

SEZA



SEZO CL

compact & low-power sensor

sending data to Orange Live Objects platform via LoRaWAN

measuring various environmental parameters, e.g. temperature, humidity, and indoor air quality

powered by 3500 mAh battery



configuration via USB

indoor conditions' monitoring

operates in temperatures from -30 up to 60°C

long battery life - up to 3 years on a single battery

POTENTIAL USE CASES



WAREHOUSES

The **SEZO CL** device enables controlling of the environment on the premises to *ensure optimal conditions for storage*. It is especially important in case of *FMCG (Fast Moving Consumer Goods)* such as packaged foods, pharmaceuticals or toiletries, where the right temperature, as well as levels of humidity and luminosity need to be ensured.

Facility managers easily leverage **SEZO CL** and its features because the *installation process is seamless*. Thanks to the fact that the device is compact and battery-powered, all that needs to be done is to install it (by gluing or screwing it on) in a place where you want to monitor the temperature, humidity level or light and the device is ready for operation.

SEZO CL is capable of sending data via LoRaWAN to Orange Live Objects platform.



OFFICE BUILDINGS

SEZO CL, thanks to its ability to measure such environmental parameters as temperature and humidity, is leveraged by **office managers** to ensure not only comfortable, but also *stable working conditions* for the employees. Each parameter is configurable via USB and can therefore be adjusted to any specific needs.

SEZO CL also allows you to monitor indoor air quality in real time - by bringing your hand close to the device, the color of the LED will determine *the current indoor air quality*. In this way, the SEZO CL ensures optimal conditions for office workers.

The device has an alarm threshold configuration for all measured parameters and is capable of *sending data via LoRaWAN* to Orange Live Objects platform.



POTENTIAL USE CASES



HEALTHCARE FACILITIES

SEZO CL makes healthcare facilities such as hospitals or private clinics more comfortable for the users.

Building management leverages **SEZO CL** to control the temperature, humidity, indoor air quality, as well as luminosity on the premises. Thanks to the possibility of configuring alarm thresholds, **building managers** determine the optimal conditions necessary to ensure the comfort of people staying on the premises. This is important not only for the hospital or clinic staff, but above all for the patients - the room conditions have a significant impact on their health and well-being.

The device is capable of *sending data via LoRaWAN* to the Orange Live Objects platform.

end device

IoT

hospitals

health

comfort zone

indoor



GREENHOUSES

The **SEZO CL** device is used by *greenhouse owners*.

SEZO CL helps ensuring that a certain *temperature, humidity and light level* within the greenhouse is maintained. This, in turn, helps *preserve a climate within the greenhouse* optimal for the plants requiring such regulated conditions.

Thanks to the high sensitivity of the device and the accuracy of the measurements, *the environment can be very precisely controlled*.

The device is *compact and battery-operated*, which makes it exceptionally easy to install - also without using any screws.

The **SEZO CL** device sends data via LoRaWAN to the Orange Live Objects platform, which offers *an easy and transparent way to monitor* and analyse the data.

end device

IoT

horticulture

environment monitoring

climate control

indoor

SEZO CL - TECHNICAL SPECIFICATIONS

DESCRIPTION	<ul style="list-style-type: none"> - Compact low-power sensor device measuring temperature, humidity, air pressure, luminosity and indoor air quality - LoRaWAN networking technology for long transmission range and very long battery life (up to 3 years on a single battery) - Made for indoor condition monitoring in human-occupied spaces - USB configuration - Every unit is shipped with individual test report confirming all specified parameters - Integrated with Orange Live Objects Platform
MEASURED PARAMETERS	Temperature, Humidity, Air pressure, Luminosity, Indoor Air Quality
OPERATING TEMPERATURE	-30 ÷ 60°C
MEASUREMENT RANGE AND ACCURACY	<ul style="list-style-type: none"> - Temperature: -30 ÷ 60 [°C], typ. ±0,5 [°C], max ±2 [°C] - Humidity: 0 ÷ 100 [%RH], typ. ±4%, max. ±7% @25 [°C] - Air Pressure: 300 ÷ 1100 [hPa], typ. ±1 [hPa] max. ±3 [hPa] - Luminosity: 0 ÷ 1000 [lx], typ. ±10%, max ±35% @500 [lx] - IAQ: 0 ÷ 500 [IAQ Index]
COMMUNICATION PROTOCOL	LoRaWAN v1.0.3, Class A device
FREQUENCY AND TRANSMISSION POWER	868 MHz, maximum 14 dBm
DATA TRANSMISSION INTERVAL	Default 15 minutes (configurable) or event-triggered
BATTERY	3.6 [V], 3500 [mAh]
ENCLOSURE	IP40, ABS, four mounting holes
WEIGHT	90 [g]
PRODUCT DIMENSIONS	Body: 74 x 74 x 25.5 [mm]



About WiRan

WiRan Sp. z o.o. is a B2B company providing R&D services to national and international clients in the space, maritime, railway, industrial and IoT sectors. Our expertise lies in Radio Frequency and Wireless technologies, the development of electronic parts, fast product prototyping, feasibility studies, certifications and EMC testing. Founded in 2002, we are looking back at soon to be 20 years as a HW design office - supporting our diverse clients from the conception through prototyping to product quality development of electronic devices. You can find our designs mounted around Tricity (air quality measuring systems), and soon also in space (satellite communication modules), just to name a few. WiRan offices and laboratories are currently located in Gdynia, Poland.

About SEZO

SEZO is a suite of products that can be best described as long range, customizable IoT solutions. SEZO products are based on LoRaWAN™ and LTE-M / NB-IoT technology and can be customized by clients, based on their needs.