NTL ADP KIT

FOR NTL10X OEM MODULES FAMILY

Overview

2022

CONTENTS

1 NTL ADP KIT PACKAGE CONTENTS

For a quick and easy set up GNSS receiver OEM modules and rapid testing, take advantage of NTL Adp Kit.

The NTL Adp Kit includes everything you need to work with the navigation OEM modules of the NTL10X family or other OEM modules form-factor and pinout compatible.

NTL Adp Kit package contains*:

- NTL Adp Board – 1pcs. (A);
- TW3972 – Triple Band GNSS antenna with L-Band Correction + antenna cable, 5m – 1pcs. (B, C);
- TNC female to SMA male cables – 1pcs. (D) (optionally);
- SMA female to MMCX male cables – 2pcs. (E);
- USB standard A to mini-B cable – 1pcs. (F);
- Documentation set;
- Packaging.

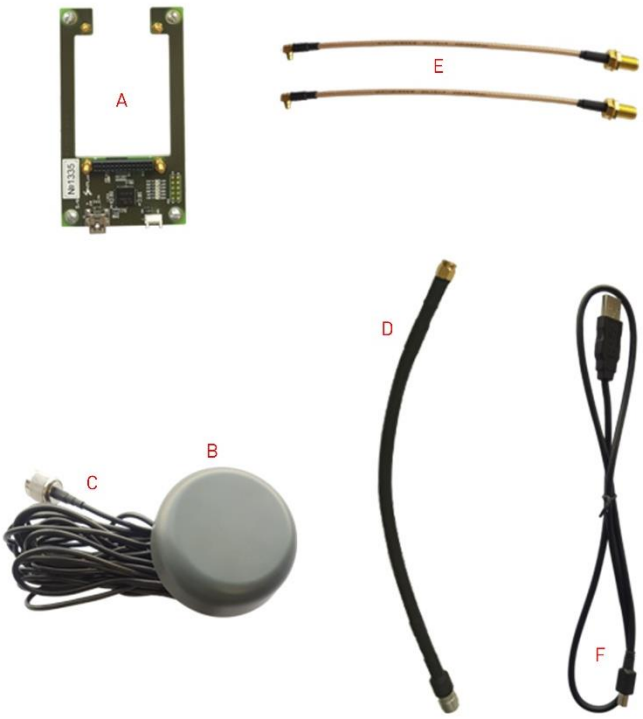


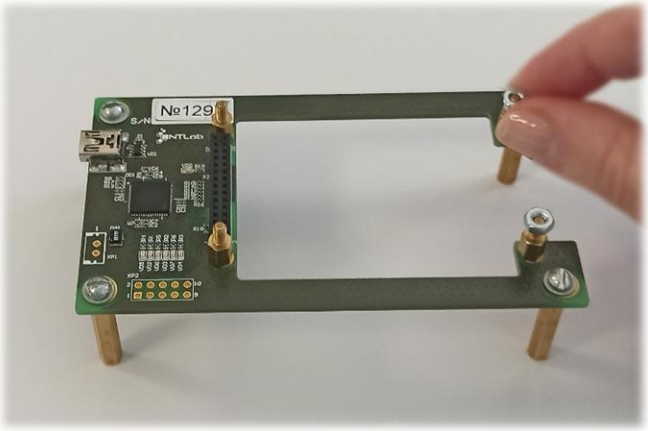
Figure 1.1 – NTL Adp Kit package contents

*The package contains can be changed by the supplier. Please, visit **www.ntlab.lt** for actual information on the package contents.

2 NTL ADP KIT CONNECTION DIAGRAM

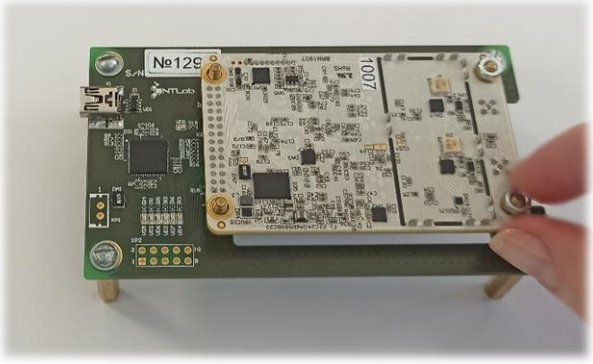
Complete the following steps:

- NTL Adp Board have sets of four standoffs. Remove the top set of four nuts.



- Place the NTL10X OEM module on the standoffs so the pin header on the OEM module faces downward and fits into the mating pin header on the NTL Adp Board.

