PIR MOTION SENSOR | BUILT-IN CO2 NDIR SENSOR |
|--------------|--------------------------|----------------------------|--------------------------|
| TZ200-LX | | | |
| TZ200H-LX | ✓ | | |
| TZ200MH-LX | ✓ | ✓ | |
| TZ200HC-LX | ✓ | | ✓ |
| TZ200MHC-LX | ✓ | ✓ | ✓ |

Application

This sensor is designed to facilitate simple user interactions typically used in the HVAC industry for terminal equipment control. It allows powerful yet flexible solutions that can be tailored and sized according to any project needs.

Technical Specifications

POWER SUPPLY

24 Vac/dc ± 15%

CURRENT CONSUMPTION

1.0 VA room sensor only

MICROPROCESSOR

STM32 (ARM Cortex[™] M3)

32 bits, 64 MHz

MEMORY

Flash: 64 KB non-volatile

RAM: 10 KB

EXTERNAL CONNECTIONS

Mini USB Type-A connector allows local access to the MS/TP network.

Requires the USB to RS-485 adapter: USB-MSTP-LX.

BACKLIGHT DISPLAY / LCD

Multi-HVAC system symbols, time display, 4 segment main numeric display with one decimal

COMMUNICATION PROTOCOLS

Proprietary RS-485 protocol to controller

BAUD RATE TO CONTROLLER

9600, 19200, 38400, 76800 default, 115200, 230400 & 460800 Bps

ROOM SENSOR ADDRESSING

Via keypad configuration

HUMIDITY SENSOR (SENSIRION SHT31)

±2 @ 0-100% RH

PIR SENSOR

- Operating Principle: Passive Infrared
- Detection Angle: 100 degrees
- Detection Distance: 4 m (13 ft.) maximum
- Detection Area

CO2 SENSOR SENSIRION SCD30

- Operating Principle: Self calibrating, non-dispersive infrared (NDIR)
- Sensor Range: 0-5000 ppm
- Accuracy: ± 30 ppm @ 3% of reading
- Accuracy is valid after a minimum of 3 weeks of continuous operation
- Response Time T63: 2 minutes

DIMENSIONS

B 83 mm x A 124 mm x 20 mm
B 3.25 in. x A 4.88 in. x 0.8 in.

WIRE SIZE

18-24 AWG acceptable; 18 AWG recommended

STOCKING TEMPERATURE

-30 °C to 50 °C / -22 °F to 122 °F

OPERATING CONDITIONS

-25 °C to 45 °C / -13 °F to 113 °F
10% to 90% RH without condensation

WEIGHT

120 g. / 0.25 lb.

MOUNTING TYPE

Standard 2 in. x 4 in. electrical junction box

WARRANTY

1 year

ENCLOSURE

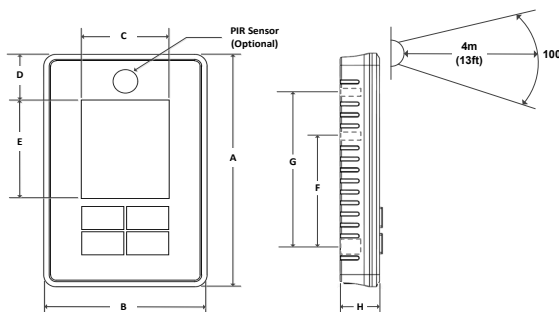
White color, ABS material UL94VO

CERTIFICATIONS

UL 916 Energy Management Equipment



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