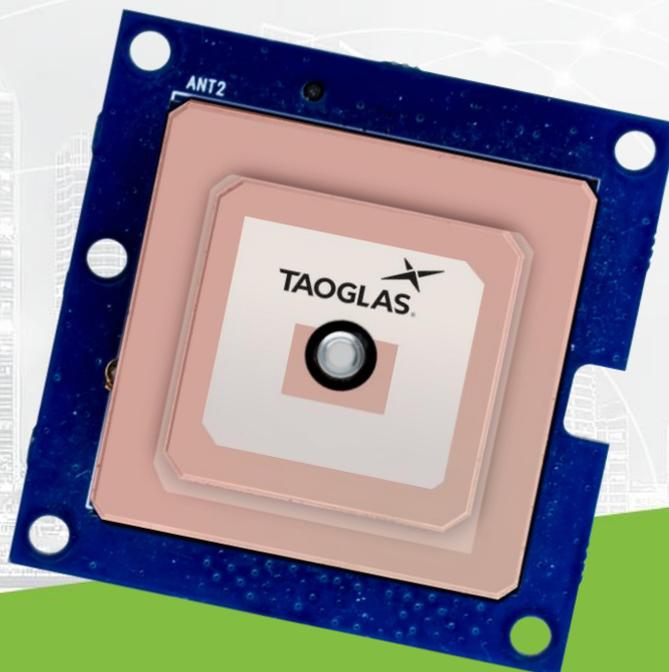




TAOGLAS®



User Guide

Taoglas EDGE™ Locate EL20

Part No:
EL20

Description:

High Precision GNSS Solution

Ordering Information:

EL20A – Taoglas EDGE™ Locate - cmLevel Positioning Module (With USB to PMOD interface)
EL20B – Taoglas EDGE™ Locate - cmLevel Positioning Module (Module Only)

Features:

- High-end RTK receiver
- Integrated u-blox ZedF9P multi-band GNSS Receiver
- Concurrent reception of GPS, GLONASS, Galileo and BeiDou
- Anti-spoofing and anti-jamming
- PMOD compatible and easy to integrate into third-party hardware
- Pre-certified and validated electronics
- Easy integration with EDGE Connect for full cellular connectivity
- REACH & RoHS Compliant



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1. Introduction

The **Taoglas EDGE™ Locate** solution is an energy efficient IoT platform that provides high precision GNSS location for both large scale and niche navigation and autonomous applications in an off-the-shelf, compact form factor.

The Taoglas EDGE™ Locate GNSS L1/L2/E5b combines the antenna, RF electronics and receiver technology in a single package delivering reliable high accuracy positioning.



Key Benefits

- Integrated u-blox ZED-F9P module for Multiband RTK to enable cm level positioning.
- Integrated Taoglas Antenna to maximise RF performance.
- Fast time to market, with an accurate navigation solution ready to use out of the box.
- Small form factor for ease of integration into your design.
- Industry standard UART & USB interfaces available.

Please contact your regional Taoglas customer service team for more information and installation guidelines.

