TAOGLAS®

User Guide

EDGE Locate™
High Precision GNSS
Solution

Taoglas EDGE Locate™ High Precision GNSS Solution
set up instructions

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Contents

Introduction

EDGE Locate™
High Precision GNSS Solution

The Taoglas® **EDGE Locate™** is an ultra low-power IoT hardware platform providing high precision GNSS for high volume navigation and autonomous applications in an off-the-shelf, compact form factor.

The EDGE Locate™ GNSS L1/L2/E5 hardware platform combines the antenna, RF electronics and receiver technology delivering reliable high accuracy positioning.

Key Features

- Optional RTK capabilities, providing up to 1 centimeter level accuracy
- Small form factor design and energy efficient platform
- Integrated and validated multi band antenna
- Integrated u-blox ZED-F9P multi-band GNSS receiver
- Concurrent reception of GPS, GLONASS, Galileo and BeiDou
- Advanced anti-spoofing and anti-jamming
- PMOD compatible and easy to integrate into third party hardware
- The EDGE Locate is supplied with a PMOD to USB adaptor and USB cable.

Key Benefits

- Ultra low power platform in an off the shelf compact form factor
- Future-proof your IoT deployments and optimize location based performance with high precision GNSS and RTK
- Quickly and effectively build IoT devices without having to invest in costly and lengthy RF design, integration and testing processes

Typical Applications

| UAV | Micro Mobility | Agriculture and Machine Control | Robotic Guidance | Professional Sports | Survey and Mapping |

What's in the Box?

1. **Quick Start Guide**
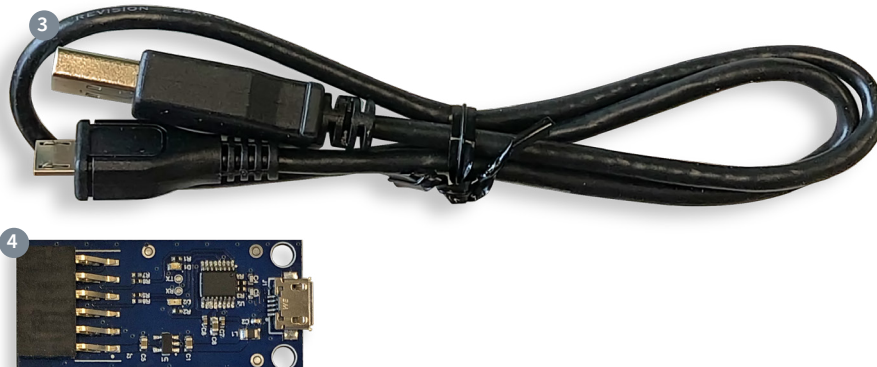
2. **Taoglas EDGE Locate**

3. **Micro-USB cable**

4. **USB adapter**

EDGE Locate™ Quick Start Guide

1. Download and install the u-center evaluation software from **www.u-blox.com/u-center**

2. Connect the EDGE Locate and the provided USB interface board as in **Figure 1**.

3. Connect the USB interface board to a Windows PC via the provided USB cable. The driver required to use this interface will install automatically in the background if you have an active internet connection.

4. Start u-center and select the menu item **"Receiver" > "Connection"** and then the COM port the EDGE Locate is connected to. If there are multiple COM ports listed, you will have to determine the correct one using the Device Manager.

5. Under the menu item **"Receiver" > "Baudrate"** select **38'400**. To confirm communication with the EDGE Locate, Select the menu item **"View" > "Text Console"**, a window should appear displaying NMEA sentences as they are sent from the module.

6. To setup an Error Correction Service connection in u-center, select the menu item **"Receiver" > "NTRIP client…"** and enter the mount point settings you have received from your correction service provider. (See included leaflet if trial of corrections service is bundled)

7. Once corrections are received the Fix Mode status in the Data View will change to 3D/DGNSS and eventually to 3D/DGNSS/Fixed if a FIXED RTK solution is available.

See **https://www.taoglas.com/edge-locate-support/** for detailed installation instructions.
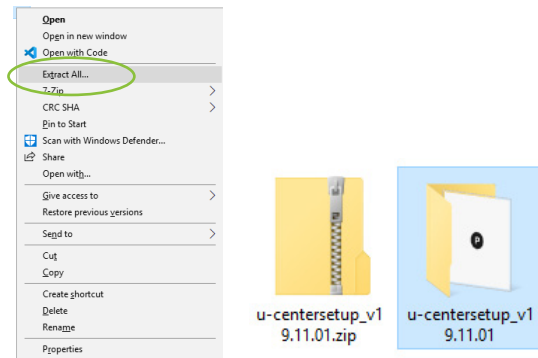
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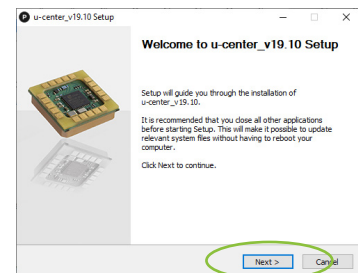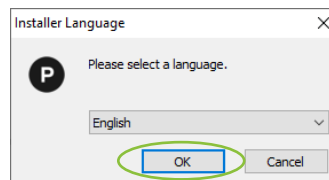

