

VIoT Node

Versatile Sensor Capabilities

Our sensor nodes are equipped with a diverse range of capabilities, ensuring comprehensive data capture tailored to various industrial requirements.

Customisation is key to meeting bespoke needs.



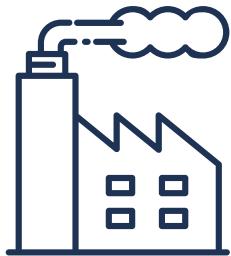
GPS Positioning

Precise location tracking for mobile assets and distributed infrastructure.



Temperature Readings

Environmental and equipment temperature monitoring for optimal performance.



Industrial Data Reader

Integration with 4-20mA Analog sensors for critical industrial parameters



Motion Detection

Alerts for unexpected motion/gesture/activity detection, ensuring enhanced security and operational safety



Customisable Sensors

Adaptable to incorporate additional sensor types as per specific project demands.



Salient Features of VIoT Nodes

- Over-the-Air (OTA) firmware updates
- ChirpStack v4.x server compatibility
- Ultra low-power
- Battery back
- Configurable polling intervals
- Data encryption and security
- API based integration
- Battery health monitoring

VIoT Node

Water Quality Sensor

Multi-Parameter Water Analysis

Water Parameters

- Chlorine: 0-10 ppm
- pH: 0-14 pH
- Turbidity: 0-4000 NTU
- Temperature: 0-50°C

Sensor Specifications

- Chlorine Accuracy: ±0.1 ppm
- pH Accuracy: ±0.1 pH
- Turbidity Accuracy: ±2% or 0.5 NTU
- IP Rating: IP68 (waterproof)

Key Features

- Multi-parameter water quality monitoring
- Waterproof IP68 design
- Automatic sensor calibration
- Real-time quality alerts
- Data logging and trending
- Regulatory compliance reporting



VIoT Node

Motion Sensor Device

Accelerometer & Gyroscope.

Sensor Type: 6-axis

Accelerometer

Sensitivity: Configurable
threshold



Key Features

- Vibration and movement detection
- Tamper detection alerts
- Fall Detection
- Activity pattern analysis
- Ultra-low power consumption
- Configurable wake-on-motion
- Real-time alert notifications



Temperature Sensor Device

- Precision Environmental Monitoring
- Temperature Monitoring
- Range: -40°C to +85°C
- Accuracy: ±0.5°C (typ)
- Resolution: 0.1°C

Key Features

- High precision temperature monitoring
- Configurable alarm thresholds
- Historical data logging
- Temperature trend analysis
- Cold chain compliance
- Real-time alerts

VIoT Node

Industrial 4-20mA Integrator

Analog Sensor Interface

current loop

Analog Interface

Channels: 2 channels

Input Range: 4-20mA

Resolution: 12-bit ADC

Accuracy: ±0.1% FS

Key Features

Standard 4-20mA industrial interface

RS485 Modbus RTU support

Multi-sensor integration

Configurable sampling rates

Data preprocessing and scaling

Industrial-grade reliability

