How to Enable and View GNSS Satellites

To enable and view GNSS satellites with BG77/BG95/BG96/EG91/EG95 USB dongles or miniPCIe, or hardware boards, do the following:

1- Install the following driver for Modem on Windows:
5G-NB-IoT/Driver/Quectel_LTE&5G_Windows_USB_Driver_V2.1 at master · 5ghub/5G-NB-IoT (github.com)

2- Install QCOM V1.6:
5G-NB-IoT/Tools at master · 5ghub/5G-NB-IoT (github.com)

3- Install QGNSS V1.7:
5G-NB-IoT/Tools at master · 5ghub/5G-NB-IoT (github.com)

4- Make sure to connect GPS/GNSS antenna to the GNSS UFL connector on the hardware board. You can use either a passive or active antenna.
5- Plug the USB dongle into a USB port. Or connect the USB port, through a USB cable, to USB port on a computer.
6- Launch Windows device manager, you shall see the following ports:

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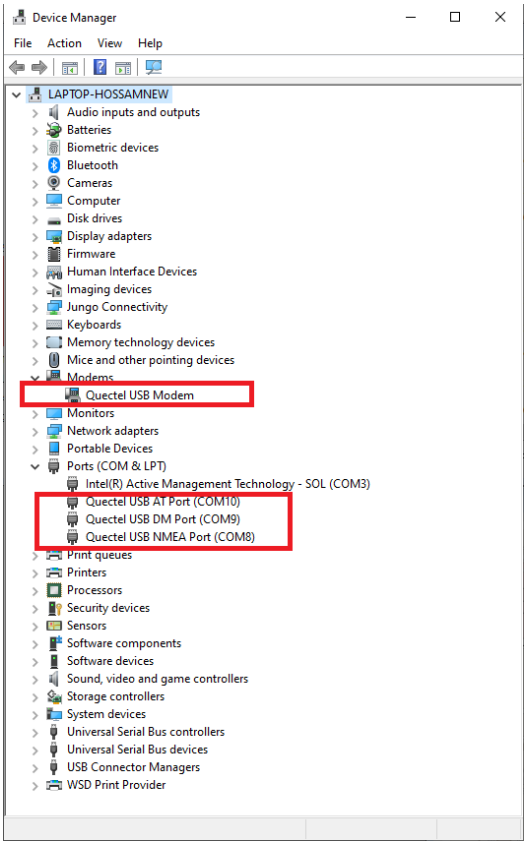

Figure 1: EG91/EG95 Devices

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7- You can connect to the COM port of either **USB AT Port** or **USB Modem**. If the latter, right-click the **USB Modem**, choose **Properties** and select the **Modem** tab to find the COM port.

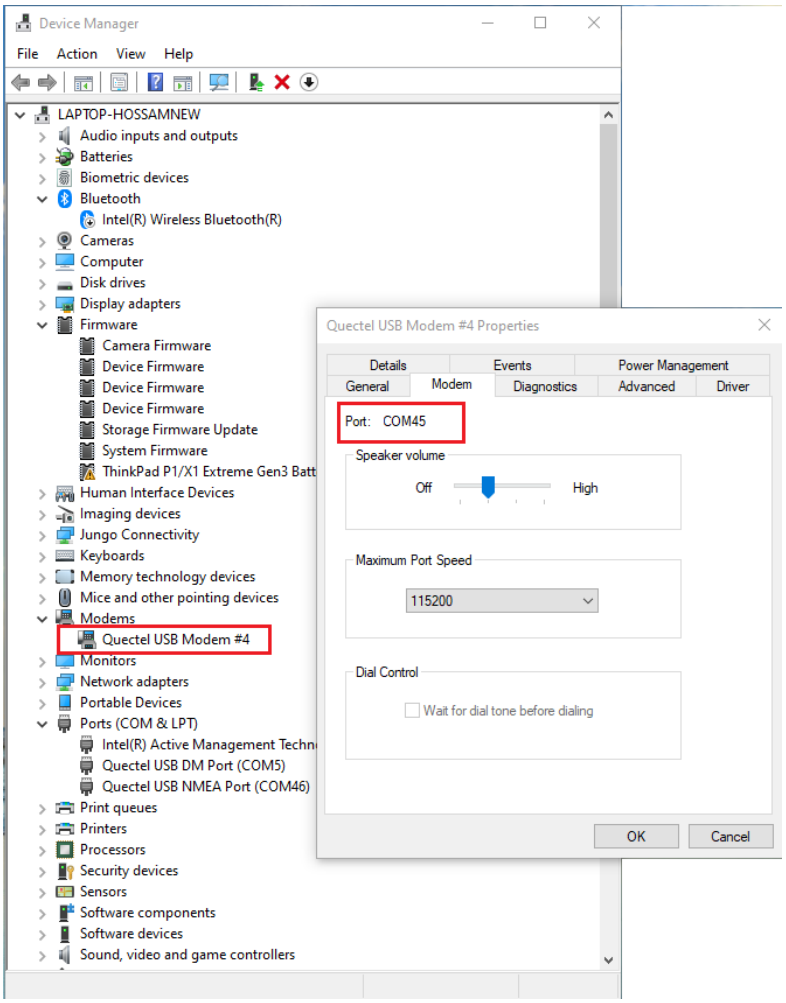

Figure 2: BG77/BG95 Devices

8- Launch QCOM tool and connect to the **USB AT port** or **USB Modem** port and click **Open Port**. Run **AT+QPS=1** and this will enable the GNSS on the modem.

