Beware of cheap underperforming clones

As of July 2024 there are many badly performing clones on the market. V2/3GHz NanoVNA uses parts like ADF4350 and AD8342 which are costly and clones have been cutting costs by using salvaged or reject parts.

See official store and **look for V2 Plus4/V2 Plus4 Pro versions only** to avoid getting a bad clone. We have stopped selling V2.2 versions since October 2020, so all V2 hardware that are not Plus or Plus4 are not made by us and we can not guarantee performance.

NanoVNA software

NanoVNA-QT and NanoVNA Saver are the two PC applications for the NanoVNA series, and both are supported by NanoRFE hardware. You can download the software and drivers here.

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NanoVNA-QT

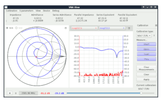
NanoVNA-QT (VNA View) is the native software for the NanoVNA V2 Plus4 and VNA6000 series. It supports adjustable sweep points and performing firmware updates. We recommend using NanoVNA-QT as it is the official software maintained by NanoRFE and fully tested to be compatible with all V2 and later NanoVNA versions.

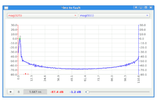
You may use the "mock device" feature (under the Device menu) to try the software prior to buying a VNA.

Features:

- Smith chart, logmag, impedance, and VSWR plots
- Live measurement - realtime display
- Custom calibration kit parameters
- TDR (time domain reflectometry) and distance to fault measurements
- Port length extension allows correcting for cable length after calibration
- C/C++ API allows raw S parameter data access
- 1 port and 2 port S parameter export
- CSV file export
- Automatic continuous data export
- Compatible with NanoVNA V2 versions listed here and VNA6000 series.

Screenshots:





Download drivers

On Windows 10 and earlier, please run CypressDriverInstaller_1.exe first to install the USB-CDC driver.
On Windows 11 and later, the driver is automatically installed by Windows Update upon first connection, and the driver below should not be used.
On Linux and MacOS, no drivers are needed. Download and run .AppImage or .dmg directly.

CypressDriverInstaller_1.exe (driver for Windows 10 and earlier)

If using Windows 10, you may need to update your NanoVNA firmware to the latest version.

Download v1.1 (Latest version)

Linux AppImage (64 bit) Linux AppImage (32 bit) Windows executable MacOS .dmg

New in v1.1: support VNA6000; adjustable IFBW and averaging settings for V2 Plus4 Pro; automatic continuous data logging (View > Continuous export)

Note: on Windows, if you get an error when connecting to the device, you may need to select Device > Other, and enter "\\.\COMx", for example "\\.\COM1"

Download 20200507

Linux AppImage (64 bit) Linux AppImage (32 bit) Windows executable MacOS .dmg

NanoVNA Saver

NanoVNA Saver is a tool developed by Rune B. Broberg and supports both V1 and V2 NanoVNAs.

This software connects to a NanoVNA and extracts the data for display on a computer and allows saving the sweep data to Touchstone files.

The software was written in Python on Windows, using Pycharm, and the modules PyQT5, numpy, scipy and pyserial. Main development is currently done on Linux (Mint 20.3 Cinnamon)

GitHub repository

Features:

- Reading data from a NanoVNA -- Compatible devices: NanoVNA V1 and V2
- Splitting a frequency range into multiple segments to increase resolution (up to >10k points)
- Averaging data for better results particularly at higher frequencies
- Displaying data on multiple chart types, such as Smith, LogMag, Phase and VSWR-charts, for both S11 and S21
- Displaying markers, and the impedance, VSWR, Q, equivalent capacitance/inductance etc. at these locations
- Displaying customizable frequency bands as reference, for example amateur radio bands
- Exporting and importing 1-port and 2-port Touchstone files
- TDR function (measurement of cable length) - including impedance display
- Filter analysis functions for low-pass, high-pass, band-pass and band-stop filters
- Display of both an active and a reference trace
- Live updates of data from the NanoVNA, including for multi-segment sweeps
- In-application calibration, including compensation for non-ideal calibration standards
- Customizable display options, including "dark mode"
- Exporting images of plotted values

Windows 7

Requires Service Pack 1 and Microsoft VC++ Redistributable. For most users, this would already be installed.

Windows 10

The downloadable executable runs directly, and requires no installation.

Windows versions older than Windows 7 are not known to work.

Download v0.6.2 (Latest version)

Linux executable Windows 64 bit

New in v0.6.2

- PyQt6 fixes
- Add option --auto-connect, connect automatically if one device detected
- Correct some inconsistencies in the UI
- 3rd party library updates

Download v0.5.5

Linux executable MacOS executable Windows 64 bit Windows 32 bit

New in v0.5.5

- Measuring inductor core permeability
- Bugfixes for calibration data loading and saving
- Make some windows scrollable

Download v0.5.4

Linux executable MacOS executable Windows 64 bit

New in v0.5.4

- Support V2 Plus5 on Windows