

The Ubisense Slim Tag is a small, rugged device that, when worn by people or attached to assets, allows them to be located to an accuracy of 15cm* in 3D in real-time. In addition to its tracking capabilities, it includes additional features such as LEDs for easy identification, a buzzer to provide basic messaging capabilities, a motion detector to instantly activate a stationary tag and two push buttons to trigger events.



Features

Accurate Location

The tag transmits ultra-wideband (UWB) radio pulses which can be used by the Ubisense location system to find its position to within 15cm* in 3D. By using UWB, the system's accuracy is maintained even in cluttered, multipath-rich indoor environments. The Ubisense UWB location system is the only one capable of measuring both Angle-of-Arrival (AoA) and Time-Difference-of-Arrival (TDoA) of the tag's signals, enabling it to generate accurate 3D tracking information even when only two sensors can detect the tag.

Two Way Communication

Ubisense tags employ a unique dual-radio architecture – in addition to the one-way UWB radio used for tracking, tags have a conventional bi-directional 2.4GHz radio for control and telemetry. The two-way communication capability allows the Ubisense system to dynamically manage the tag's update rate, flash the tag's LED or sound its buzzer, report battery status and button presses, and wirelessly reprogram the tag to enable new features.

Flexible Update Rates

The Ubisense software platform allows the tag's update rate to be dynamically and automatically varied depending on tag activity. If the tag is moving quickly, a high update rate can be assigned for best tracking; if it is moving slowly the update can be reduced for best battery lifetime. When stationary, tags sleep to conserve power, and an in-built motion detector ensures the tag transmits again as soon as it is moved.

User Interaction Features

The tag has two buttons to provide context-sensitive input to interactive systems. Applications can use the tag's location at the time a button was pressed to determine what action should be taken in response – for example, activating an item of machinery when a button is pressed, but only if the user is in a safe location. The application can also send feedback to the user via the tag LED or the buzzer that the application received the service request.

Rugged and Adaptable

The Slim Tag is designed to be rugged for use in a variety of environments. It is mechanically robust, dust- and water-resistant, and can be securely mounted or worn using a variety of attachment mechanisms.

Long Battery Life

The low current consumption and power management techniques result in long battery lifetimes. In a typical application, where a tag is used to locate a worker every 3s, it has an expected lifetime of over four years. Status reports and alerts make maintenance easy and batteries can simply be replaced.

Specifications

Size and Weight

Dimensions 83mm x 42mm x 11mm
(3.25" x 1.65" x 0.4")

Weight 32g (1.1 oz)

Temperature

Standard -20 °C to 60 °C (-4 °F to 140 °F)

Extended -30 °C to 70 °C (-22 °F to 158 °F)

Humidity 0 to 95%, non-condensing

Enclosure

Standard IP63

Extended IP65

Update Rate 0.00225Hz up to 33.75Hz
(can be varied dynamically under software control)

Peripherals

LED (application controllable)

Buzzer (application controllable)

Two push buttons (application controllable)

Motion detector

Radio Frequencies

Ultra-wideband 6GHz – 8GHz

Telemetry channel 2.4GHz

Certifications

FCC Part 15 (FCC IDs SEATAG21,

SEATAG21HH)

EU CE

Power Supply

3V coin cell (CR2477)

Mounting Options

Badge clip (supplied), cord lanyard

Ubisense Part Codes

UBITAG7021 (Standard),

UBITAG7021-X-65 (Extended)



Ubisense Series 7000 Slim Tag

About Ubisense

Ubisense is the world leader in Precise Real Time Location Systems, tracking unlimited numbers of people and objects in any space of any size. With unmatched 15cm 3D tracking accuracy and high reliability, its acclaimed open standards technology platform gives enterprises the power to bring visibility and control to previously intractable business processes. Together Ubisense consulting and its partners, such as IBM, Atlas Copco, Lockheed Martin and Raytheon deliver geospatial and RTLS systems, pioneering innovation whilst reducing costs, gaining competitive advantage and improving safety for companies across all vertical markets. With over 400 customers worldwide including BMW, Caterpillar, DHL, Duke Energy, Deutsche Telekom, US Army; Ubisense is revolutionising industries today. Visit www.ubisense.net

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