

Aistin Level — on another level

Measure any surface level and its properties







Teknologiantie 18 90590 Oulu, Finland



Aistin Level accurately measures any surface level and its properties, while blending 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

On another level

**Elegant & Functional:** Our Aistin Design casing seals in all the sensors – object distance, 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**

Measure any surface level

- ☐ The fill level of fuel and water tanks
- ☐ The fill rate of waste bins or gravel storage
- ☐ The temperature and level of foodstuff
- □ Predictive alerts forward the need to refill or empty containers

## 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 Level**



#### **TECHNICAL SPECIFICATION**

### **Device Settings**

Aistin Level 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.

### **Inside the Casing**

- □ Connectivity: 4G-Cat M1 & NB-IoT or LoRaWAN 868MHz, optionally Bluetooth 5 connectivity
- **□ Dimensions**: 90 x 90 x 28,5 mm
- **☐** Operating temperature:
  - -25 to +60 °C
  - -40 to 85 °C with reduced accuracy
- ☐ Powering: 1 x 3,6V C Primary battery
- **□** Battery lifetime:

Battery lifetime is object to change and is dependent on other features (i.e. positioning)

- Over 5 years: 12 measurements / day
- □ Surface Distance Radar:
  - Can detect multiple objects
  - 200–5000 mm (spherical corner reflector r = 50 mm)
  - Distance and amplitude
  - Unaffected by dirt and rain
  - Accuracy ± 10 mm

#### ■ 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 ± 0.1 °C
- ☐ Device Orientation: 360°

# **Positioning**

#### □ loTrack (NB-loT):

- Cellular positioning
- Accuracy up to one meter (5G) or between 50 and 250 meters (4G)
- ☐ Optional: GPS/(GNSS)

# **Device Management**

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