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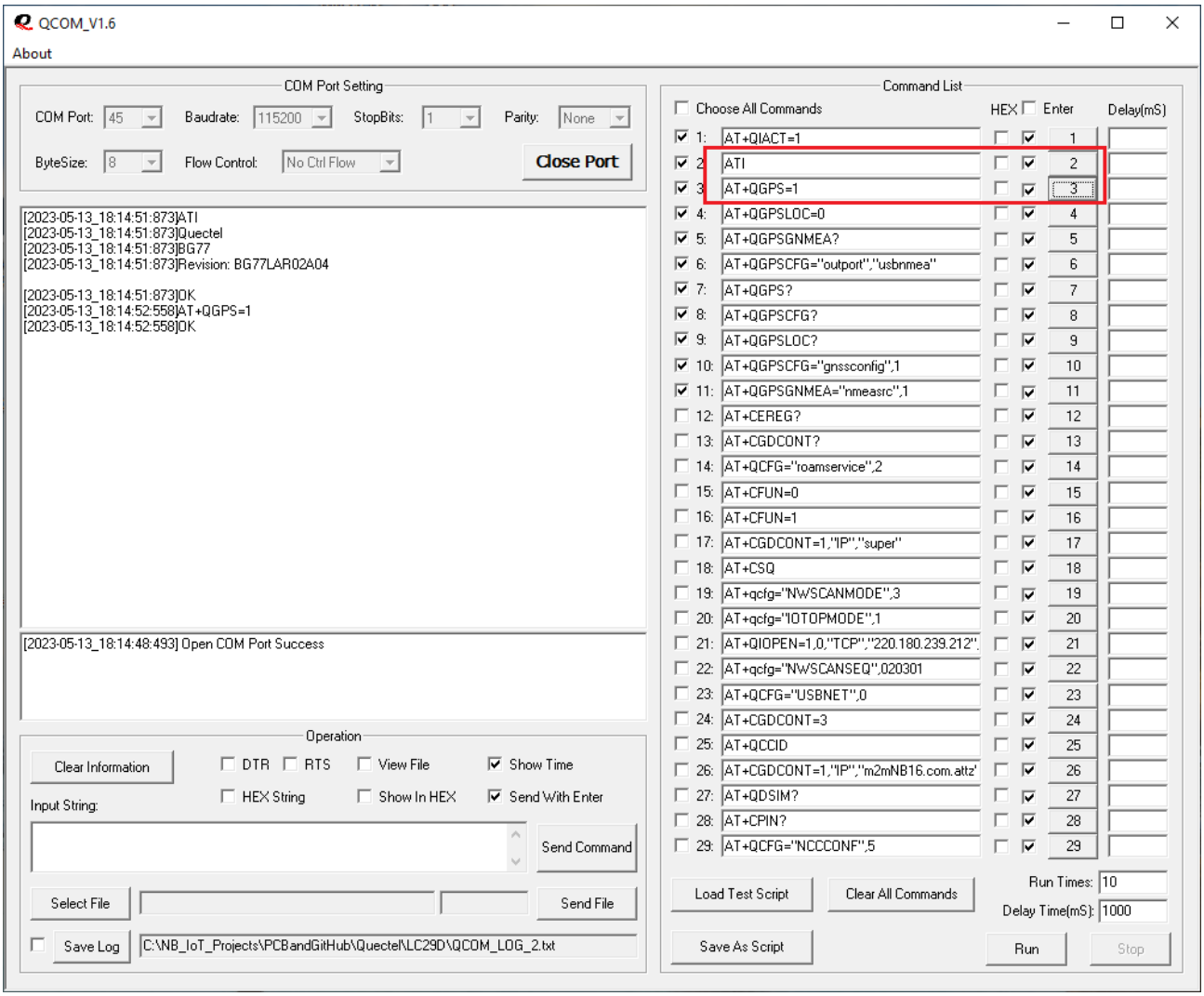