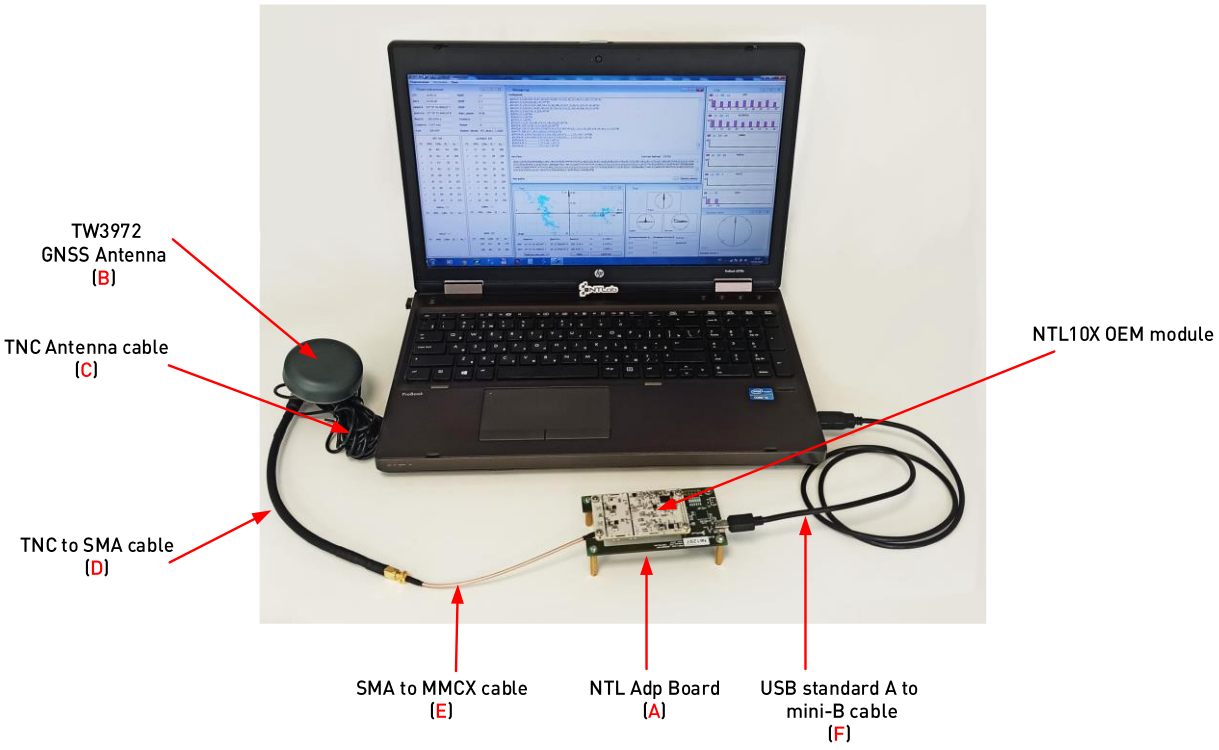
- Attach the nuts you removed in step above to secure the OEM module to the NTL Adp Board (hand-tighten only).



- Connect an external TW3972 antenna to the NTL10X OEM module using **C***, **D*** and **E*** cables.
- Connect the **F*** cable to **X1** NTL Adp Board connector and to a USB port on your PC.
- Install CP210x drivers on computer for NTL Adp Board. The drivers are available from:

https://www.silabs.com/products/development-tools/software/usb-to-uart-bridge-vcp-drivers

- Run NTL Browser for development, diagnostic testing and demonstrate the OEM module work results. NTL Browser is a software tool designed to communicate with NTL10X. It is available on NTLab company FTP server. Link (password and login) may be provided on request.



* See figure 1.1

3 ANTENNA SPECIFICATIONS*

Applications:

- Precision positioning;
- Triple Frequency RTK receivers;
- Military & Security.

Main electrical antenna specifications:

- Frequency Range: GPS L1/L2/L5, GLONASS G1/G2/G3, BeiDou B1/B2, Galileo E1/E5a+b plus L-band correction services;
- Filter Bandwidth: L2/L5 1164MHz...1254MHz, L-Band/L1 1525 MHz...1606MHz;
- LNA Noise Figure: < 2.5dB typ. at 25°C;
- Overall LNA Gain: 37dB typ., 35dB min;
- Gain Variation with Temperature: 3dB max over operational temperature range;
- VSWR (at LNA output, reference 50 Ohms): <1.5:1 typ. 1.8:1 max.;
- EMI Immunity: 50V/Meter, excepting L1+/-100MHz and L2 +/- 100MHz;
- Supply Voltage Range: +2.5 to 16V DC nominal, up to 50mV p-p ripple;
- Supply Current: 24 mA typ. at 25°C;
- ESD Circuit protection: 15 KV air discharge.

Mechanicals & Environmental:

- Mechanical Size, Ground Plane: 66mm x 21mm, 100mm ground plane recommended;
- Cable connector: TNC male;
- Operating Temperature Range: -40°C to +85°C;
- IP67, REACH, and RoHS compliant;
- Weight: 185 g.

* According to the product datasheet

CONTACTS

For complete contact information visit us at **www.ntlab.lt**

Office
NTLAB, UAB
Švenčionių g. 112, Nemenčinė, LT-15168 Vilniaus r., Lithuania
Tel.: +370 6 169 5418
e-mail: sales@ntlab.lt

Rev 02