

LoRa SENSORS

SONDEK

NODO IoT

HRD

- ✓ Mini IOT node
- ✓ Data reception center
- ✓ LoRa® Technology
- ✓ Low power consumption
- ✓ High tolerance to interference
- ✓ High reception sensitivity (-136dBm)
- ✓ Long range (up to 20 km maximum)

APPLICATION ENVIRONMENTS



RESIDENTIAL BUILDINGS



HOTELS AND RESORTS



HOSPITALS AND HEALTHCARE SECTOR



FACTORIES AND INDUSTRIAL WAREHOUSES



SUPERMARKETS



AGRICULTURE



PUBLIC SPACES



EKSELANS BY ITS



HRD

SONDEK

NODO IoT

Professional Sensor System for Residential, Industrial, and Tourist Environments.

SONDEK allows for the creation of a technological infrastructure within a building, regardless of its intended purpose, to monitor various environmental and consumption parameters with the aim of improving habitability, energy efficiency, and the well-being of the environment.

SONDEK system is composed of various detectors designed to capture and measure a wide range of environmental parameters: carbon dioxide (CO₂), carbon monoxide (CO), oxygen (O₂), temperature, humidity, and atmospheric pressure. Its main function is to collect precise information on these variables and transmit them in real-time using LoRa® technology to different modular nodes (MPDs), which in turn communicate with a central gateway (HDR - IoT Node). It is this **IoT Node** that securely stores all environmental factors for data analysis, allowing for the identification of patterns and the implementation of preventive or corrective measures, even automatically.

SONDEK sensors are designed for easy installation and offer advantages such as automatic linking with the modular node and a self-configuration procedure for measurement transmission cycles. The IoT Node (HDR) stores data locally in real-time, with the option of communication with a cloud system. Additionally, it provides access to city infrastructures (Smart Cities) that have implemented building metadata analysis.



TECHNICAL TABLE

REFERENCE		HRD
Code		420001
Measurements		Gateway IoT LoRa
Type of measurement		LoRa®
Connection		USB-C, RJ45
Measuring range	dBm	Min: -17 Max: -136
Type of material		Aluminium
Working voltage	V	5