For further information on the antenna used, the AGPSF.36, please refer to the **Datasheet**

U-Center Install

1. Download and install u-center from
   https://www.u-blox.com/en/product/u-center.

   Once downloaded, extract the installer from the
   zip file by right-clicking on it and selecting **'Extract All'**.

2. Navigate into the newly extracted folder and
   double click the installer. You will be presented
   with a screen asking you to allow the installer to
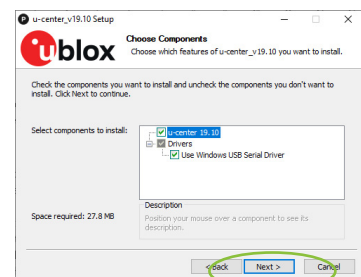   make changes, click **'Yes'**.

   Once the installer opens, you will be presented
   with the screen below, asking you to select a language.
   Select the language you wish to use and click '**OK**'.
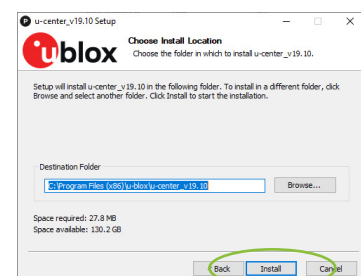   Click **'Next'** on the welcome screen to start the installation process.

3. Please read through the license agreement and click **'I Agree'** if you agree to
   the terms.

4. Click **'Next'** on the install components screen.

5. Then keep the default installation location and click '**Install**'.
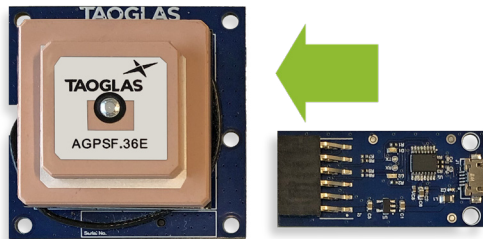
6. Once the installation is completed, click '**Finish**'. u-center is now installed.

U-Center Device Setup

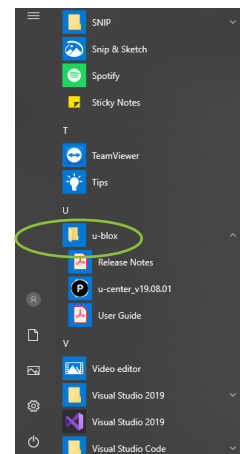1. Connect the **EDGE Locate** module to the **USB Adapter interface board** as below.

2. Connect the **micro-USB** included in the package to both the **interface board** and your **PC**.
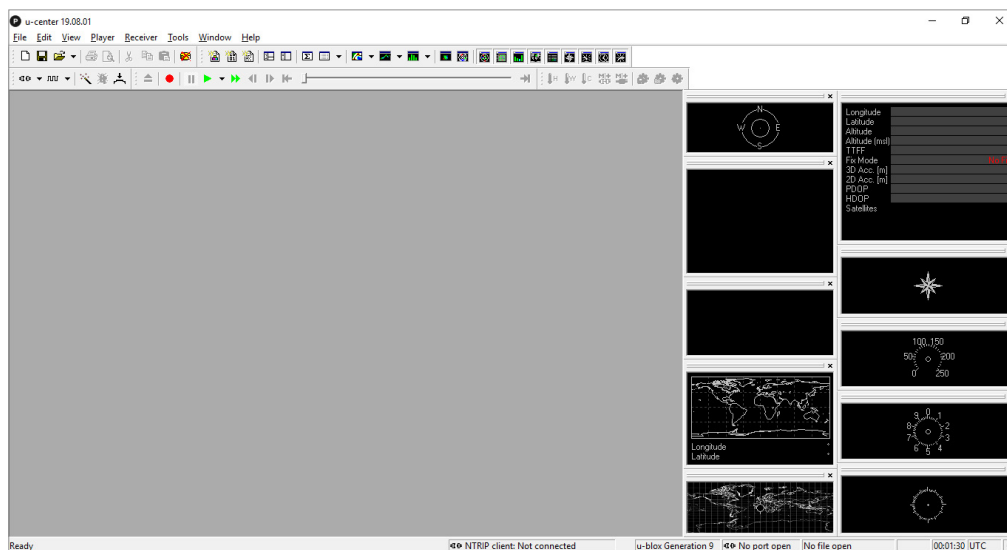
If you have an active internet connection, the driver required for this USB interface will install automatically in the background.

