

## **Installation of GNURADIO**

To install gnuradio

```
sudo add-apt-repository ppa:gnuradio/gnuradio-releases
sudo apt-get update
sudo apt install gnuradio
sudo apt-get install gnuradio-dev
```

(For more information about gnuradio installation on linux from source or installation on Windows <https://wiki.gnuradio.org/index.php/InstallingGR> )

Install osmocom source/sink for RTL-SDR in gnuradio

```
git clone git://git.osmocom.org/gr-osmosdr
cd gr-osmosdr/
mkdir build
cd build/
cmake ../
make
sudo make install
sudo ldconfig
```

you also may need to set python path to osmosdr in

Open the file ~/.bashrc in your text editor – e.g. nano ~/.bashrc

add this line to end and save

```
export PYTHONPATH=/usr/local/lib/python3/dist-packages/:$PYTHONPATH
```

(Information obtained from <https://github.com/osmocom/gr-osmosdr>)

## **Installation of USRP Hardware Drivers**

**(you may install the driver for the SDR you are using if it is other than USRP)**

Install the USRP N210 hardware driver

```
sudo add-apt-repository ppa:ettusresearch/uhd
sudo apt-get update
sudo apt-get install libuhd-dev libuhd003 uhd-host
```

install UHD images

```
sudo uhd_images_downloader
```

(Information obtained from [https://files.ettus.com/manual/page\\_install.html](https://files.ettus.com/manual/page_install.html))

for installation from source [https://kb.ettus.com/Building\\_and\\_Installing\\_the\\_USRP\\_Open-Source\\_Toolchain\\_\(UHD\\_and\\_GNU\\_Radio\)\\_on\\_Linux](https://kb.ettus.com/Building_and_Installing_the_USRP_Open-Source_Toolchain_(UHD_and_GNU_Radio)_on_Linux) )

## **Installation of RTL-SDR Hardware Drivers**

Install RTL SDR driver

```
sudo apt-get update
sudo apt-get install rtl-sdr
```

(for the installation from the source or installation on windows, see <https://www.rtl-sdr.com/tag/install-guide/> )