

Iiwari Base Station

Main Features

- UWB radio, Decawave (DW1000)
- BLE, 2.4GHz radio, MCU uBlox (BMD-340, nRF52840) SoC chip
- User LED
- DC Power connector 12 - 48V input, socket diameters 5,5x2,1 mm



Product Overview

The Iiwari Base Stations are at fixed positions in the site (typically in the ceilings) and exchange UWB radio signals with the Master Base Stations and the tags. The site is divided into logical cells for positioning which allows unlimited expansion of the positioning network. Depending on the facility, one cell can cover an area between 225 to 2500m². Tags can freely move between cells.

Each cell has one Master Base Station (MBS) and up to 8 Base Stations (BS) which can also be part of other adjacent cells. The MBS acts as the center of the cell and is connected to a gateway unit with an Ethernet cable (PoE). BSs themselves require only power connection (or battery power) and all communication happens with UWB radio between MBS, BS and tags or 2.4 GHz proprietary radio between MBS and BS.

Specification

Dimensions

- 100.0 mm x 100.0 mm x 45.0 mm

Power consumption

- 1 watts (max.)

Weight

- 110.0 grams (without battery)

Environment

- Temperature
 - Operating temp. Range: -30°C ... +70°C without battery
 - Operating temp. Range: 0°C ... +45°C with battery
 - Storage temp. Range: -40°C ... +80°C without battery
 - Storage temp. Range: -20°C ... +60°C with battery
- Ingress Protection Rating: IP30, Indoor Use
- Humidity (non-condensing): 0%~90% typical