

SEZA



SEZO™

multi-purpose 3D tracking device

integrated with Orange Live Objects platform

GNSS geolocation with geofence functionality and altitude measurement

rechargeable battery enabling up to 22 hours of live tracking

communication via LTE-M, NB-IoT and E-GPRS

remote configuration via Bluetooth or cellular

built-in loudspeaker for voice messages functionality

accident/impact detection thanks to built-in accelerometer



POTENTIAL USE CASES



INDUSTRIAL PRODUCTION SITES

SEZO TM enhances the safety of people working in manufacturing, chemical and refinery facilities - wherever wearing of a safety helmet is required.

SEZO TM placed on a helmet enables *3D location* - it allows to determine in which building and on which floor the employee is located. In the event of a collision or fall, the production supervisor is immediately informed of where the hazard has occurred, which significantly reduces the response time and thus increases safety in dangerous working environments. **SEZO TM** is also equipped with a loudspeaker that *generates an alarm in the event of danger* (e.g. a fall or impact) - alerting people in the close vicinity.

In addition, **SEZO TM** can be used as a programmable access card thanks to its built-in NFC tag - preventing unauthorized access e.g. to individual production halls.

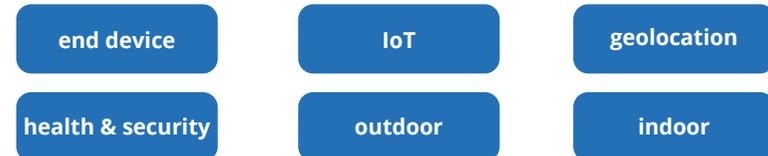


CONSTRUCTION SITES

SEZO TM is ideal as an additional *security system* on the site. *3D geolocation* of people on the construction site significantly increases the safety of employees thanks to the possibility to determine their *position with an accuracy of 1 meter* in external conditions. In the event of a fall or impact, **SEZO TM** *generates an alarm* and sends out information about the accident, enabling shorter reaction times.

SEZO TM is equipped with a 2000 mAh battery, which provides *up to 22 hours of real-time tracking*. The battery is charged *wirelessly* (Qi standard). The device can be configured (e.g. data transmission intervals) via *Bluetooth or mobile network*, which makes it much easier to use **SEZO TM** and allows you to adjust it to your needs and applications.

The device sends data to Orange Live Objects platform.



SEZO TM - TECHNICAL SPECIFICATIONS

DESCRIPTION	<ul style="list-style-type: none">- Multi-purpose 3D tracking device- GNSS geolocation with geofence functionality and altitude measurement- Ability to play received voice messages by integrated loudspeaker- Remote configuration (Bluetooth or cellular)- Configurable NFC tag for access control- Integrated with Orange Live Objects Platform
MEASURED PARAMETERS	<ul style="list-style-type: none">- Geolocation (± 1m in outdoor conditions),- Impact / acceleration (accident detection),- Altitude: ± 1m accuracy if pressure reference is on site (e.g. SEZO EL)
OPERATING TEMPERATURE	-30 ÷ 60°C
COMMUNICATION PROTOCOL	<ul style="list-style-type: none">- LTE-M, NB-IoT and E-GPRS- Bluetooth Low Energy- NFC
DATA TRANSMISSION INTERVAL	<ul style="list-style-type: none">- Default 15 seconds, configurable interval (buffering available – data can be gathered in device memory and sent in bulk transfer)- Transmission triggered by alert (e.g. accident, acceleration)
BATTERY	<ul style="list-style-type: none">- Up to 22 hours of live tracking,- Sleep mode,- 2000 mAh battery capacity (rechargeable, inconvertible),- Qi wireless charging
ENCLOSURE AND MOUNTING	IP67, material: CPE Mounting brackets
WEIGHT	114 g
PRODUCT DIMENSIONS	Length 81 mm, width 68 mm, height 44 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.