



DATASHEET

CombiQ ISN Lite

Industrial Sensor Node Lite



Brief Summary

The Industrial Sensor Node Lite (ISN Lite) is a robust sensor device designed to measure vibration and temperature in industrial environments. It uses wireless communication for data transmission, enabling real-time machine monitoring and analysis.



Key Features & Benefits

Wireless Communication

Utilizes Bluetooth 5.0 for secure and efficient data transfer.

Compact Design

Lightweight and easy to install on various machinery.

Cloud Integration

Data is sent to the CombiQcloud service for detailed analysis and monitoring.

Early Warning

Set alarms in our CombiCloud software platform and be automatically notified of events via sms or email.

Industrial Grade

Built to withstand harsh industrial conditions with an IP67 rating.

Applications

Machinery Condition

Monitor machinery conditions with continuous tracking of vibration and temperature, ensuring early detection of potential issues allowing preventive intervention.

Predictive Maintenance

Leverage trend analysis to forecast equipment issues before they arise, enabling proactive maintenance and reducing overall maintenance costs.

Industrial IoT

Integrate Industrial IoT solutions seamlessly into your operations to enable smart sensor data collection and real-time analysis, enhancing decision-making, efficiency, and connectivity across your industrial processes.

Equipment Performance

Evaluate equipment performance by analyzing sensor insights to identify inefficiencies, optimize operations, and extend the lifespan of your machinery through detailed performance analysis.

Technical Specifications

Physical

Specifications	
Casing material	PC+ABS
Dimension	50.1 x 45 x 16.3 mm
Weight	40 g

Sensors

Accelerometer	
Range	±16g
Resolution	From ±244µg
Sample Rate	Max 2000 Hz
Temperature	
Accuracy	±4°C
Range	-40°C to +85°C

Hardware

Component	
CPU	32-bit ARM Cortex-M4 @ 38.4 MHz with DSP and FP
RAM	64kB
Flash	512kB (Program), 8 MB (Storage)
Power	
Battery	VARTA CR2450
Nominal Input	3 VDC
Max Input	3.6 VDC
Min Input	2.3 VDC
Wireless	
Bluetooth	5.0, BLE
Receiver Type	CLASS 2
Transmitter Type	CLASS 2
Nominal RF Range	25 m
RF Output Power	+1 dBm

Safety Information and Regulations

Safety Instructions

- **Important:** Changes or modifications not expressly approved by the manufacturer may void your right to use the equipment.
- **General Use:** Use the product only for its intended purpose, following all provided instructions.
- **Qualified Personnel:** Installation, operation, and maintenance must be performed by qualified personnel.
- **Environmental Protection:** This device complies with applicable EC directives and should be disposed of at a suitable recycling station for electronic equipment.

Battery Safety

- **Compatibility:** Use only the specified battery type, VARTA CR2450, to reduce fire or explosion risk.
- **Damage Precaution:** Avoid puncturing or deforming the battery to prevent fire hazards.
- **Heat Exposure:** Do not expose the ISN Lite to heat sources exceeding 85°C (185°F) to avoid explosion risks.

Ordering Information

The ISN is a standard product to match a large variety of use cases. Please send your orders with the complete ordering code as detailed below. Please feel free to contact one of our sales representatives if you require assistance.

Ordering code: ISN -Lite

Legal and Warranty Statement

Limitations of liability

CombiQ AB shall not be responsible for any direct or indirect damages, commercial losses, loss of profit in any way connected with CombiQ's devices.

Warranty

CombiQ AB warrants that the product is free from defects in materials and workmanship for a period of one year from the date of sale by CombiQ AB.

Additional Resources

More technical data, manuals, and regulations can be downloaded from www.combiq.com.



www.combiq.com