

LORAWAN CO2 SENSOR



SKU: WSLRW-CO2

LoRaWAN CO2 SENSOR
WSLRW-CO2

LoRaWAN



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WSLRW-CO2 is a LoRaWAN sensor utilizes CMOSens® Technology for IR detection enables Carbon Dioxide measurements of the highest accuracy at a competitive price. Along with the NDIR measurement technology for detecting CO2 comes a best-in-class humidity and temperature sensor integrated on the same sensor module. Ambient humidity and temperature can be measured by special algorithm expertise through modelling and compensating of external heat sources without the need of any additional components. With Ultra-low Power design and smart firmware allow the sensor can last up to 10 years with 02 x AA-type battery (depends on configuration). The sensor will transmit data in kilo-meters distance to LoRaWAN gateway, any brand on the market. Typical Applications: Indoor Air Quality monitoring, HVAC Control, Green house, Smart Agriculture,...



LORAWAN COMMUNICATION

LoRaWAN communication standard to allow sensor connect to any LoRaWAN Gateway on the market



ULTRA-LOW POWER WITH 5 YEARS BATTERY

Ultra-low power sensing technology from Daviteq with Ultra-low power wireless technology allow the sensor can last up to 5 years with 02 x AA batteries



HIGH ACCURACY & STABLE

Advanced ultrasonic sensor with NDIR CO2 sensor technology processing to deliver high accuracy and stable measurement



MEASURE OTHER PARAMETERS

Integrated temperature and humidity sensor to monitor the ambient environment

DETECT CO2 GAS IN HVAC SYSTEM



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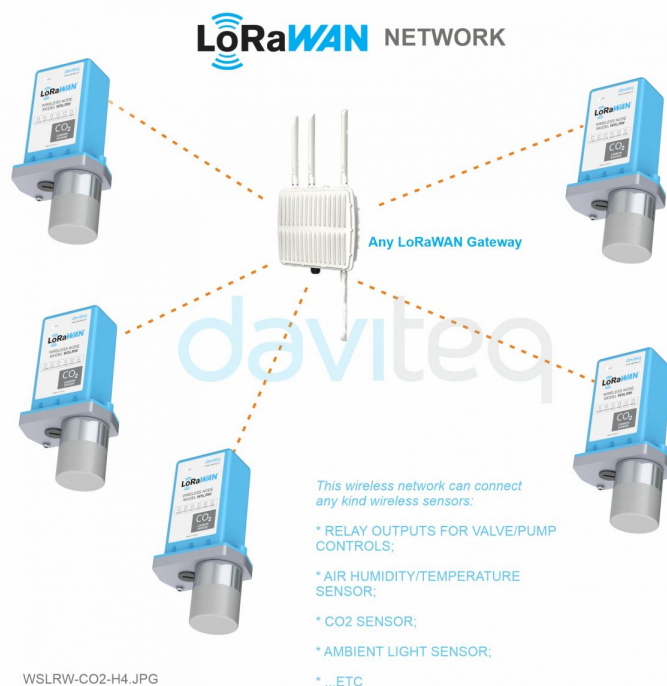
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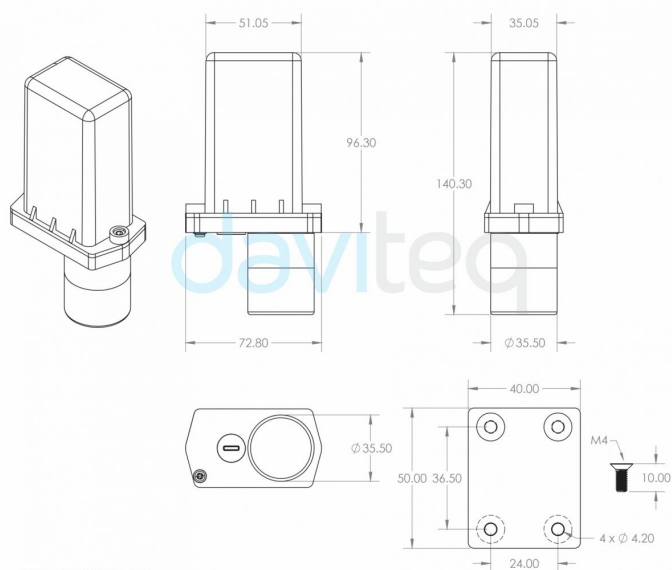
SPECIFICATION

