# truvami tag XL



## description

truvami® tag XL is a powerful and flexible GNSS tracking device that integrates a multi-standard GPS scanner and passive Wi-Fi MAC address scanner with Bluetooth 5.2 connectivity and various sensors such as accelerometer, into one compact device. Location functionality is based on Semtech LoRa Edge™ platform and is tightly integrated with Semtech LoRa Could™ Locator service. The IP67-rated housing with different mounting options prepares the device for operation in a harsh industrial environment.

Highly configurable device firmware allows for fine-grained adaptation to a specific use case to optimize performance and battery lifetime.

# applications

- industrial asset tracking
- warehouse logistics
- construction site management
- fleet management
- theft protection

#### device variants

| TRU-TRK-EU868-2301-TAG-XL | Europe    |
|---------------------------|-----------|
| TRU-TRK-US915-2301-TAG-XL | America   |
| TRU-TRK-AU915-2301-TAG-XL | Australia |
| TRU-TRK-AS923-2301-TAG-XL | Asia      |

#### features

- 2 × AA batteries for up to 5 years lifetime
- LoRaWAN® class A compliant device
- Low power GNSS and passive Wi-Fi AP MAC address scanner module based on Semtech LoRa Edge™ platform
- bluetooth 5.2 receiver and transmitter with integrated antenna
- various selection of sensors available
- robust IP67 industrial housing





# technical specifications

## mechanical specifications

| weight     | 186 g                             |
|------------|-----------------------------------|
| dimensions | 93 × 89 × 37 mm                   |
| enclosure  | plastic, ABS, with strong magnets |

## operating conditions

| temperature | -20 - 60°C                     |
|-------------|--------------------------------|
| humidity    | 0 - 95 % RH,<br>non-condensing |

### device power supply

|  | battery type                 | 2×AA alkaline<br>standard cell            |
|--|------------------------------|---|
| radio / wireless                           | expected battery<br>lifetime | up to 5 years depending on device profile |
| wireless technologies                      | LoRaWAN® 1.0.3, Bluetoot     | h 5.2                                     |
| LoRaWAN® Device type                       | class A                      |   |
| supported LoRaWAN® features                | OTAA, ADR, Adaptive Cha      | annel Setup                               |
| LoRaWAN® receiver sensitivity <sup>1</sup> | -127 dBm (SF7, 125 kHz) t    | to -141 dBm (SF12, 125 kHz)               |
| LoRaWAN® transmission power¹               | 14 dBm / 22 dBm (deper       | nding on region)                          |
| bluetooth transmission power¹              | 6 dBm                        |   |
| bluetooth sensitivity <sup>1</sup>         | -106.7 dBm(125 kbps) to      | -96.2 dBm(2 Mbit/s)                       |

<sup>&</sup>lt;sup>1</sup>See transceiver datasheet for detailed specifications

# ((•)) sensor specifications

#### **GNSS**

| receiver | Semtech LR1110 receiver with external patch antenna |
|----------|---|
| GNSS     | GPS & Beidou L1 band                                |

#### Accelerometer

| range           | ±2, ±4, ±8, ±16 |
|-----------------|-----------------|
| resolution      | 16 bit          |
| accuracy (typ.) | ±20 mg          |

#### Wifi

| receiver                | 2.4 GHz passiv MAC scanning 802.11 b/g/n |
|-------------------------|--|
| magnetic response       | omnipolar                                |
| reset activation (typ.) | after 7.5 sec                            |



# **1** disclaimer

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