DIMENSION4

UWB Multi-mode Tag

Fact Sheet

OVERVIEW

The Ubisense DIMENSION4 Multi-mode Tag is a small, rugged device that can be attached to assets, allowing them to be located both indoors and outdoors using ultra-wideband (UWB) and GPS signals. In addition to its tracking capabilities, it includes features such as three LEDs for easy status identification, a motion detector to instantly activate a stationary tag and a push button to trigger events.

ACCURATE LOCATION

The tag transmits UWB radio pulses which can be used by the Ubisense location system to find its position with high accuracy in 3D. By using UWB, the system's accuracy is maintained even in cluttered, highly-reflective 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.

Specifications

Dimensions:
71mm x 64mm x 47mm (2.80" x 2.52" x 1.85")

Weight:
129g (4.5oz) (including C-size battery)

Temperature:
-40°C to 85°C (-40°F to 185°F)

Humidity:
0 to 95%, non-condensing

Enclosure:
ABS (V0), UV Stabilized
Tested to protection level IP66, IP68, IP69K

Update rate:
Ultra-wideband (UWB): Up to 30Hz (configurable)
GPS: One update per minute to one update per 255 minutes (configurable)

Peripherals:
LEDs, Push button, Motion detector

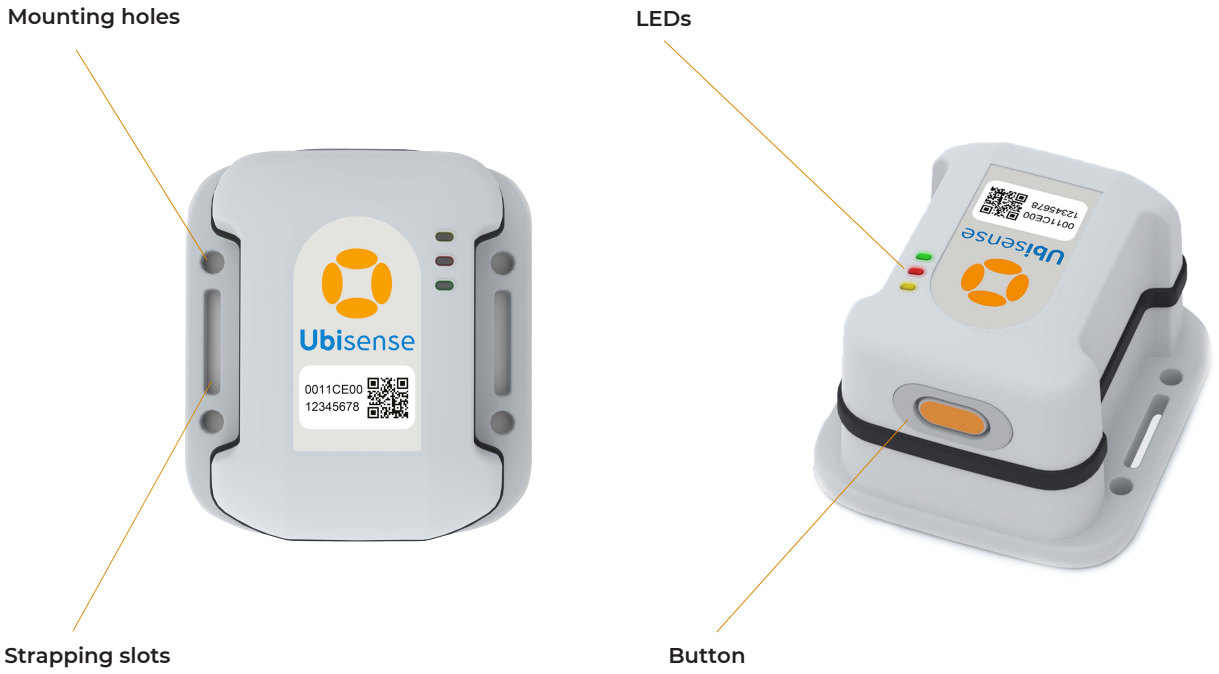
Radio frequencies:
Ultra-wideband channel: 6 - 7GHz
Telemetry channel: Narrow-band 2.4GHz

Certifications:
US: FCC Part 15; FCC ID SEAMOD31
Canada: ISED; IC 8673A-MOD31
EU: CE
UK: UKCA

Power supply:
C-size lithium cell

Mounting options:
Screw, Strap
plus Adhesive, Magnet and Velcro® (via optional mounting bracket)

Ubisense part codes:
D4TAG30MUL-C (Multi-mode tag)
INDTALLBKT (mounting bracket)



OUTDOOR GPS LOCATION

The Multi-mode Tag incorporates a SiRFStar-based GPS receiver. It continually attempts to use GPS to find its location. When successful, it relays the location back to the Ubisense location systems using the 2.4GHz radio.

RUGGED AND ADAPTABLE

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

USER INTERACTION FEATURES

The tag has a button to provide context-sensitive input to interactive systems. Applications can use the tag's location at the time the button was pressed to determine what action should be taken in response – for example, activating an item of machinery when the button is pressed, but only if the user is in a safe location.

FLEXIBLE UPDATE RATES

The tag's update rate may be automatically varied depending on tag activity. An inbuilt motion detector ensures that when the tag is moving, a high update rate is assigned for best tracking; if it is stationary, the update rate may be reduced to preserve battery lifetime.

LONG BATTERY LIFE

The low current consumption and sophisticated power management techniques result in long battery lifetimes. Status reports and alerts make maintenance easy and batteries are technician-replaceable. The C-size lithium cell provides considerable battery capacity. Battery life depends heavily on the specific application. Higher rates of GPS based positioning will consume relatively more power.

OPTIONAL WIRELESS CONFIGURATION

An on-board 2.4GHz radio may be used for configuring tag parameters, such as update rate, during commissioning.

Ubisense

To find out more, contact us on:

US +1 720 217 4397 UK +44 1223 53 5170
DE +49 211 229733-0 FR +33 1 83 79 06 82

www.ubisense.com