Typical Applications



UAV



Micro Mobility



Agriculture and Machine Control



Robotic Guidance



Professional Sports



Survey and Mapping

2. What's in the box?

1. Quick Start Guide
2. Taoglas EDGE Locate
3. Micro-USB cable
4. USB adapter

1

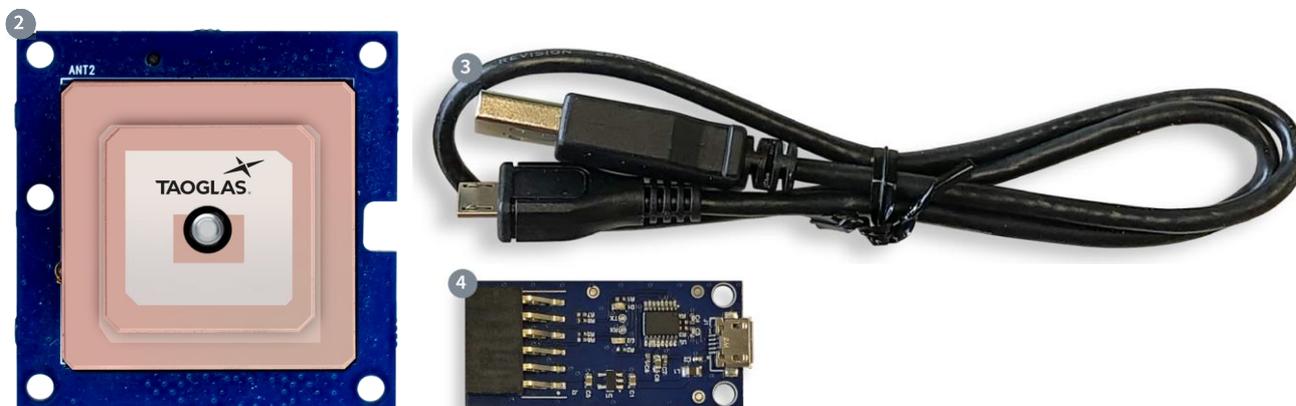
EDGE Locate™ Quick Start Guide

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 www.taoglas.com/iot-support/ for detailed installation instructions.



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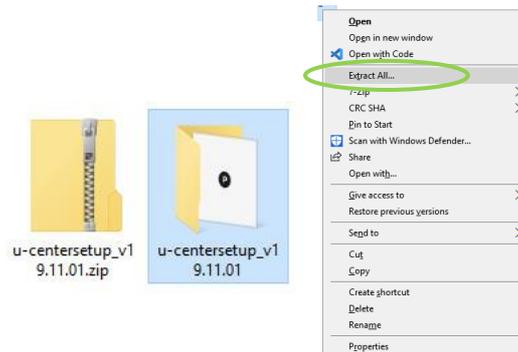


For further information on the antenna used, the AGPSF.36, please refer to the [Datasheet](#)
 For further information on the GNSS receiver used, the ZED-F9P, please refer to the [Datasheet](#)

3. 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'.

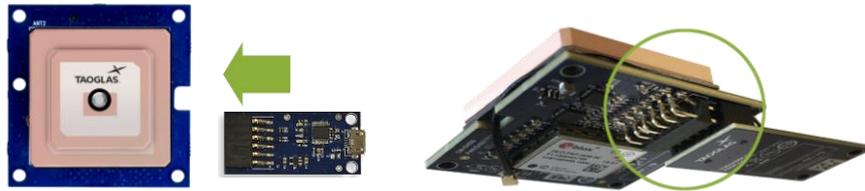


6. Once the installation is completed, click 'Finish'. U-center is now installed.

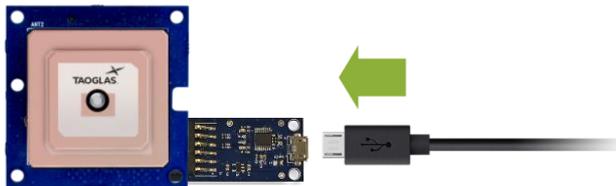


4. U-Center Device Setup

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

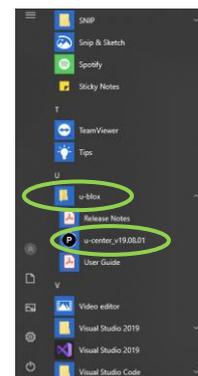


2. Connect the **micro-USB** included in the package to both the **interface board** and your **PC**.

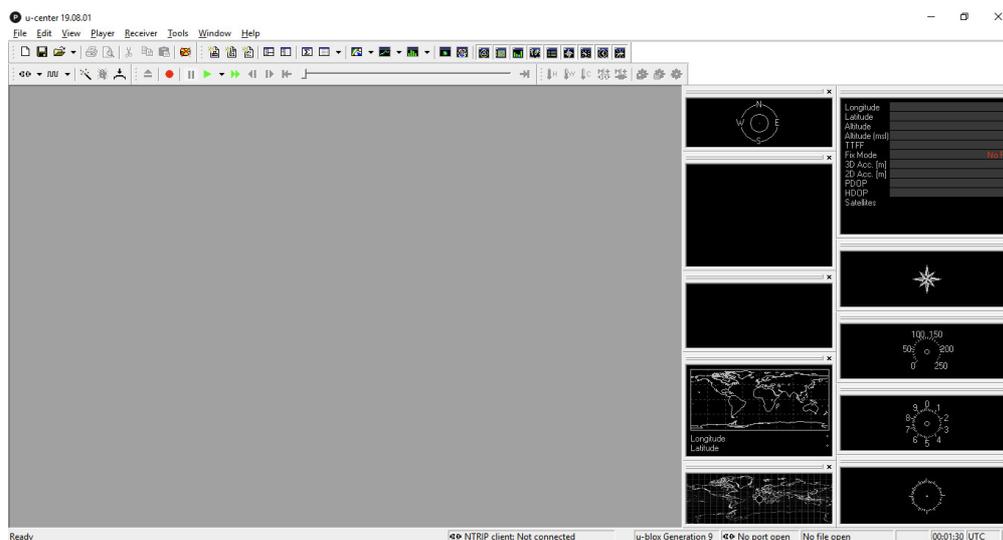


If you have an active internet connection, the driver required for this USB interface will install automatically in the background.

