

## Installation Guide

### Product Description

USB 300, USB 400J and USB 500U are EnOcean transceivers providing a bi-directional USB interface for connection to PC's, Wi-Fi access points or IoT gateways.



Sample image: USB 300 / USB 500U (white housing)



Sample image: USB 400J (transparent housing)

### Windows PC installation

- Plug USB stick into USB port of PC or notebook
- Download and install DolphinView:  
<https://www.enocean.com/en/support/development-tools/>
- Start DolphinView and press connect button (F5)

### Gateway/Wifi access point installation

- Plug USB stick into USB port of gateway or Wifi access point
- Follow instructions of gateway or Wifi access point documentation

### Technical information

USB 300, USB 400J and USB 500U provide the following key features:

- Reception and transmission of radio telegrams according to EnOcean Radio Protocol
- Serial interface over USB (Virtual COM port) according to EnOcean Serial Protocol v3
- Power status LED (green) and USB communication activity LED (yellow)

### Ordering information

Product	Frequency	Order Number Tray/Bulk Package OEM
USB 300	868.300 MHz	S3004-K300
USB 400J	928.350 MHz	S3064-K400
USB 500U	902.875 MHz	S3054-K500

## Features Overview

<b>Frequency/modulation</b>	USB 300: 868.300 MHz / ASK <sup>1)</sup> USB 400J: 928.350 MHz / FSK <sup>1)</sup> USB 500U: 902.875 MHz / FSK <sup>1)</sup>
<b>Data rate</b>	125 kbit / s
<b>Antenna</b>	PCB antenna
<b>Receiver sensitivity</b> (at 25°C) <sup>2)</sup>	USB 300: typ. -96 dBm <sup>2)</sup> USB 500U: typ. -98 dBm <sup>2)</sup> USB 400J: typ. -95 dBm <sup>2)</sup>
<b>Receiver category</b> (RED, EN 300 220)	Class 2 (standard performance)
<b>Tx output power (at antenna base)</b>	USB 300: max. 6.7 dBm USB 400J: typ. 0 dBm USB 500U: typ. 1 dBm
<b>USB power supply current</b>	typ. 50 mA / max. 90 mA
<b>Dimensions</b> (incl. cap)	70 x 23 x 9 mm
<b>OEM label size</b>	39 x 12 mm
<b>USB interface</b>	Virtual COM port (FTDI)
<b>USB connector</b>	Typ A
<b>Operating temperature</b>	-20°C to +50°C (max. 90% r.h.)
<b>Radio regulations</b>	USB 300: RED (EU) USB 500U: FCC (US) / ISED (CA) USB 400J: ARIB (Japan)

1) According to ISO/IEC 14543-3-1x

2) 0.1% telegram error rate, based on received sub-telegram(s). USB extension cable is recommended for best performance.

## Troubleshooting

- To optimize radio performance and minimize radiated noise from connected computer equipment we strongly recommend using an USB extension cable
- For advanced development and analysis, we recommend using EnOcean Developer Kit
- The USB stick front cap is used as handling protection during delivery.
- In case of installation issues, check LEDs:
  - \* USB stick powered by USB port -> green LED on
  - \* Radio telegram received or sent -> yellow LED short flash

## Market & Radio certifications



Hereby, EnOcean GmbH declares that this radio equipment is in compliance with the essential requirements and other relevant provisions of the European Union. A copy of the Declaration of Conformity can be obtained from the product webpage at [www.enocean.com](http://www.enocean.com)



The WEEE marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. Germany: WEEE-Reg-No.: DE 93770561



contains: FCC: SZV-TCM515U  
IC: 5713A-TCM515U

This device complies with part 15 of the FCC rules and Industry Canada ICES-003. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**IMPORTANT!** Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.



**206-000372** TCM 410J used in USB 410J complies with the Japanese radio law and is certified according to ARIB STD-T108.

When the product is placed on the Japanese market, it must carry the Specified Radio Equipment marking as shown to the left. If the certification label cannot be recognized from outside (e.g. installation in a host) then the appropriate information must be referenced in the user manual.

## EN

### Intended use:

- This product is intended for indoor usage in closed dry rooms, for details see user manual.
- The product must not be used in any relation with equipment that supports, directly or indirectly, human/animal health or life or with applications that can result in danger for people, animals or real value.
- The product is not suitable for use in mechanically or environmentally challenging environments including (but not limited to) environments with heavy vibrations, mechanical shocks, very high humidity, very dusty or in explosive atmosphere.
- The installation and assembly of electrical equipment may only be performed by a skilled electrician.

### Basic safety instructions:

- Risk of suffocation! Do not leave the packaging material lying around. Children could swallow the small parts and choke on them.
- Install and operate product according to user manual and do not modify product.
- The product should not be exposed to rapid temperature changes shortly before or during operation; condensation of moisture has to be avoided.
- Wrong cleaning may damage the product; we suggest cleaning with soft and damp tissue.

### Disposal:

- Product: Dispose of the used components at an official collection point for electronic waste or at your local dealer.
- Packing: Please use the recycling operators known to you.

