**Release note**

| | |
|---|---|
| **Topic** | **FW 3.05 HPG 1.43 – firmware for NEO-M8P products** |
| | UBX-21035325          C1-Public |
| **Author** | Vladimir Stoyanov |
| **Date** | 10 January 2022 |

## Contents

# 1   General information

## 1.1   Scope

This release note (with minor corrections made in January 2022) describes flash firmware version FW 3.05 HPG 1.43 for the NEO-M8P high precision GNSS receiver. It covers the functional improvements compared to u-blox flash firmware FW 3.01 HPG 1.40.

This firmware version FW 3.05 HPG 1.43 is installed in production on the latest NEO-M8P-0 and NEO-M8P-2 module versions. The firmware is fully backward-compatible and can be used on any NEO-M8P-0 and NEO-M8P-2 module.

## 1.2   Related documentation

[1]    NEO-M8P firmware (FW3.01 HPG 1.40) release note, UBX-17021504

[2]    NEO-M8P Interface description, UBX-13003221

[3]    NEO-M8P integration manual, UBX-15028081

[4]    NEO-M8P data sheet, UBX-15016656

[5]    u-center v20.06 release note, UBX-20010557

## 1.3   u-center

It is recommended to use the latest u-center evaluation software with the released FW. At the time of issue of this document, the u-center version is 21.09.

## 2 Released firmware image

| Released firmware image for u-blox NEO-M8P | |
|---|---|
| File | UBX_M8_305_HPG_143_REFERENCE.4afe47902b3d8068a4fedccd45b8e6be.bin |
| | UBX_M8_305_HPG_143_ROVER.74d7454b395e2fdf680d864f40b9dbed.bin |
| Firmware version | EXT CORE 3.05 (ff96ba) FWVER=HPG 1.43REF |
| | EXT CORE 3.05 (ff96ba) FWVER=HPG 1.43ROV |
| ROM base support | ROM 3.01 |
| | ROM 2.01 |

## 3 New features

No new features.

## 4 Dropped features

No dropped features.

## 5 Functional improvements

- Improved MSM correction stream handling
  - o Extended capability to handle MSM correction streams, also including messages other than the ones supported by the receiver (GPS, GLONASS, and BeiDou).
  - o Extended capability to handle MSM correction streams including SBAS messages.
- Improved M8P base station BDS D2 encoding
  - o Extended support for BDS_B1ID2 signals on GEO satellites.

## 6 Known limitations

- A change in reference station ID for a reference station providing GLONASS corrections, combined with concurrent data outage (e.g., in case of a temporarily broken communication link) could occasionally result in mixing the correction data of the new reference station with position data from a prior reference station. As a possible consequence, position errors may be temporarily observed.
- A NEO-M8P rover can use corrections from a ZED-F9P reference station only if the latter is configured to deliver GPS and GLONASS corrections.

## 7 Changed default configuration

- The revision ID in the software version string (boot screen, UBX-MON-VER message) now displays a hexadecimal instead of a decimal number.
- The default value for GPS leap seconds (UBX-CFG-NAVX5.leapSec) and GPS week number rollover (UBX-CFG-NAVX5.wknRollover) has been updated to reflect the time of release.

## 8 New and modified messages

No new or modified messages.