



# u-center 19.05

**GNSS evaluation software for Windows**

Release Note

## **Abstract**

This release note contains general information, features, improvements, changes and known limitations for u-center 19.05.

[www.u-blox.com](http://www.u-blox.com)

UBX-19025462 - R01



## Document Information

<b>Title</b>	<b>u-center 19.05</b>	
<b>Subtitle</b>	GNSS evaluation software for Windows	
<b>Document type</b>	Release Note	
<b>Document number</b>	UBX-19025462	
<b>Revision and date</b>	R01	28-May-2019
<b>Disclosure restriction</b>	Production Information	

u-blox reserves all rights to this document and the information contained herein. Products, names, logos and designs described herein may in whole or in part be subject to intellectual property rights. Reproduction, use, modification or disclosure to third parties of this document or any part thereof without the express permission of u-blox is strictly prohibited.

The information contained herein is provided "as is" and u-blox assumes no liability for the use of the information. No warranty, either express or implied, is given with respect to, including but not limited to, the accuracy, correctness, reliability and fitness for a particular purpose of the information. This document may be revised by u-blox at any time. For most recent documents, please visit [www.u-blox.com](http://www.u-blox.com).

Copyright © 2019, u-blox AG.

u-blox is a registered trademark of u-blox Holding AG in the EU and other countries.

# Contents

<b>1 General information.....</b>	<b>4</b>
1.1 Released files.....	4
1.2 Version and checksum of files.....	4
1.3 Released documentation.....	4
<b>2 Features.....</b>	<b>5</b>
2.1 Supported Microsoft Windows versions.....	5
2.2 Supported receiver generations.....	5
2.3 Supported protocol specification version.....	5
2.4 External hardware support.....	5
2.5 Multiple GNSS AssistNow Service.....	5
2.6 Debug messages.....	5
<b>3 Improvements and changes.....</b>	<b>7</b>
3.1 Version 19.05.....	7
3.2 Version 19.04.....	7
3.3 Version 19.03.....	7
3.4 Version 19.02.....	7
3.5 Version 19.01.....	7
3.6 Version 18.11.....	7
<b>4 Known limitations.....</b>	<b>9</b>
4.1 Known issues.....	9

# 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_v19.05.exe	u-center installer including u-blox CDC-ACM (USB) (x64 bit) driver v1.2.0.8 for Windows 7 and 8
u-center-v19.05_ReleaseNote_(UBX-19025462).pdf	Public release note
u-center_UserGuide_(UBX-13005250).pdf	User guide



For Windows 10, the CDC-ACM (USB) driver from Microsoft should be used, which is available from Windows Update.



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

## 1.2 Version and checksum of files

The following table lists the versions and the checksums of the [Released files](#).

File	Version	MD5
u-blox GNSS Standard Driver for Windows	1.2.0.8	
u-center.exe	19.05	d809d0606b374334bd966250e26fb05b
flash.xml	200037	bfb1eae0ce10ee611dc456264fe0dbbe
flash.xml_changelog.txt		d022572414adc9e8ba13df697e47694f
flash.txt	101098	b49a4b5d33efa113737208e788cf3afc
NMEA.dll	19.05	39cdec2d1ae4872ee6d6d99e09676ea2
RTCM.dll	19.05	a812b2386ff0ee3aae9d0aecb3700ef9
sqlite3.dll	3.21.0.0	07fb6d31f37fb1b4164bef301306c288
UBX.dll	19.05	ed2e0719fea3ee362b1bedde51cac0fe
ubxfwupdate.exe	19.03	
ubloxgnssusbcons.exe	18.4.0.0	7571060ea6937f31c6e5d7e4bebd864a

## 1.3 Released documentation

- Public Release Note (UBX-19025462)
- u-center User Guide (UBX-13005250)

## 2 Features

### 2.1 Supported Microsoft Windows versions

u-center 19.05 runs on Microsoft Windows Vista and later versions up to (including) Windows 10.