## DE

### Verwendungszweck:

- Dieses Produkt ist für den Innenbereich in geschlossenen, trockenen Räumen vorgesehen. Details siehe Bedienungsanleitung.
- Das Produkt darf nicht in Verbindung mit Geräten verwendet werden, die direkt oder indirekt menschlichen gesundheits- oder lebenssichernden Zwecken dienen oder durch deren Betrieb Gefahren für Menschen, Tiere oder Sachwerte entstehen können.
- Das Produkt eignet sich nicht für den Einsatz in mechanisch oder umweltbedingt kritischen Umgebungen, einschließlich (aber nicht beschränkt auf) Umgebungen mit starken Vibrationen oder mechanischen Stößen, hoher Luftfeuchtigkeit, viel Staub oder in explosiver Atmosphäre.
- Die Installation und Montage von elektrischen Geräten darf nur von einem Elektrofachmann durchgeführt werden.

### Grundlegende Sicherheitshinweise:

- Erstickungsgefahr! Lassen Sie Verpackungsmaterial nicht herumliegen. Kinder könnten die Teile verschlucken und daran ersticken.
- Installieren und betreiben Sie das Produkt gemäß Bedienungsanleitung. Ändern Sie das Produkt nicht.
- Das Produkt sollte kurz vor oder während des Betriebs keinen schnellen Temperaturänderungen ausgesetzt werden. Kondensation von Feuchtigkeit muss vermieden werden.
- Falsche Reinigung kann das Produkt beschädigen; Wir empfehlen die Reinigung mit weichem und feuchtem Tuch.

### Entsorgung:

- Produkt: Entsorgen Sie die Komponenten bei einer offiziellen Sammelstelle für Elektronikabfälle oder bei Ihrem örtlichen Händler.
- Verpackung: Bitte entsorgen Sie diese bei den Ihnen bekannten Recycling-Betreibern.

## FR

### Utilisation prévue:

- Ce produit est destiné à une utilisation en intérieur, dans des locaux secs et fermés. Pour plus de détails, se référer au manuel d'utilisateur.
- Le produit ne doit pas être utilisé avec un équipement qui concerne, directement ou indirectement, la santé humaine ou animale, la vie, ou avec des applications pouvant entraîner un danger pour les personnes, les animaux ou de valeur réelle.
- Le produit n'est pas adapté pour une utilisation dans des contextes environnementaux ou mécaniques difficiles comprenant, (liste non exhaustive) des environnements à fortes vibrations, avec chocs mécaniques, avec une humidité excessive, une atmosphère poussiéreuse ou explosive.
- L'installation et l'assemblage d'équipements électriques ne peuvent être effectués que par un électricien qualifié.

### Instructions de sécurité de base:

- Risque d'asphyxie ! Ne laissez pas les matériaux d'emballage à l'intérieur. Les enfants pourraient avaler les petites pièces et risquer de s'étouffer.
- Installez et utilisez le produit selon le mode d'emploi. Ne modifiez en aucun cas le produit.
- Le produit ne doit pas être exposé à de brusques changements de température (avant ou pendant le fonctionnement). Condensation et humidité doivent être évitées.
- Un nettoyage incorrect peut endommager le produit. Nous suggérons de le nettoyer avec des tissus doux et humides.

### Disposition:

- Produit: Jeter les composants utilisés dans un point de collecte pour déchets électroniques ou chez votre revendeur local.
- Emballage: utilisez le circuit de recyclage habituel.

## IT

### Uso previsto:

- Questo prodotto è destinato per l'uso all'interno nei ambienti chiusi e asciutti. Per dettagli vedere il manuale dell'utente.
- Il prodotto non deve essere utilizzato in alcun modo con apparecchiature che supportino direttamente o indirettamente la salute umana o con applicazioni che possano provocare pericoli o danni per persone, animali o valori reali.
- Il prodotto non è adatto per l'uso nei ambienti con difficoltà meccaniche o ambientali, compresi (ma non limitati) nei ambienti con vibrazioni pesanti, urti meccanici, umidità elevata, molto polverosi o in un atmosfera esplosiva.
- L'installazione e l'assemblaggio di apparecchiature elettriche possono essere eseguite solo da un esperto elettricista.

### Istruzioni di base di sicurezza:

- Rischio di soffocamento! Non lasciare il materiale d'imballaggio in giro. I bambini potrebbero inghiottire le piccole parti con rischio di soffocamento.
- Installare e utilizzare il prodotto in base al manuale dell'utente e non modificare il prodotto.
- Il prodotto non deve essere esposto a rapidi cambiamenti di temperatura poco prima o durante l'operazione; la condensazione dell'umidità deve essere evitata.
- La pulizia errata può danneggiare il prodotto; Si consiglia di pulire con un tessuto morbido e umido.

### Disposizione:

- Prodotto: Smaltire i componenti utilizzati in un punto di raccolta ufficiale per rifiuti elettronici o presso il rivenditore locale.
- Imballaggio: Utilizzate gli operatori di riciclaggio conosciuti.