Aistin Owl Gaze
PIR Add-on Board (PIR212)

PIR212 Aistin Add-on Board is a perfect fit if you need ultra low power motion detection on a longer distance. When attached to an Aistin Host Board (e.g. CPU2x2, BUB212, BUQ212 and BTL2x2) you can easily detect ambient temperature, air pressure and humidity, and the color of light. With an integrated passive IR motion sensor you're able to detect movement from up to 5 meters distance.

This is the right tool for such solutions as surveillance, access control, presence or movement detection, etc., just to name some. Options are limitless! Example programs are available for most common use-cases. Build your own innovative creation with different Add-on and Host Boards from the Aistin family.

Technical Overview

- Dimensions: 16 x 17.5 x 16.5 mm³
- Aistin Bus24 Add-on Connector*
- Light Color Sensor
- Humidity and Temperature Sensor
- Air Pressure Sensor
- Passive IR Motion Sensor

*iprotoxi.fi/index.php/aistin-bus24

PIR212

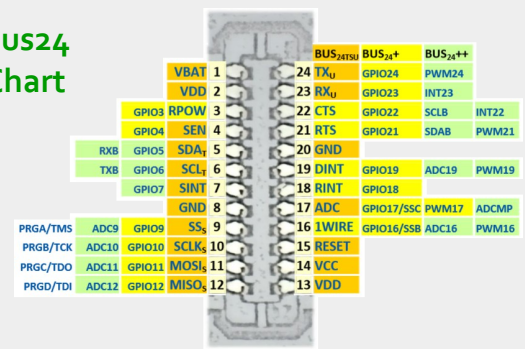
Technical Details

PIR212 is an Aistin Add-on Board which is equipped with several sensors for detecting and measuring changes in the environment. Different sensor properties are described in the table below.

	PIR212
Light Color Sensor (TCS37725FN)	Very High Sensitivity; 3 800 000:1 Dynamic Range
Humidity Sensor (HTS221)	0 to 100% RH range
Temperature Sensor (HTS221)	-40 to 120 °C Temperature Range *
Air Pressure Sensor (LPS25H)	260 to 1260 hPa Absolute Pressure Range
Passive IR Motion Sensor (AMN41122)	1µA Current Consumption
	Detection Distance: 5m
	Detection Range (Horizontal × Vertical): 100° × 82°

PIR212 can measure the color and brightness of ambient light with its very high sensitivity light color sensor. The board has a full-range humidity sensor and very sensitive temperature sensor to measure ambient conditions. Air pressure can be measured with an integrated barometer. PIR212 also has an ultra low power passive IR motion sensor which can detect motion and objects from 5 m distance.

Aistin Bus24 Signal Chart



** Theoretical sensor chip range*