### 2.2 Supported receiver generations

u-center 19.05 can update the firmware of the following receiver generations:

- u-blox 5 with ROM 3.00, ROM 4.00, ROM 5.00
- u-blox 6 with ROM 6.00, ROM 6.02, ROM 7.03
- u-blox 7 with ROM 0.10, ROM 0.11, ROM 0.14, ROM 1.00
- u-blox 8/M8 with ROM 0.21, ROM 0.22, ROM 2.01, ROM 3.01
- u-blox F9 with ROM 0.30, ROM 0.40, ROM 1.01



u-blox 5 receiver support is end of life and will be removed in one of the next versions.

### 2.3 Supported protocol specification version

u-center 19.05 supports the u-blox protocol specification from version 10.00 and later versions up to (including) version 27.

### 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 19.05 includes the multiple GNSS AssistNow Service (libMGA) version 1.10.

### 2.6 Debug messages

The following messages will be enabled or polled when pressing the "Debug Messages" button:

- Any UBX-INF
- UBX-MON-MSGPP
- UBX-NAV-CLOCK
- UBX-NAV-PVT
- UBX-NAV-SIG
- UBX-NAV-ORB
- UBX-NAV-SAT
- UBX-RXM-SVSI (every 30 seconds)
- UBX-MON-HW (polled)

- UBX-MON-EXCEPT (polled)
- and additional u-blox debug messages

The following messages will additionally be enabled or polled when pressing the "Debug Messages" button for ADR product line:

- UBX-ESF-MEAS
- UBX-ESF-STATUS

The following messages will additionally be enabled or polled when pressing the "Debug Messages" button for HPG product line:

- UBX-NAV-RELPOSNED
- UBX-NAV-SVIN
- UBX-MON-IO
- UBX-NAV-SOL
- UBX-NAV-AOPSTATUS

The following messages will additionally be enabled or polled when pressing the "Debug Messages" button for SPG product line:

- UBX-MON-IO
- UBX-NAV-SOL
- UBX-NAV-AOPSTATUS

## 3 Improvements and changes

### 3.1 Version 19.05

- Improvement: In statistics view, the average and standard deviation column is now shown to two decimal places for the "Carrier range status" property.
- Bug fix: Message UBX-HNR-INS is now available in u-center.
- Bug fix: Help dialog now drawn correctly.

### 3.2 Version 19.04

- Bug fix: Fixed the problem with NMEA message parser so that it can now detect invalid NMEA messages properly.
- Bug fix: UBX-CFG-VALGET now updates the hex view as the user enters configuration keys to the request list. Also the user now has to press "Send" to send the request to the receiver instead of "Poll".
- Bug fix: Fixed issues in the log file player that led to messages being omitted or being played more than once.

### 3.3 Version 19.03

- Bug fix: Fixed Beidou B2 signal visibility in "Satellite-Levels" view.
- Bug fix: High Navigation Rate data can now be viewed in the table view.

### 3.4 Version 19.02

- Improvement: Added support for Bosch SMI230 IMU sensor in UBX-CFG-SPT and UBX-MON-SPT.
- Improvement: Updated libMga to v19.02.
- Bug fix: u-center now saves the configuration correctly.
- Bug fix: Fixed u-center crash issue while pressing the "Load differences from default" button in "View->Generation 9 Configuration View".

### 3.5 Version 19.01

- Improvement: Added support for the new version of UBX-NAV-RELPOSNEED in u-center.
- Bug fix: Fixed bug for the NTRIP server/caster UI.
- Bug fix: Added grouping for items related to automatic configuration to NTRIP server dialog. Fixed the problem where clicking "Get configuration automatically" or "Enable authentication" caused other UI elements to revert back to previous values.
- Bug fix: NTRIP server now ignores the case of the mount point name.
- Bug fix: Satellite-levels history view has been fixed to show elevation and azimuth in degrees instead of radians.
- Bug fix: Fixed the empty KML file issue.
- Bug fix: Fixed bug for UBX-RXM-RTCM to show all supported RTCM input messages.
- Bug fix: The accidental removal of configuration view menu item has been reverted.

### 3.6 Version 18.11

- Improvement: Wrong user credentials detection in the NTRIP client has been improved and a copy button has been added to the NTRIP log.
- Bug fix: Fixed connection/reconnection problems with u-center's NTRIP client.

