Brief comparison of NanoVNA V2 with a professional VNA HP-8753E

Matthias, DD1US, April 17th 2020, rev 1.0

Recently I acquired a NanoVNA V2, which is specified to cover the frequency range up to 3 GHz. The price of 64 USD including shipping to Germany is amazing low. I bought it from Tindie in China.

I have not thoroughly investigated its performance but made a quick comparison with my HP-8753E VNA. I measured S11 at 2.4 GHz of a POTY feed for my portable QO-100 setup. Here are the results:

S11 Smith Chart of the POTY feed in the frequency range 2000-2800MHz measured with HP-8753E
S11 log magnitude of the POTY feed in the frequency range 2000-2800MHz measured with HP-8753E

S11 SWR of the POTY feed in the frequency range 2000-2800MHz measured with HP-8753E
S11 Smith Chart, log mag and SWR of the POTY feed in the frequency range 2200-2600MHz measured with the NanoVNA V2.

Direct comparison S11 Smith Chart:

NanoVNA V2 2.2-2.6GHz

HP-8753E 2.0-2.8GHz

The first results with the NanoVNA V2 are quite encouraging. If you have more information or questions please let me know.

Kind regards
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