Figure 3: BG77 Device

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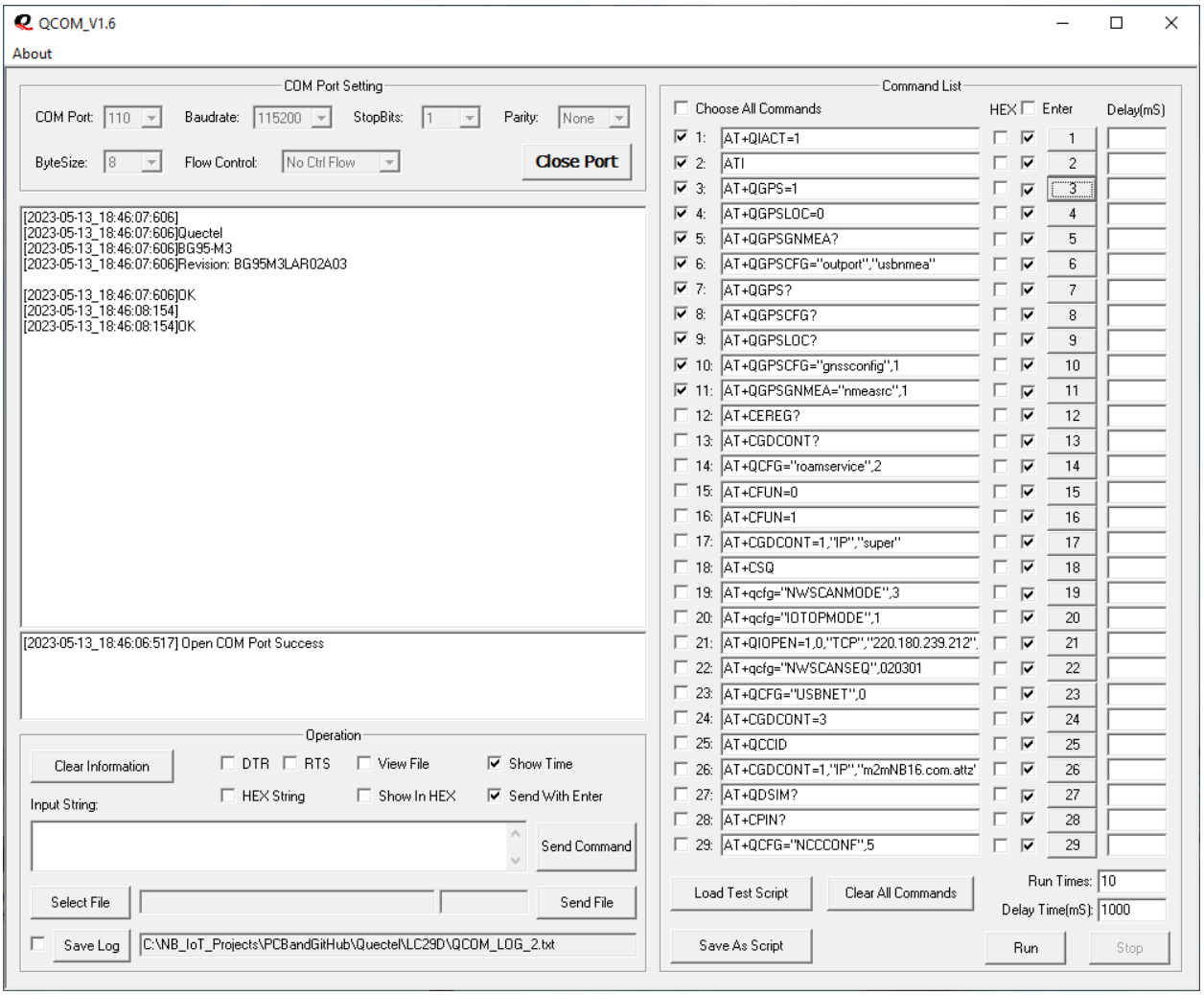

