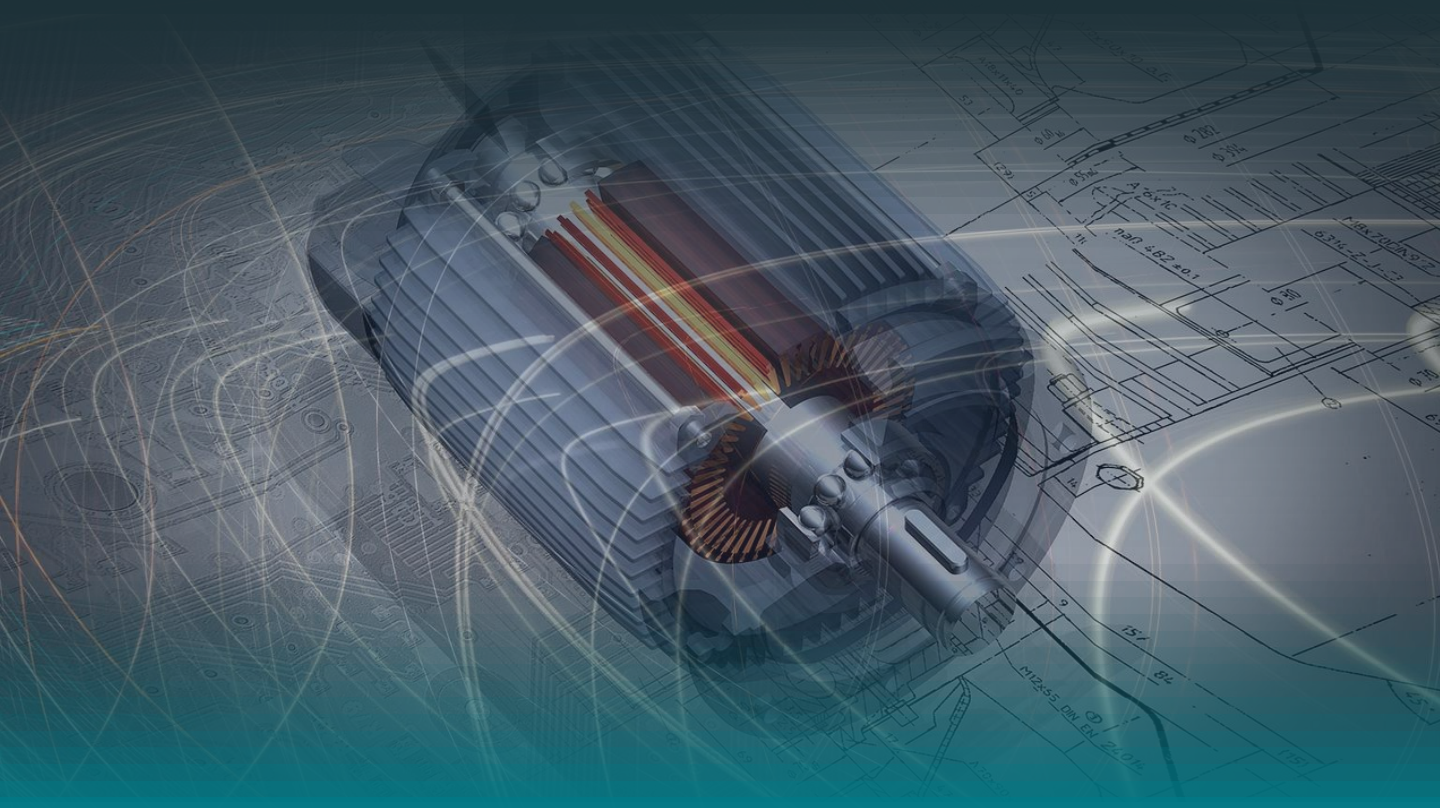
ADROIT FIRE

Aistin Motion

Aistin Motion — monitor motion and vibration

Monitor true usage times

IoTrack



iprotoxi
energy-efficient industrial IoT

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Aistin Motion

V1.0

Aistin Motion accurately measures motion and vibration, allowing for the monitoring of e.g. engine usage times. Aistin Motion blends smoothly to the environment around it. The design is modern, elegant, functional - **energy-efficient, completely wireless and ready with software**. We believe devices should be pleasant and easy to use.

The Device

Monitor true usage times

Elegant & Functional: Our Aistin Design casing seals in all the sensors – vibration detection, ambient temperature, and orientation, making the device robust and waterproof.

Energy-efficient: Smart power control enables longer than usual operating times, by default over 5 years with single set of batteries.

Modern and completely wireless: Members of the Aistin family never require a separate gateway. The device is connected to the internet via 4G-NB-IoT.

Why Aistin

Modern, elegant, functional

- ❑ Independent and Maintenance Free
- ❑ Completely Wireless — Over-the-air updates and Device Management
- ❑ Plug-and-Play – Functional, ready with software, ready to use
- ❑ *Shock- and Waterproof, Robust*

Use Case Examples

Monitor true usage times

- ❑ How long the true total usage time of an engine is (total or between maintenance)
- ❑ Optimize maintenance
- ❑ Predictive alerts forward the need to maintain whatever is being measured – smart algorithms
- ❑ Monitor unwanted motion
- ❑ Predictive alerts forward when movement and/or vibration thresholds are about to exceed

iProtoxi Custom

All of our products and services can be tailored to connect to other cloud services and API interfaces or include additional features. For any tailoring related questions, please consult our sales at sales@iprotoxi.fi

Aistin Motion

TECHNICAL SPECIFICATION

Device Settings

Aistin Motion is configurable **remotely over-the-air.** With **IoThund Cloud** web and mobile apps, all of the devices can be updated, configured, and managed at bulk or one at a time.

Positioning

- **IoTrack (NB-IoT):**
  - Cellular positioning
  - Accuracy up to few 100 meters
- **Optional:** GPS/(GNSS)

Inside the Casing

- **Connectivity: 4G Cat M1 & NB-IoT**
  - NFC 13.56 MHz
- **Dimensions**: 90 x 90 x 28,5 mm
  - IP67 casing
  - Weight 170 g
- **Operating temperature**
  - -25 to +60 °C
  - -40 to 85 °C with reduced accuracy
- **Powering:** 1 x 3,6 V C Primary battery
- **Battery lifetime:**
  Over 5 years: 12 measurements / day
  Battery lifetime is dependent on used features like positioning
- **6D-Accelerometer/Gyroscope**
  - Acceleration range of ±2/±4/±8/±16 g
  - Angular rate range of ±125/±250/±500/±1000/±2000 dps
- **Device Vibration**
  - Vibration frequency Hz
  - Amplitude
- **NTC Temperature (Device Temperature)**
  By default, the NTC is installed inside the casing, but may be fit into the casing seam to react quicker to changes in outer temperature.
  - Range from -40 to +125 °C
  - Accuracy ± 1 °C
- **Device Orientation:** 360°
- **Activity**
  - Engine hours
  - Total count

Device Management

- **Measurement and Alarming Functions**
- **Complete Device Management and Firmware Updates:** Over-the-air via IoThund Cloud

Product Code

- **Order Numbers**
  - With SIM card 20041
  - No SIM card 20042