SENSOR SPECIFICATION :	
CO2 Sensor technology	NDIR sensor
CO2 range/resolution/accuracy	0-40.000 ppm / 1ppm / (+/- 30ppm + 3% reading)
Repeatability	+/- 10ppm Temperature Stability
Temperature range/resolution/accuracy	-40..+70°C / 0.1°C / ± 0.5 °C in range 0-50 °C
Humidity range/resolution/accuracy	0-100%RH / 0.1%RH / +/- 3.0%RH in range 25-100% RH
Barometric Pressure range/resolution/accuracy	300-1200 mbar / 0.01 mbar / +/- 4 mabr in range -20 .. + 85 oC
Sensor housing material / Rating	SS316 / SS304 / for Indoor use
Data rate	625bps .. 50kbps
Antenna	Internal Antenna 2.67 dbi
Battery	02 x AA size 1.5VDC, battery not included
RF Frequency and Power	860..930Mhz, +14 .. +20 dBm, configurable for zones: EU868, IN865, RU864, KR920, AS923, AU915, US915
Protocol	LoRaWAN, class A
Data sending modes	Interval time and when alarm occurred
RF Module complies to	ETSI EN 300 220, EN 303 204 (Europe) FCC CFR47 Part15 (US), ARIB STD-T108 (Japan)
Vietnam Type Approval	TBA soon
Working temperature	-40oC..+60oC (with AA L91 Energizer)
Housing/Protection	Aluminum + Polycarbonate / IP67
Dimension	H180xW73xD42
Net weight	< 400 grams



DIMENSION DRAWING OF WIRELESS SENSOR

(Unit: mm)



WSLRW-CO2-H5.JPG

RECOMMENDED BATTERIES FOR LoRaWAN SENSOR

E91 AA Alkaline battery**-18 .. + 60 oC working temperature****10-year shelf life****3000 mAh Capacity****Price: 1X**

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L91 AA Lithium battery**-40 .. + 60 oC working temperature****20-year shelf life****3500 mAh Capacity****Price: 3.5X**

ORDERING INFORMATION

ITEM CODE	DESCRIPTIONS
WSLRW-CO2-01	WIRELESS LORAWAN CARBON DIOXIDE GAS SENSOR, 0-5.000PPM, Internal antenna, Type AA battery 1.5VDC, IP67, 860-930 Mhz for KR920, AS923, AU915, US915
WSLRW-CO2-02	WIRELESS LORAWAN CARBON DIOXIDE GAS SENSOR, 0-10.000PPM, Internal antenna, Type AA battery 1.5VDC, IP67, 860-930 Mhz for KR920, AS923, AU915, US915
WSLRW-CO2-03	WIRELESS LORAWAN CARBON DIOXIDE GAS SENSOR, 0-40.000PPM, Internal antenna, Type AA battery 1.5VDC, IP67, 860-930 Mhz for KR920, AS923, AU915, US915
WSLRW-CO2-01-TH	WIRELESS LORAWAN CARBON DIOXIDE GAS SENSOR, 0-5.000PPM, Humidity and Temperature, Internal antenna, Type AA battery 1.5VDC, IP67, 860-930 Mhz for KR920, AS923, AU915, US915
WSLRW-CO2-02-TH	WIRELESS LORAWAN CARBON DIOXIDE GAS SENSOR, 0-10.000PPM, Humidity and Temperature, Internal antenna, Type AA battery 1.5VDC, IP67, 860-930 Mhz for KR920, AS923, AU915, US915
WSLRW-CO2-03-TH	WIRELESS LORAWAN CARBON DIOXIDE GAS SENSOR, 0-40.000PPM, Humidity and Temperature, Internal antenna, Type AA battery 1.5VDC, IP67, 860-930 Mhz for KR920, AS923, AU915, US915
WSLRW-CO2-01-PTH	WIRELESS LORAWAN CARBON DIOXIDE GAS SENSOR, 0-5.000PPM, Humidity and Temperature, Barometric Pressure, Internal antenna, Type AA battery 1.5VDC, IP67, 860-930 Mhz for KR920, AS923, AU915, US915
WSLRW-CO2-02-PTH	WIRELESS LORAWAN CARBON DIOXIDE GAS SENSOR, 0-10.000PPM, Humidity and Temperature, Barometric Pressure, Internal antenna, Type AA battery 1.5VDC, IP67, 860-930 Mhz for KR920, AS923, AU915, US915
WSLRW-CO2-03-PTH	WIRELESS LORAWAN CARBON DIOXIDE GAS SENSOR, 0-40.000PPM, Humidity and Temperature, Barometric Pressure, Internal antenna, Type AA battery 1.5VDC, IP67, 860-930 Mhz for KR920, AS923, AU915, US915