SunPeak
Innovations

Products

All our devices are based on LoRaWAN® technology and are adapted for helium

Agriculture and livestock

The devices are designed to improve the efficiency of farming and livestock breeding, prevent adverse conditions, crop diseases and livestock. Soil condition sensors signal temperature and humidity at several levels of soil depth, illumination above the surface. Animal sensors track general signs of health and location.

Soil condition sensor SP Agro

- Number of controlled levels: 1/2/3/4
- Measured parameters: humidity, temperature, illumination
- Power supply: Li-ion battery and photovoltaic panel

Ear clip for cattle SP Herd Clip

- Measured parameters: activity, temperature
- Location: indirectly relative to the base collar
- Power supply: Li-ion battery 3.6V

Livestock Collar SP Herd Collar

- Measured parameters: activity, temperature
- Location: indirectly relative to the base collar
- Power supply: Li-ion battery 3.6V

Livestock Main Collar SP Herd Base

- Functions: activity and temperature measurement, accumulation of information from collars and herd clips
- Location: GPS
- Power supply: Li-ion 3.6V battery

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Safety sensors

Security sensors serve to ensure the safety of housing, retail facilities, manufacturing, logistics and other areas. Sensors individually and in combination provide peace of mind to owners, immediately notifying about the risks of incidents and unauthorized access, careless movement of goods and valuables with light, sound or SMS/Push/Call notifications from the application.

Fire sensor SP Smoke

- Smoke control method: optical
- Additional measurements: humidity, temperature
- Power supply: 2 AA batteries

Leak control sensor SP Leak

- Control method: electrical resistance of the environment
- Response threshold: < 2 Mohm
- Power supply: 2 AAA batteries

Access control sensor SP Access

- Control method: magnetic
- Stored data: status and number of state changes
- Power: 2 AAA batteries

Presence sensor SP Exist

- Measurement method: IR radiation changes
- Stored data: status and number of state changes
- Power supply: 4 AA batteries

Impact sensor SP Shake

- Control method: mechanical sensor
- Stored data: status and number of state changes
- Power supply: 2 AAA batteries

Slope Control Sensor SP Tilt

- Control method: mechanical sensor
- Stored data: status and number of state changes
- Power supply: 2 AAA batteries

Counters

Counting devices are used to manage marketing processes in retail, services and other trade enterprises. Counters allow you to effectively track customer flow and satisfaction with the quality of services, and influence the occupancy of parking spaces. All counters store an archive of values until radio communication is restored.

Parking occupancy sensor SP Park

- Control method: microwave radar
- Power: 4 batteries type 14505 LiSoCl2

Pass counter SP Count

- Control method: dual IR sensor
- Counting directions: 2 directions separately
- Power supply: 1 LiSoCl2 battery

Client terminal SP Delight

- Control method: touch
- Transmitted data: current rating and data archive
- Power: 2 AAA batteries

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Measuring loggers

Loggers are designed to periodically measure various physical parameters and store these values before transmitting them to the cloud service to the user.
All loggers are sealed and adapted for outdoor installation, autonomous - do not require battery replacement for several years, are easily installed on screws or mounting ties.

Humidity and temperature logger SP Uni

- Humidity: 0 - 99% (±2% RH)
- Internal temperature: -40°C to +70°C (±0.3°C)
- External temperature: -55°C to +125°C (±0.5°C)
- Application: mobile and stationary refrigeration and heating units

Product level logger SP Level

- Measuring product height: h from 0 to 7 m (±(1+h*0.3%))
- Installation above the object at a distance of 28 cm
- Measurement method: ultrasonic
- Applicability: bulk material and liquid warehouses, water supply system tanks

Current logger SP Power

- Current: 0 to 5/10/20/50/100 A (±3% at 10-120% I1)
- Cable window size: 13mm*13mm
- Current transformer type: detachable
- Application: uninterruptible power supply systems, lighting lines

