



# u-center 23.08

## GNSS evaluation software for Windows

### Release note

#### **Abstract**

This release note contains general information, features, improvements, changes and known limitations for u-center 23.08.

## Document information

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<b>Subtitle</b>	GNSS evaluation software for Windows	
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# 1 General information

The u-center GNSS evaluation software for automotive, mobile terminal and infrastructure applications provides a powerful tool for evaluation, performance analysis and configuration of the u-blox GNSS receiver.

## 1.1 Released files

The following table lists the files that have been released.

File	Description
u-center_v23.08.exe	u-center installer including u-blox CDC-ACM (USB) (x64 bit) driver v1.2.0.8 for Windows 7 and 8
u-center-v23.08_ReleaseNote_(UBX-23010444).pdf	Release note
u-center_UserGuide_(UBX-13005250).pdf	User guide



For Windows 10, use the Microsoft CDC-ACM (USB) driver available from the Windows Update.



u-blox Sensor and VCP drivers are deprecated and removed from the release package.

## 1.2 Released documentation

- Public release note (UBX-23010444)
- u-center user guide (UBX-13005250)

## 2 Features

### 2.1 Supported Microsoft Windows versions

u-center 23.08 runs on Microsoft Windows Vista and later versions up to (including) Windows 10.

### 2.2 Supported receiver generations

u-center 23.08 supports the following receiver generations:

- u-blox 6
- u-blox 7
- u-blox 8/M8
- u-blox 9
- u-blox 10

### 2.3 Supported protocol specification version

u-center 23.08 supports the u-blox protocol specification from version 10.00 and later versions up to (including) version 42.

### 2.4 External hardware support

The following external hardware is supported to interface with the receiver:

Interface	Device	DLL version
DDC/I2C	Totalphase Aardvark I2C/SPI Host Adapter	aardvark.dll v5.15 for Windows 32-bit
DDC/I2C	Diolan U2C-12 USB-I2C/SPI/GPIO Adapter	i2cbrdg.dll v1.0.0.9 for Windows 32-bit
SPI	Totalphase Aardvark I2C/SPI Host Adapter	aardvark.dll v5.15 for Windows 32-bit
SPI	Totalphase Cheetah SPI Host Adapter	aardvark.dll v5.15 for Windows 32-bit
SPI	Diolan U2C-12 USB-I2C/SPI/GPIO Adapter	i2cbrdg.dll v1.0.0.9 for Windows 32-bit

### 2.5 Multiple GNSS AssistNow Service

u-center 23.08 includes the multiple GNSS AssistNow Service (libMGA) version 22.05.

## 3 Improvements and changes

For detailed information on any new messages or protocols, contact u-blox support or see product Interface description.

### 3.1 Version 23.08

- Features
- Improvements
  - Added support for L5 band signals in table view.
  - Added Galileo OS-NMA flags in messages UBX-NAV-PVT, UBX-NAV2-SIG, and added new message UBX-SEC-OSNMA.
  - Fixed PointPerfect timeout issue for network unavailability. Implemented initial logic for tile and node changes and support for AssistNow updates.
  - Added protection level invalidity reason in case signal attenuation compensation (SAC) has been enabled and correct message version for pTime field in message UBX-NAV-PL.
  - Added authentication in message UBX-NAV-TIMEUTC to make sure that the conversion between GNSS time and UTC time has been performed using OSNMA authenticated conversion parameters.
  - Added initStatus field in message UBX-ESF-STATUS.
- Bug fixes
  - Message UBX-CFG-TMODE2 is available now which was missing in u-center v22.05 and v22.07.

### 3.2 Version 22.07

- Features
  - AssistNow Offline tool now provides MGA data for BeiDou and Galileo.
- Bug fixes

### 3.3 Version 22.05

- Improvements
  - Improved MQTT tool with options to subscribe to key, AssistNow and data topics.
  - Adjusted UBX-RXM-SPARTNKEY message so users can't enable/disable it anymore as being only the pollable message.
- Bug fixes

### 3.4 Version 22.02

- Features
  - Added new messages UBX-MGA-INIT-ATT, UBX-MGA-SF-INIT, UBX-MGA-SF-INIT2 to support "Advanced calibration handling" feature.
  - Added new message UBX-RXM-COR to support multiple correction sources.
  - Position protection level reported values from message UBX-NAV-PL are added in chart and statistic views.
- Improvements
  - At successful MQTT connection, the client can now connect to the PointPerfect and AssistNow Online services.

## 4 Known limitations

### 4.1 Known issues

- Enumerating the ports on a computer with many ports can take a long time.
- Using the protocol filter with "silent" or "no receiver" results in an empty message tree.
- Full support for u-blox 10 generation receiver is not yet available.

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The basic library functions are written in C and are freestanding. Also included in the distribution is a just-in-time compiler that can be used to optimize pattern matching. This is an optional feature that can be omitted when the library is built.

#### THE BASIC LIBRARY FUNCTIONS

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