

SEZA®



SEZO PL

PM 1, 2.5, 10 air quality monitoring, air conditioning track provides reliable results in a wide range of environmental conditions

powered by 230V AC, using a standard power socket

measuring environmental parameters such as temperature, humidity and atmospheric pressure

USB configuration



threshold configuration for all measured parameters

POTENTIAL USE CASES



FACILITIES MANAGEMENT

SEZO PL makes refineries and chemical producers more secure.

SEZO PL sensors will not only help monitor air quality, but also help control environmental conditions such as workplace or storage temperature. **SEZO PL** can provide accurate data with immunity to any interference from high humidity.

SEZO PL sensors will also benefit plant managers, who can use them to control conditions in depots, warehouses, or distribution centres.



WINTER RESORT

SEZO PL enables air quality testing at very low temperatures.

As a result, it can be used in many places like winter resorts, cities in Northern hemisphere countries, or other locations with frequent cold and low humidity weather. In these places, there is a need to guarantee precise air measurements. Many sensors at a very low temperature stop taking measurements due to the risk of damage or are not accurate because of humidity interference. Thanks to the heated air inflow track and the temperature sensor extended beyond the housing **SEZO PL** operates very smoothly even down to minus 30 °C.



POTENTIAL USE CASES



SCHOOLS

SEZO PL makes schools a safer place for children and staff.

School management leverages SEZO PL to detect and prevent exposure to floating dust on school yards and parking lots and therefore make schools a safer place for both, children and staff. **SEZO PL** measures particulate matter such as PM1, PM2.5, and PM10.

The device is powered via a AC 230V power supply, and can therefore be used conveniently in various locations with a standard power socket.



INDUSTRIAL PRODUCTION SITES

SEZO PL enhances security processes at industrial manufacturing sites.

Industrial producers have additional health and safety conditions in the workplace. Thanks to constant air measurements, **SEZO PL** allows you to reduce the risk of unconsciously worse working conditions and, in the long run, occupational diseases.

The device pulls data from the environment like dust levels (PM1, PM2.5, PM10). **SEZO PL** device is powered by 230V AC.



SEZO PL - TECHNICAL SPECIFICATIONS

<p>DESCRIPTION</p>	<ul style="list-style-type: none"> - A compact telemetry device that makes measurements environment and air quality - Outdoor (PM 1, PM 2.5, PM 10) air quality monitoring - Measuring environmental parameters such as temperature, humidity and atmospheric pressure - Powered by 230V AC, using a common power socket - USB configuration - Flexibility & configurability (threshold configuration for all measured parameters) - Conditioning track, heats up the air before measurement
<p>MEASURED PARAMETERS</p>	<p>Particulate matter concentration, temperature, humidity, atmospheric pressure</p>
<p>OPERATING TEMPERATURE</p>	<p>-30°C - +60°C</p>
<p>MEASUREMENT RANGE AND ACCURACY</p>	<ul style="list-style-type: none"> - PM: 0 ÷ 500 µg/m³, ±10 µg/m³ @ <100 µg/m³ - Temperature: -30 ÷ 60°C, typ. ±0.1°C, max ±0.6°C - Humidity: 0 ÷ 100%, typ. ±1,5%, max. ±5% @25°C - Air pressure: 300 ÷ 1100 hPa, typ ±1 hPa max ±3 hPa
<p>COMMUNICATION PROTOCOL</p>	<p>LoRaWAN v1.0.3, Class C device</p>
<p>FREQUENCY AND TRANSMISSION POWER</p>	<p>868 MHz, maximum 14 dBm</p>
<p>DATA TRANSMISSION INTERVAL</p>	<p>Default 15 minutes (configurable) or event-triggered</p>
<p>POWER SUPPLY</p>	<p>Internal AC adapter 100-240V 50Hz max. 1W, Type C European Plug</p>
<p>ENCLOSURE AND MOUNTING</p>	<p>IP55, polycarbonate, four mounting holes for screws and other assembly elements enabling mounting by means of dowels with screws on flat surfaces or steel band clamps on poles.</p>
<p>WEIGHT</p>	<p>615 g</p>
<p>PRODUCT DIMENSIONS</p>	<p>110 x 105 x 360 mm (L x W x H)</p>



About SEZO

SEZO is a suite of long range, customizable IoT solutions. SEZO products are based on LoRaWAN™ and LTE-M / NB-IoT technologies and can be customized based on site requirements.

About WiRan

WiRan Sp. z o. o. is a B2B company providing research and development services for domestic and international clients from the space, maritime, railway, industrial and IoT sectors. We specialize in RF and wireless technologies, electronic parts development, rapid product prototyping, feasibility studies, certification and EMC testing. Founded in 2002, the company has 20 years of activity behind it, based on supporting our diverse clients from concept, through prototyping, to the development of the quality of electronic devices products. Our projects can be found e.g. at various points in the Tri-City and the surrounding area (air quality measurement systems) and also in space (satellite communication modules). WiRan headquarters and laboratories are located in Gdynia.