Light level logger SP Light

- Illuminance: from 0 to 65 thousand lx
- Accuracy: -4%...+44% at 1000 lx
- Accuracy depends on the spectrum of light and the angle of installation of the logger
- Applicability: automatic lighting systems

Vibration level logger SP Vibro

- Measurement range: ±2g (±0.03g)
- Applicability: monitoring of rail joints of ground transport, vibrations of building structures and equipment

Kinetic energy logger SP Wave

- Measurement range: ±8g (±0.05g)
- Applicability: kinetic load level on river and sea transport, wave energy in port waters

Location determination devices

Geolocation devices allow tracking the movement of goods, mobile objects, people and animals. The devices use LoRaWAN radio network data for a rough location estimate and GPS for an accurate one. Geolocators operate in the LoRaWAN networks of the country for which they are intended, SP Sticker automatically switches to the radio frequencies of the country of presence.

Geotag of cargo SP Sticker

- Location method: indirect by radio network data
- Radio coverage: worldwide
- Power: 3 CR2032 batteries

Electronic seal SP Pendant

- Control method: resistance of electric circuit
- Location: GPS
- Power supply: 1 LiSoCl2 battery

Panic button SP Alert

- Location method: indirect by radio network data and GPS by pressing a button
- Power: 1 CR2032 battery

Bike Guard SP Track

- Location method: indirect, using radio network data and GPS when the sensor is triggered
- Alarm trigger: tilt
- Power supply: 2 AA batteries

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Control and auxiliary devices

To create a sensor-based control system, you will need these actuators and valves to turn on, for example, a siren or a fire extinguishing system, irrigation or shading, livestock waterers or a lighting line. In case of insufficient LoRaWAN radio coverage, you can install a gateway that directly transmits data to the SunPeak application.

Universal actuator SP Act

- Electrical load: 10A 230V 50Hz
- Modes: on/off by command/by timer
- Power supply: from the controlled network

Smart socket SP Homeact

- Electrical load: 10A 230V 50Hz
- Modes: on/off by command/by timer
- Power supply: from the controlled network

Controlled valve SP Valve

- Connection diameters: 3/4, 1/2, 1 inch
- Modes: on/off by command/by timer
- Power: 5V 1A external (USB-C)

Electronic lock SP Lock

- Functions: locking and unlocking doors and drawers by command from the application
- Power: 5V 0.5A external (USB-C)

Gateway SunPeak SP Net

- Data reception channel: LoRaWAN ABP
- Data transmission channel: LTE
- Power supply: 5V 1A external (USB-C)

Autonomous power supply SP Solar

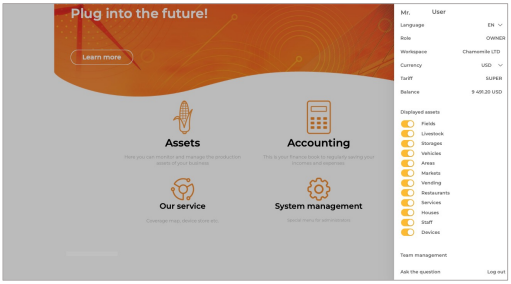
- Power source: solar lighting
- Battery capacity: 15 Ah
- Output power: 15 W 5 V

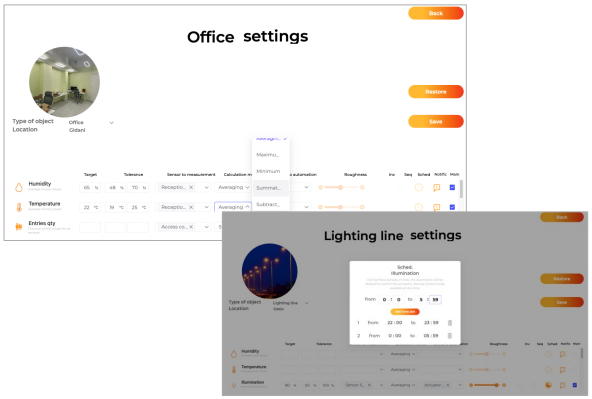
Cloud service

All SunPeak devices are designed to operate on the Helium Network, which covers most major cities around the world, and automatically connect to the SunPeak cloud service, accessible at service.sunpeaki.com or via a mobile app for Android or iOS.