Figure 4: BG95 Device

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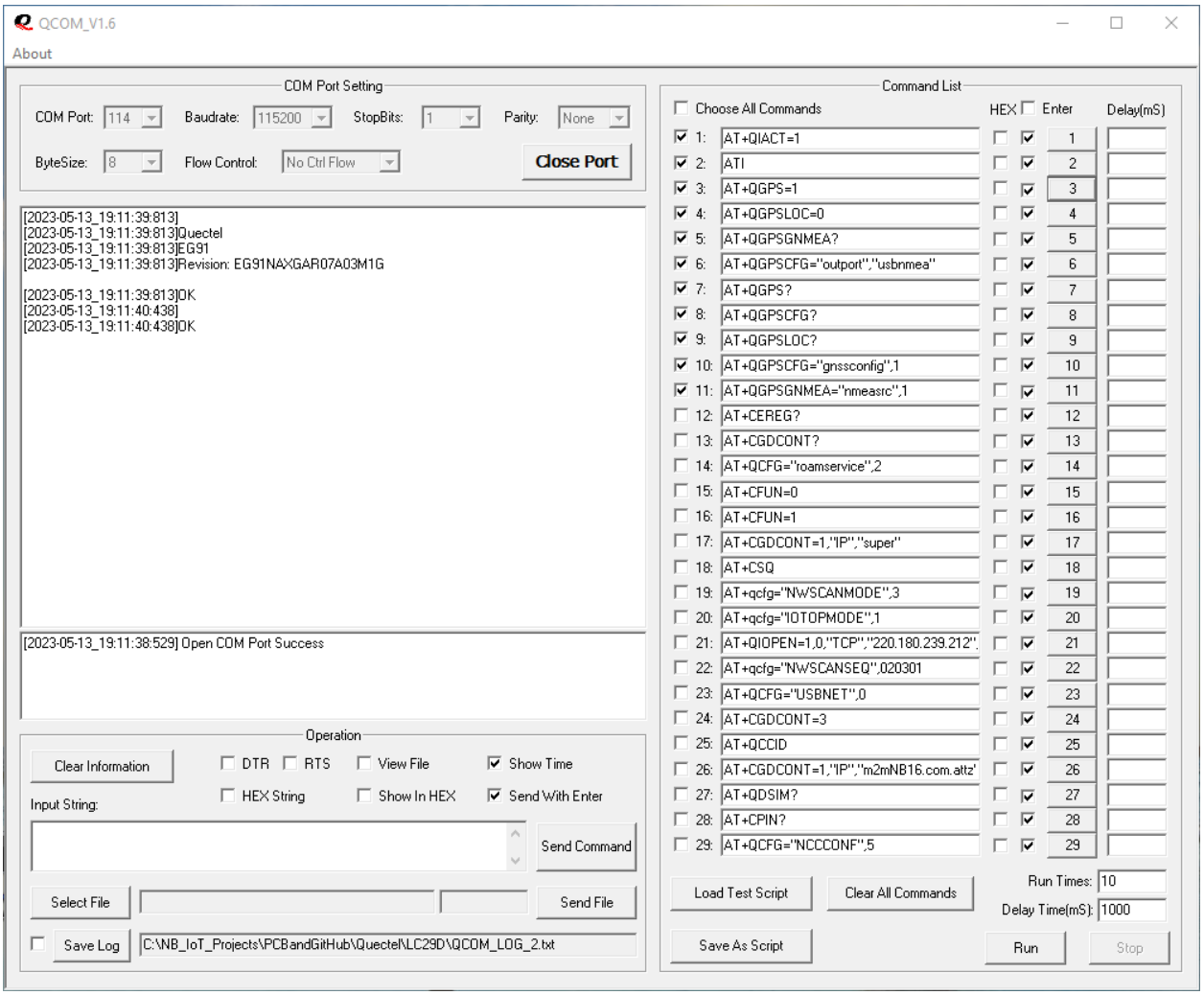

Figure 5: EG91NA/NAX Device

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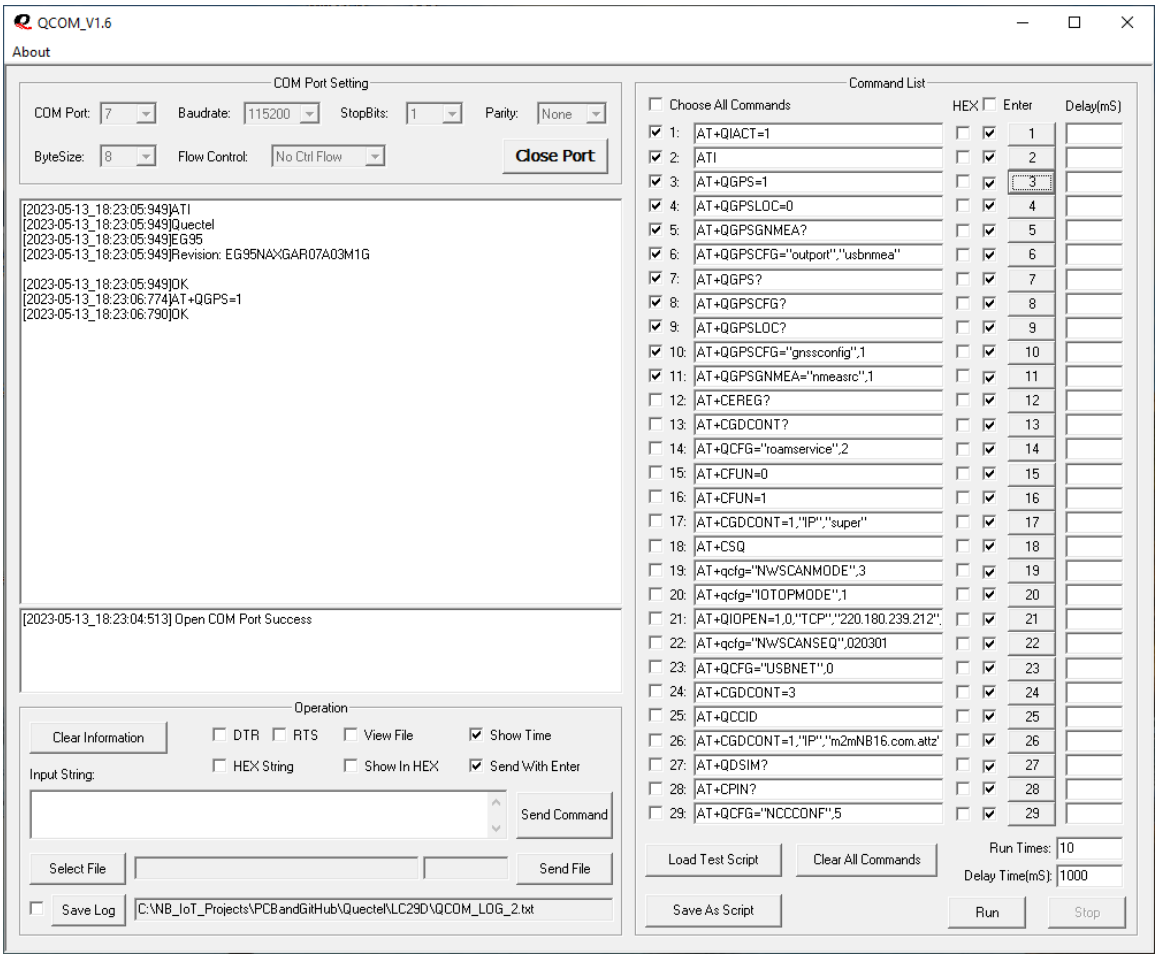

