

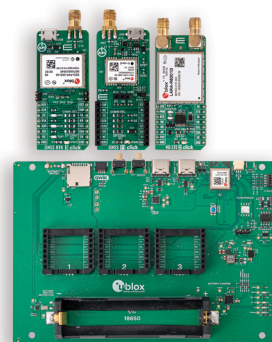
Product summary

XPLR-HPG-1

High precision GNSS explorer kit

Flexible platform for u-blox high precision GNSS solutions

- Prototyping kit for cm-level accuracy positioning applications
- High precision GNSS, LTE, Wi-Fi, Bluetooth, and antennas
- PointPerfect GNSS augmentation service
- Dual-core MCU for applications
- ubxlib software components and application in source code
- Click boards™ for flexible adaptation and expansion



Product description

The XPLR-HPG-1 explorer kit provides a complete platform for evaluation and prototyping of u-blox's high precision GNSS solution with the PointPerfect GNSS augmentation service. With its GNSS and communications modules it can access correction data from a satellite broadcast using an L-band satellite GNSS receiver or via IP connectivity using Wi-Fi or LTE.

The correction data is provided by PointPerfect, the u-blox GNSS augmentation service, and delivered via Thingstream IoT service delivery platform.

With the board's flexible design and mikroBUS™ connectors it is easy to evaluate various communication channels for correction data and to monitor the results. The base board includes the NORA-W10 wireless MCU module with Wi-Fi and Bluetooth connectivity, which runs the high precision GNSS application and controls the communications between the u-blox wireless modules.

The application makes use of ubxlib, a set of software modules connecting the various u-blox modules with concise C APIs.

The hardware design and software source code are available on Github so that customers can modify code as needed, add functionality, and start developing their own product.

Kit includes

- Base board with mounted Click boards™
- Application software example in source code
- Trial PointPerfect and AssistNow location services

Integrated positioning and communication

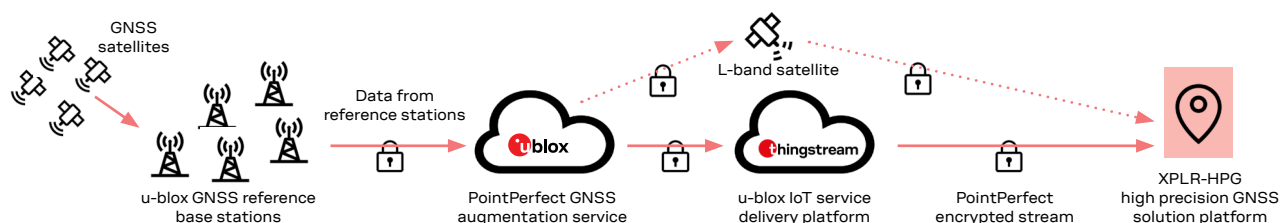
On base board NORA-W106	Dual-core MCU for applications and Wi-Fi 4 / Bluetooth LE v5 connectivity
Click board ZED-F9R-03B	High precision GNSS receiver module with dead reckoning
Click board NEO-D9S	L-band GNSS correction receiver module
Click board LARA-R6001D	LTE Cat 1 module to receive PointPerfect correction data via mobile network
Correction service PointPerfect	PointPerfect based on SPARTN messaging format and MQTT delivery protocol

Electrical data and interfaces

Power supply	USB and onboard battery (not included)
Application MCU	Dual LX7 with 8 MB flash and 512 kB RAM
Data storage	SD card slot for max 32 GB
Antennas	Bluetooth and Wi-Fi (on NORA-W106), 2 LTE, GNSS and L-band

Product variants

XPLR-HPG-1	High precision GNSS explorer kit with Wi-Fi, Bluetooth, cellular, and GNSS technologies. PointPerfect, AssistNow
------------	--



Legal Notice:

u-blox or third parties may hold intellectual property rights in the products, names, logos, and designs included in this document. Copying, reproduction, or modification of this document or any part thereof is only permitted with the express written permission of u-blox. Disclosure to third parties is permitted for clearly public documents only.

The information contained herein is provided "as is". No warranty of any kind, either express or implied, is made in relation to the accuracy, reliability, fitness for a particular purpose or content of this document. This document may be revised by u-blox at any time. For most recent documents, please visit www.u-blox.com.

Copyright © 2022, u-blox AG

Further information

For contact information, see www.u-blox.com/contact-u-blox.

For more product details and ordering information, Visit www.u-blox.com/product/xplr-hpg-1