The SunPeak intelligent cloud IOT platform allows you to monitor parameters measured by sensors in real time, display them on graphs and in reports, track the position of objects on a map using precise measurements and indirect signs, configure and send notifications about parameters exceeding permissible limits, connect actuators to objects and measurement channels, and manage them both manually and automatically.
Ready-made templates for different areas of application help to set up objects for monitoring without unnecessary effort, and the simple interface of the system will allow you to understand the rich functionality easily and quickly.

The SunPeak platform allows not only personal use, but also teamwork in a single workspace with the division of roles into operator, engineering, and accounting, which allows organizing the work of a small enterprise in a single information environment with separate rights, responsibilities, and notifications.

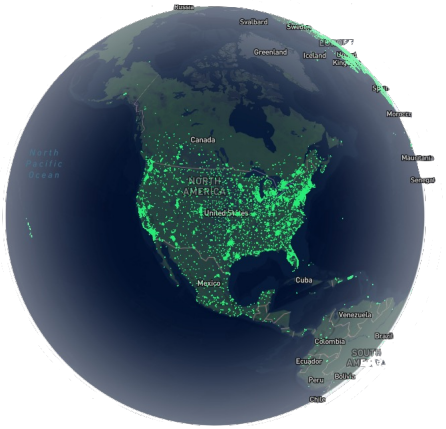


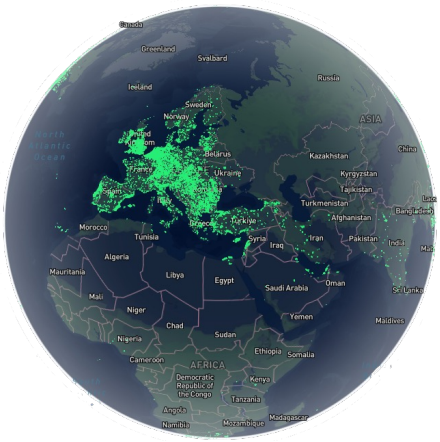


Each measuring channel of each object is easily and arbitrarily configured. When using several sensors to measure one parameter, it is possible to use various methods of additional calculation - summation, subtraction, sampling of maximums or minimums, triggering by AND/OR functions. By connecting an actuator, it is possible to set time windows of permitted triggering, fine or coarse automatic control.

Cloud service

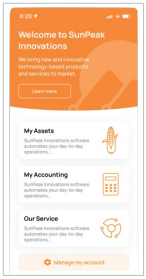
Helium radio coverage provides reliable reception in most major cities in the world and their suburbs, and in case of its insufficiency, it is possible to easily provide a high signal level by installing a LoRaWAN Helium or SP Net gateway and guarantee reliable delivery of sensor data within a radius of up to 500-1000 meters around. Check the coverage in your location at https://world.helium.com/en/iot/coverage

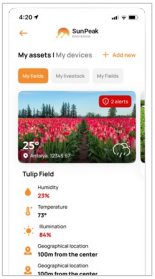


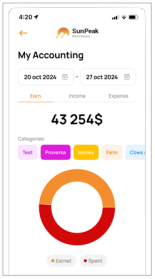


The platform's multilingualism allows you to work with it in 6 popular languages of the world, including within one workspace. Artificial intelligence is used to analyze data, providing recommendations for managing the object for the best efficiency of your business.

It is possible to connect any standard LoRaWAN devices in the Helium network with a known exchange format to the platform. And for integration into the user's information systems, access to data in the REST API format is provided upon request.







The SunPeak App mobile application contains all the functionality of the web version, but allows you to have online data, receive unlimited push notifications and manage objects right from your pocket.

Try all the features of SunPeak's intelligent cloud IOT platform right now!

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Download on the App Store

GET IT ON Google Play

Plug into the future!

SunPeak Innovations

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