Figure 6: EG95NA/NAX Device

9- Launch QGNSS tool, select **Device->Connect** from top menu bar, and select the **Quectel USB NMEA Port**. Click **OK**

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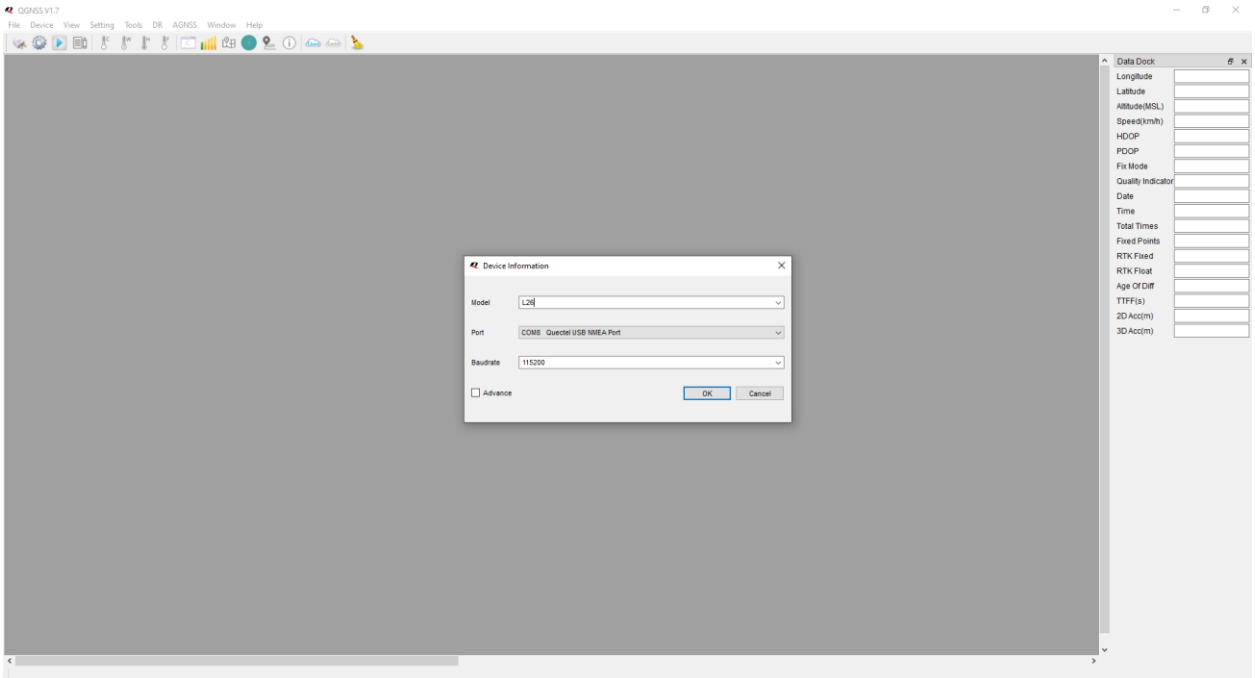

Figure 7: QNSS Tool

10- Choose the following from the QGNSS menu bar:
View->Data Dock
View->Binary Data
View->Online Map
View->GNSS Signal View
View-> Sky View

11- Wait a few seconds, GNSS will lock to satellites and display all NMEA sentences and positing information. This is how it looks when GNSS is locked and displaying satellites and positing information.

