

IPS+ UWB Indoor Positioning Receiver

Art. No.: 22002370 (IP42) / 22002743 (IP65))

For applications with the highest accuracy demands, a real-time localization system based on ultra-wideband technology working in the 6-7 GHz range can be a good fit. This consists of mobile senders (UWB Beacons) and stationary receivers with known positions.

This UWB Receiver is the building block of a typical UWB system. Just install three or more devices in your building and start triangulating positions. The signal range is around 40m. With PoE, the device only needs a single Ethernet cable to get power and data. Besides the standard version in an IP42 indoor housing, there is also an IP65-rated version for dirty or wet environments.

The Receiver communicates with the corresponding UWB Beacons and measures the distance in mm. This raw data can either be processed directly or fed into our IoT-Engine Middleware where an XY position is calculated.



- ◎ Ethernet Connectivity
- ◎ PoE / 24V DC Supply
- ◎ Up to 40 m range
- ◎ Indoor Use only

Technical Specification

Operating Principle	Ultra-Wideband (UWB) RTLS Receiver
Operating Frequency	6240-6740 MHz (Ranging) and 2400-2480 MHz (Configuration)
Antenna Connector	integrated wideband chip antenna
RF Channels	IEEE 802.15.4 Channels 11 – 26 supported (configurable)
Read Range	up to 40m (line of sight)
Ingress Protection	IP42 or IP65
Connectivity	10 MBit Ethernet, ASCII Protocol
Operating Voltage	24V DC or PoE (48V DC)
Power Consumption	idle: 100 mA, RF on: max. 450 mA
Temperature Range	-20 °C to +70 °C
Dimensions	110 x 110 x 32 mm (IP42 version)

This UWB Receiver only works with the corresponding UWB Beacons manufactured by metraTec. The ASCII protocol is open and can be processed by any software. For an easy start, have a look at our IPS+ Starter Kit consisting of 3 UWB Receivers, 2 Beacons and a demo version of our IoT-Engine software.

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About Metratec

Metratec is a manufacturer of RF electronics specialized in wireless “Identification” (RFID) and “Localization” (RTLS). We serve a variety of markets from the manufacturing industry and logistics to vending machines and medical devices. Our customers include OEM customers, IoT system integrators and research facilities worldwide.

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