3. **Open u-center**, to do this, press the Windows key and scroll down in the applications window to the **u-blox folder**.
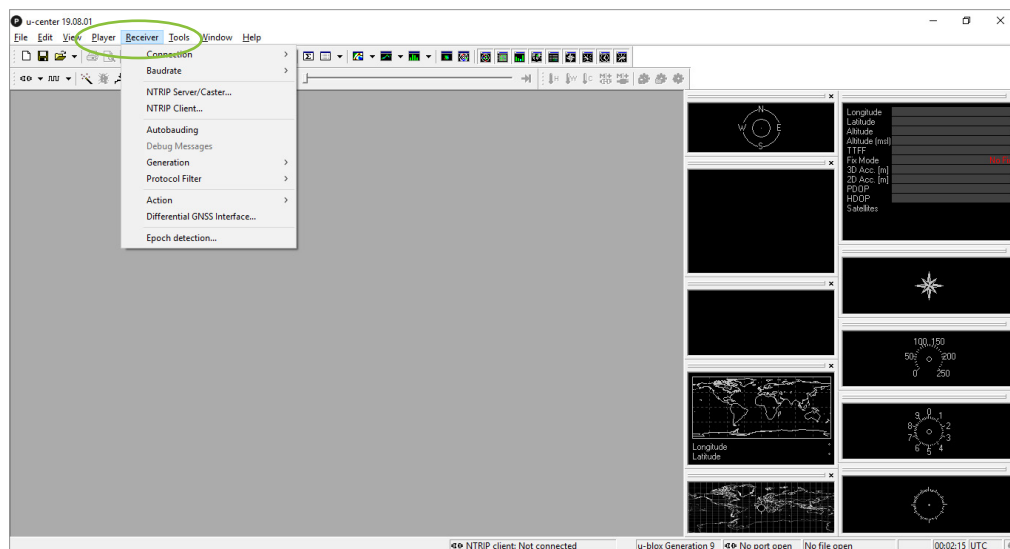   Click the folder **to expand** it and click '**u-center'** to start it.

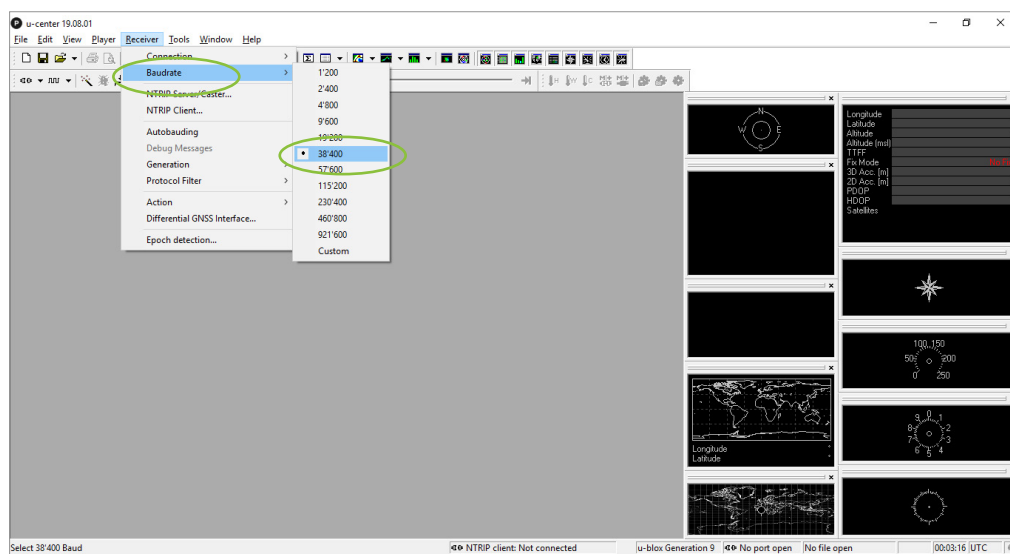This will open a window similar to the one below.

4. To Connect the **EDGE Locate** module:

    a. Select receiver > **'baudrate'** > **'38'400'**

    b. Select receiver > Connection > **'COMXX'**, where **XX is the COM port** which the **EDGE Locate** is connected to. See the **'Additional Note'** on page 10 for help in determining the COM Port.

Once the correct port is selected, the communication setup is complete.

To confirm communication with the **EDGE Locate**, select **'View'** and then '**Text Console'**. A window should appear displaying NMEA sentences as they are sent from the module.

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