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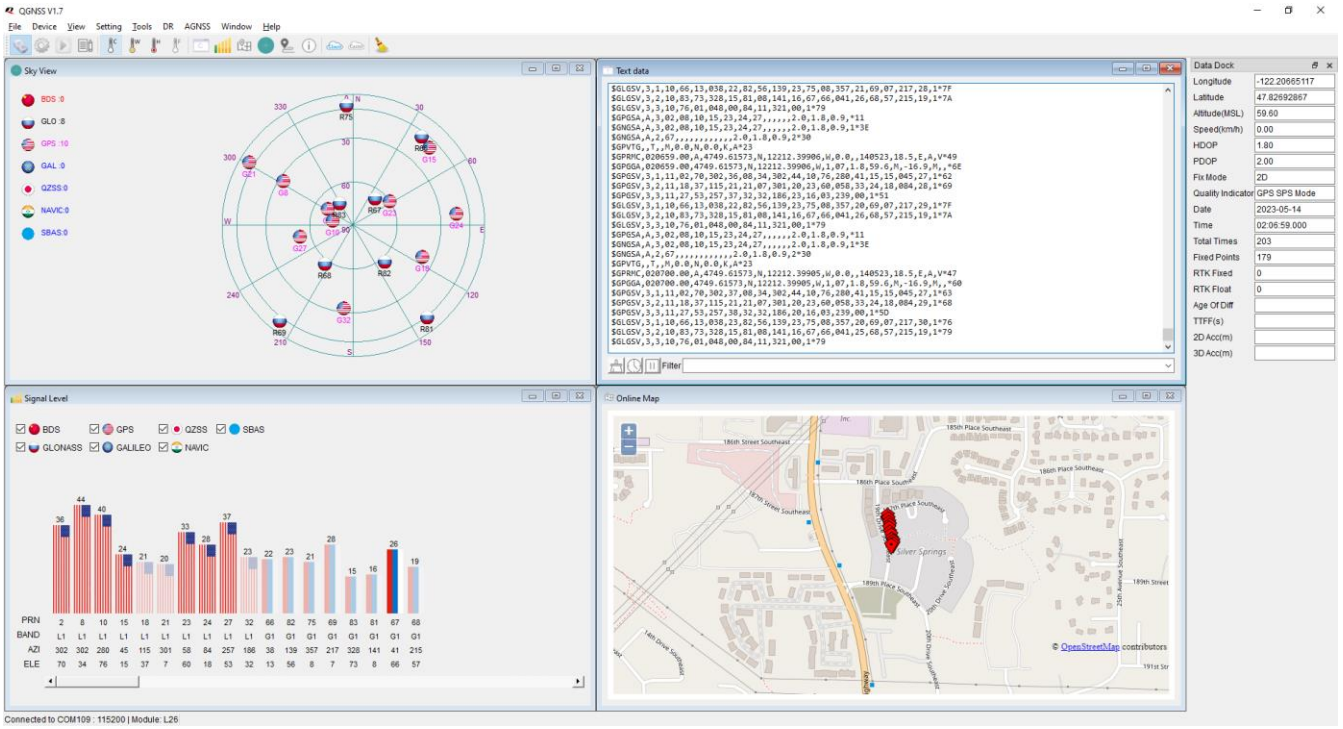