- Bug fix: Updated 48x48 pixel main icon to comply with new CI.
- Bug fix: Fixed rounding error in UBX-CFG-TMODE3 that could result in a binary string rejected by the receiver.



## 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.

# Contact

For complete contact information visit us at [www.u-blox.com](http://www.u-blox.com).

## u-blox Offices

### North, Central and South America

#### u-blox America, Inc.

Phone: +1 703 483 3180  
E-mail: [info\\_us@u-blox.com](mailto:info_us@u-blox.com)

#### Regional Office West Coast

Phone: +1 408 573 3640  
E-mail: [info\\_us@u-blox.com](mailto:info_us@u-blox.com)

#### Technical Support

Phone: +1 703 483 3185  
E-mail: [support\\_us@u-blox.com](mailto:support_us@u-blox.com)

### Headquarters

#### Europe, Middle East, Africa

#### u-blox AG

Phone: +41 44 722 74 44  
E-mail: [info@u-blox.com](mailto:info@u-blox.com)  
Support: [support@u-blox.com](mailto:support@u-blox.com)

### Asia, Australia, Pacific

#### u-blox Singapore Pte. Ltd.

Phone: +65 6734 3811  
E-mail: [info\\_ap@u-blox.com](mailto:info_ap@u-blox.com)  
Support: [support\\_ap@u-blox.com](mailto:support_ap@u-blox.com)

#### Regional Office Australia

Phone: +61 2 8448 2016  
E-mail: [info\\_anz@u-blox.com](mailto:info_anz@u-blox.com)  
Support: [support\\_ap@u-blox.com](mailto:support_ap@u-blox.com)

#### Regional Office China (Beijing)

Phone: +86 10 68 133 545  
E-mail: [info\\_cn@u-blox.com](mailto:info_cn@u-blox.com)  
Support: [support\\_cn@u-blox.com](mailto:support_cn@u-blox.com)

#### Regional Office China (Chongqing)

Phone: +86 23 6815 1588  
E-mail: [info\\_cn@u-blox.com](mailto:info_cn@u-blox.com)  
Support: [support\\_cn@u-blox.com](mailto:support_cn@u-blox.com)

#### Regional Office China (Shanghai)

Phone: +86 21 6090 4832  
E-mail: [info\\_cn@u-blox.com](mailto:info_cn@u-blox.com)  
Support: [support\\_cn@u-blox.com](mailto:support_cn@u-blox.com)

#### Regional Office China (Shenzhen)

Phone: +86 755 8627 1083  
E-mail: [info\\_cn@u-blox.com](mailto:info_cn@u-blox.com)  
Support: [support\\_cn@u-blox.com](mailto:support_cn@u-blox.com)

#### Regional Office India

Phone: +91 80 4050 9200  
E-mail: [info\\_in@u-blox.com](mailto:info_in@u-blox.com)  
Support: [support\\_in@u-blox.com](mailto:support_in@u-blox.com)

#### Regional Office Japan (Osaka)

Phone: +81 6 6941 3660  
E-mail: [info\\_jp@u-blox.com](mailto:info_jp@u-blox.com)  
Support: [support\\_jp@u-blox.com](mailto:support_jp@u-blox.com)

#### Regional Office Japan (Tokyo)

Phone: +81 3 5775 3850  
E-mail: [info\\_jp@u-blox.com](mailto:info_jp@u-blox.com)  
Support: [support\\_jp@u-blox.com](mailto:support_jp@u-blox.com)

#### Regional Office Korea

Phone: +82 2 542 0861  
E-mail: [info\\_kr@u-blox.com](mailto:info_kr@u-blox.com)  
Support: [support\\_kr@u-blox.com](mailto:support_kr@u-blox.com)

#### Regional Office Taiwan

Phone: +886 2 2657 1090  
E-mail: [info\\_tw@u-blox.com](mailto:info_tw@u-blox.com)  
Support: [support\\_tw@u-blox.com](mailto:support_tw@u-blox.com)