

# Elvaco Sense

## Wireless M-Bus indoor sensors

The ultimate smart sensor solution for your home, business or public space. With the ability to precisely measure CO<sub>2</sub> levels, temperature and humidity, these innovative sensors are a must-have for any modern environment. The sleek Scandinavian minimalistic design ensures that the sensors remain discreet while providing advanced functionality.

Thanks to NFC technology, the Elvaco Sense can easily be configured via app support to suit your exact requirements. Choose your preferred transmission interval, encryption mode, and more for a truly customized sensor experience.

These sensors have a replaceable battery, which brings a lifetime that spans several decades, making them an investment that will last for years to come.

For more information, visit [www.elvaco.com](http://www.elvaco.com)



### TECHNICAL SPECIFICATIONS

#### Mechanics

Casing material	ABS UL94-V0 (White)
Protection class	IP20
Dimensions (w x h x d)	76.2 x 76.2 x 22.5 mm
Weight	60 g excluding batteries
Mounting	Wall-mount

#### Electrical

Power supply	Lithium Battery (Removable)
Battery type	ER14505
Battery size	AA
Operating voltage	3.6 V

#### Environmental

Operating temperature	0 – 50 °C
Operating humidity	0 – 85 %RH No condensation
Operating altitude	0-2000 m
Pollution degree	Degree 2
Usage environment	Indoor
Storage temperature	-40 – 85 °C

#### Sensor characteristics

Temperature range	0 – 50 °C
Temperature accuracy	± 0.2 °C
Humidity range	0 – 85 %RH
Humidity accuracy	± 2 %RH
CO <sub>2</sub> range	400 – 10 000 ppm
CO <sub>2</sub> accuracy	± 30 ppm At 400-5000 ppm, ± 3% of reading (15-35 °C, 0-80% RH)
CO <sub>2</sub> accuracy	± 10 ppm At 5001-10000 ppm, ± 10% of reading (15-35 °C, 0-80% RH)

#### User interface

LED	Activation
App support	Elvaco OTC (Using NFC)

#### Wireless M-Bus

Frequency	868.95 MHz
Transmit power	25 MW
Transmit interval	According to table Factory default settings
Encryption	Yes/No (Mode 5)
Wireless M-Bus modes	C1a (default) / C1b / T1
Wireless M-Bus Standard	EN13757:2018
OMS Standard	4.0

### FACTORY DEFAULT SETTINGS

Sensor	Function	Value
Elvaco Sense 100W	Transmit interval	3 min
Elvaco Sense 200W	Transmit interval	6 min
Elvaco Sense 300W	Transmit interval	15 min
Elvaco Sense 300W	Automatic Baseline Calibration	Yes
Elvaco Sense serie	Encryption mode	Off
Elvaco Sense serie	Setup lock	No
Elvaco Sense serie	Wireless M-Bus mode	C1a

If the sensor has been locked, it can be unlocked with the sensor key found in [elvaco.evo](http://elvaco.evo)

#### Conformity

EMC	2014/30/EU
RED	2014/53/EU
LVD	2014/35/EU
RoHS	2011/65/EU + 2015/863
OMS	Compliance

### ORDERING INFORMATION

Art No.	Description 1	Description 2
1050080	Elvaco Sense 100W	WM-Bus indoor Temp sensor
1050081	Elvaco Sense 200W	WM-Bus indoor Temp & Humidity sensor
1050082	Elvaco Sense 300W	WM-Bus indoor CO <sub>2</sub> multi sensor
9950855	3.6V Litiumbatteri AA	ER14505

### PRODUCT INFORMATION

	Art No.	1050080 Elvaco Sense 100W	1050081 Elvaco Sense 200W	1050082 Elvaco Sense 300W
Function				
Temperature		✓	✓	✓
Humidity			✓	✓
CO <sub>2</sub>				✓
App support (NFC)		✓	✓	✓
Transmit interval		3min	6min	15min
Expected battery life time at 15 °C to 25 °C		16 years*	16 years*	10 years*
Number of batteries (9950855)		1	1	2

\* The expected battery lifetime is based on theoretical calculation and measurements. Configuration and environmental conditions may affect the lifetime of the battery.