Figure 8: BG77 Device

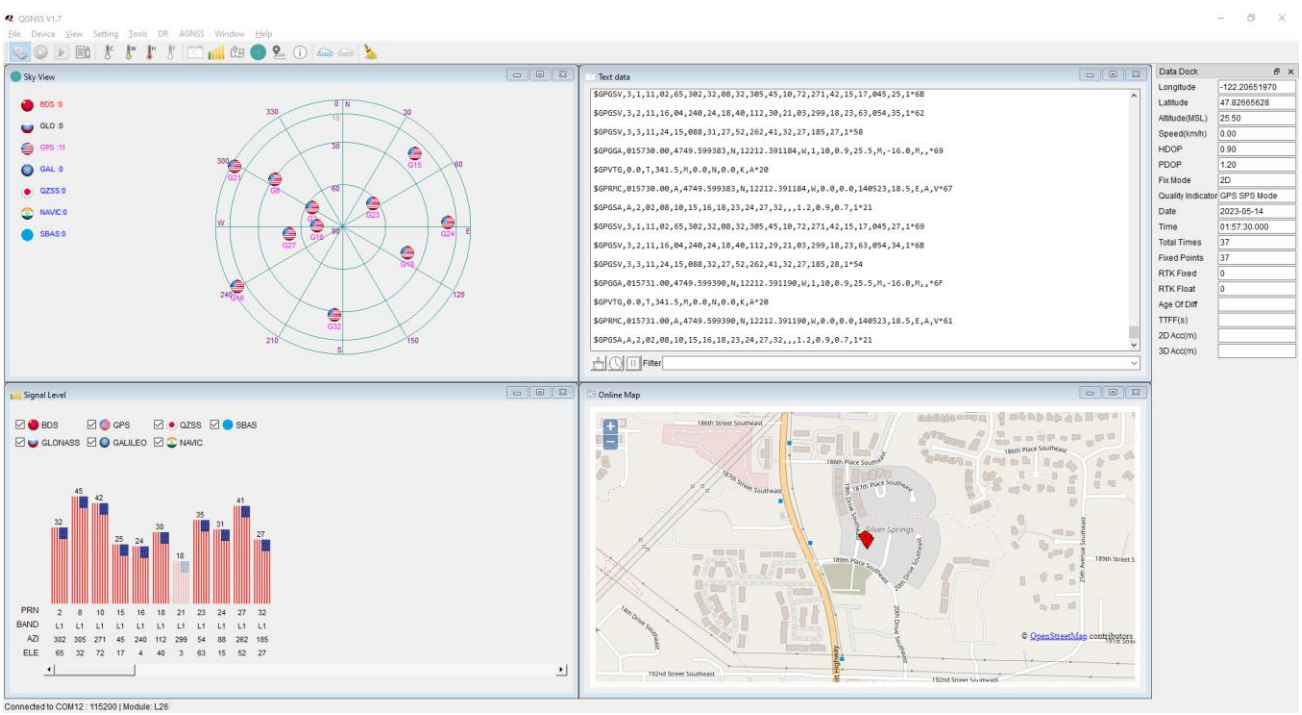

Figure 9: EG91NA/NAX Device

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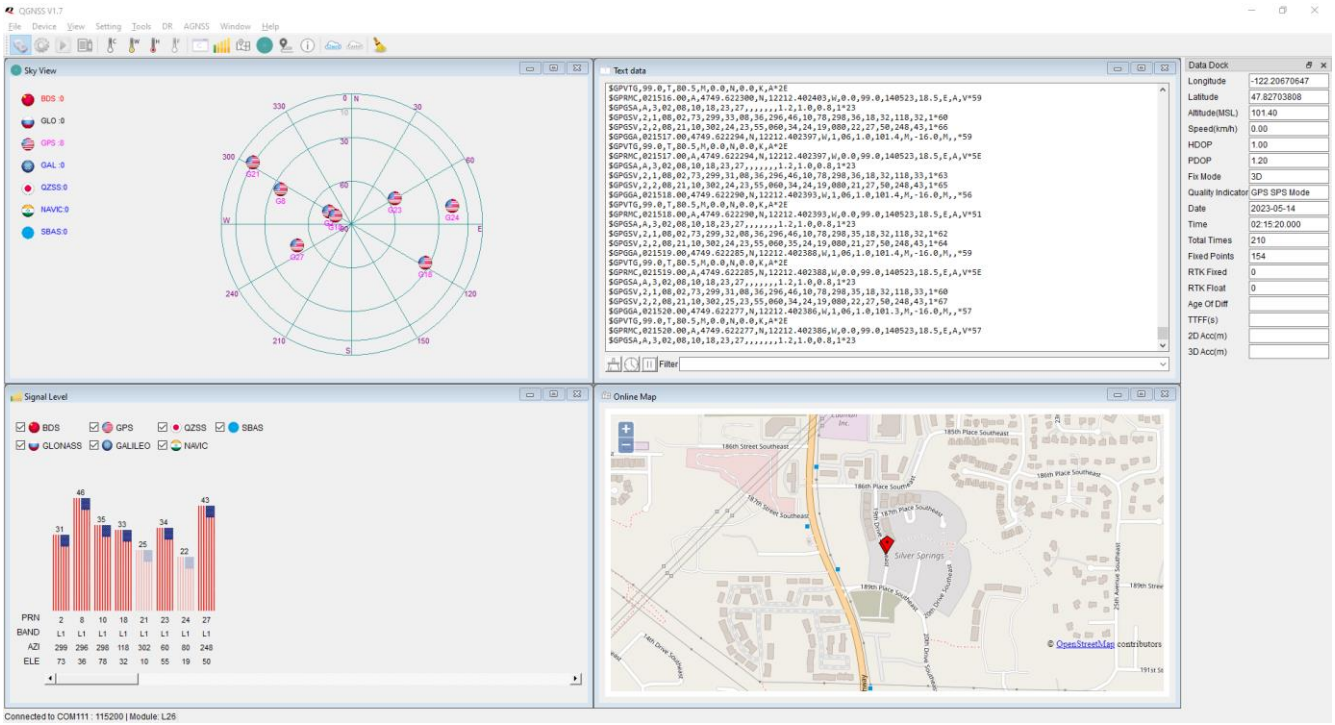