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.

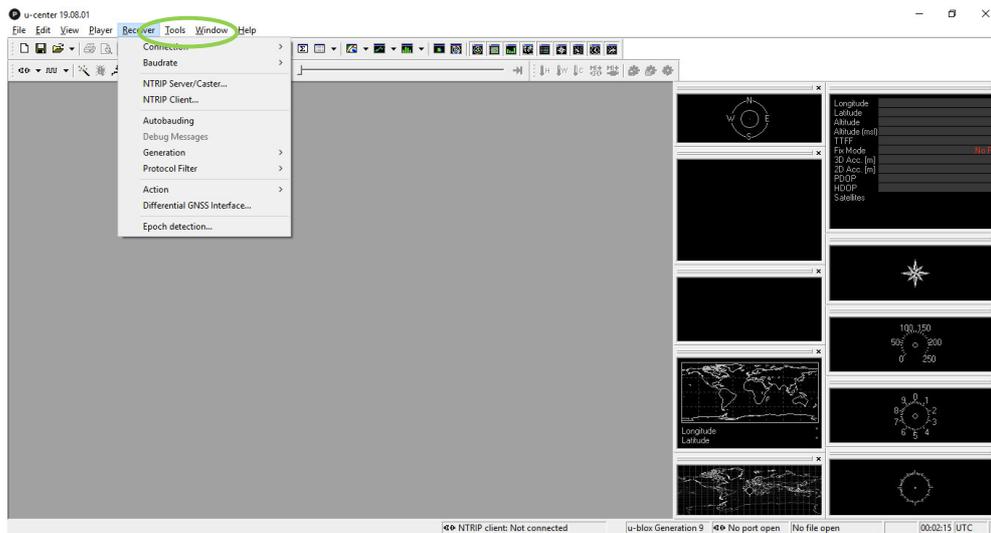


This will open a window similar to the one below.

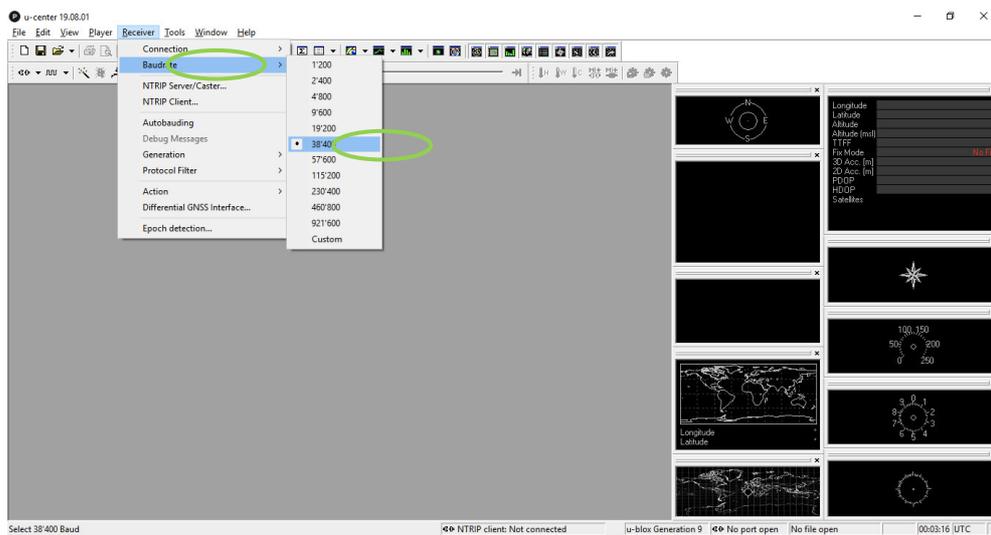


4. To connect the **EDGE Locate** module:

- a. Select receiver > 'baudrate' > '38,400'



- b. Select receiver > Connection > 'COMXX', where XX is the COM port which the **EDGE Locate** is connected to.



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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