Figure 10: EG95EX Device

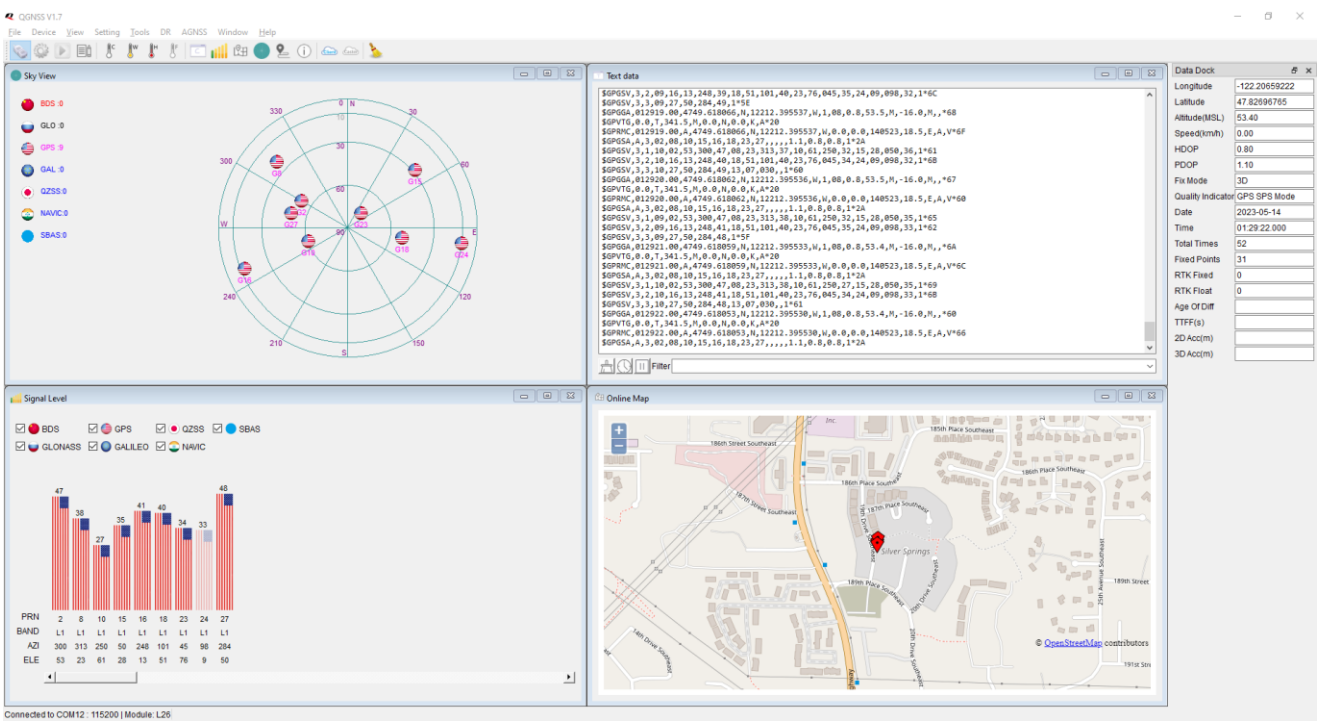

Figure 11: EG95NAX Device

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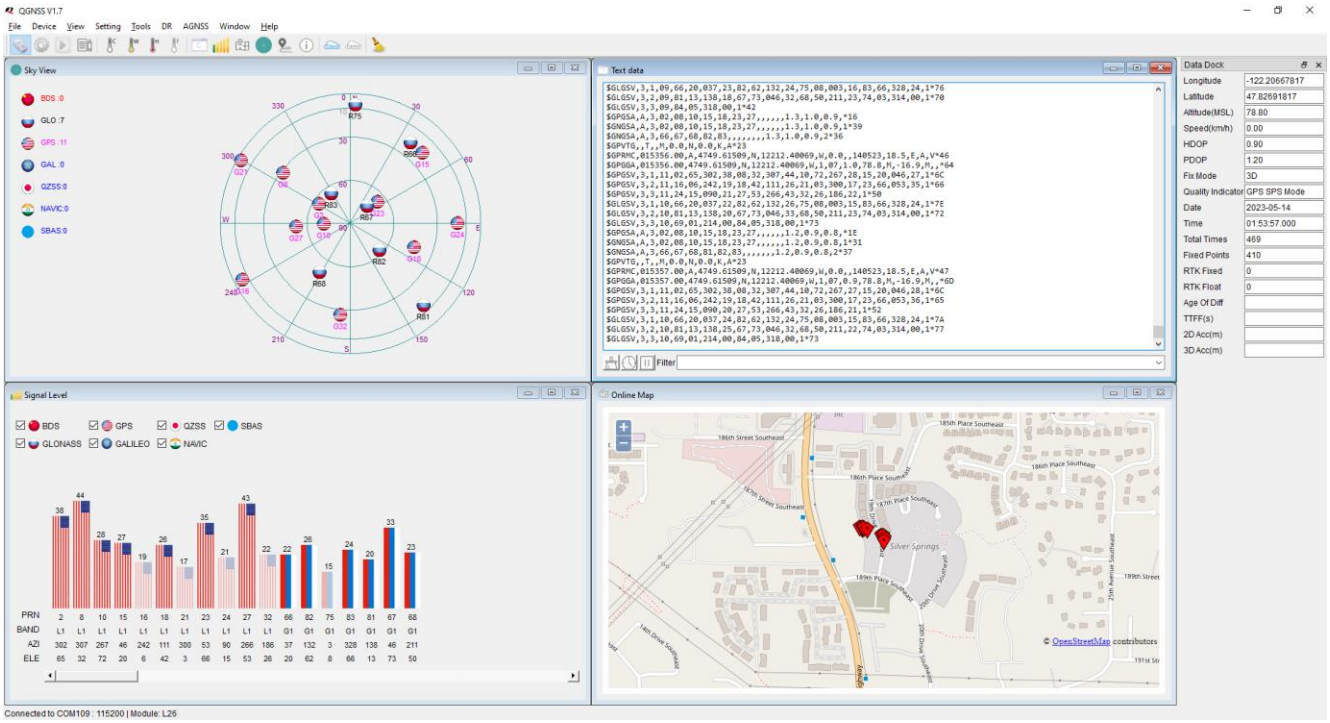

Figure 12: BG95 Device

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