

Wideband Amplifier Herotek A1812-119C

Matthias, DD1US, July 21st 2017

Recently I was able to acquire some wide band amplifiers at a flea market and now found the time to characterize them. Here is the data I measured of the Herotek A1812-119C device.

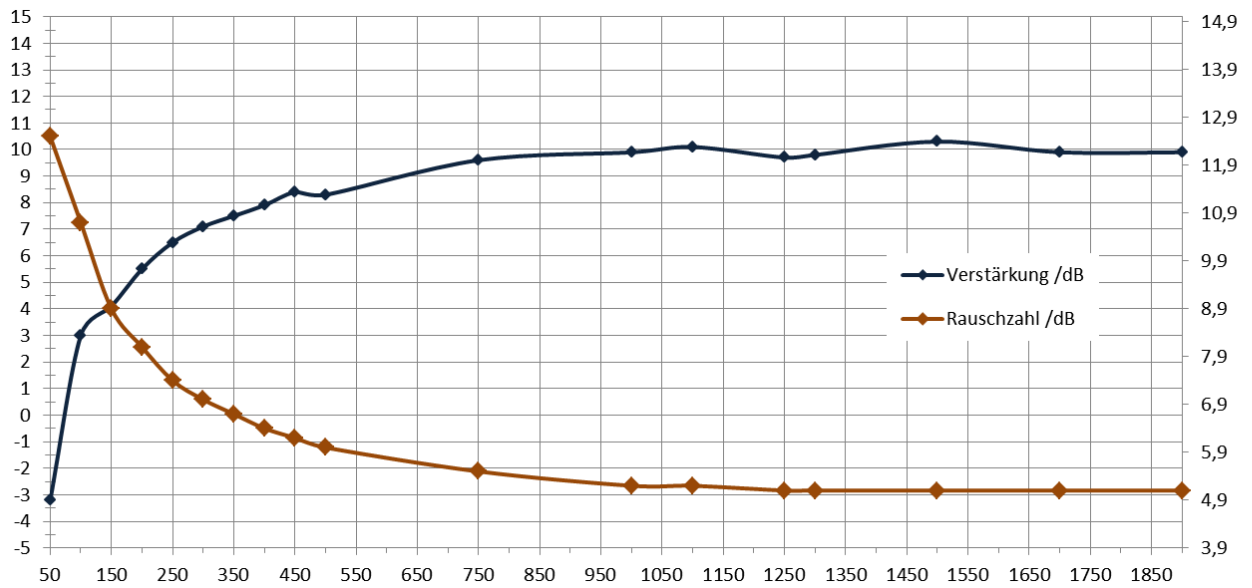
As I found no data in the internet about such a device I hope the little documentation may help others determining whether such an amplifier might be of interest for them.

Here are some pictures of the device:

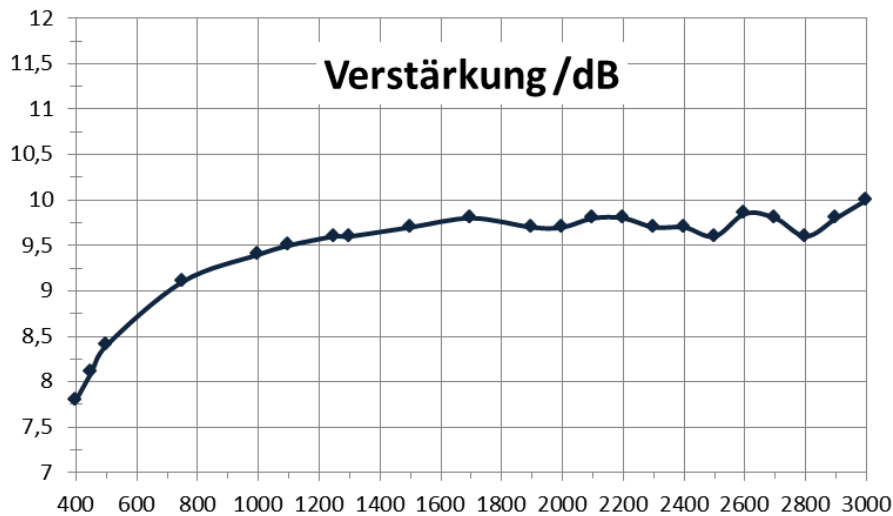


The handwritten frequency range is from the seller at the flea market. Apparently he verified that the amplifier works in the frequency range 2.5 to 13 GHz. No other data was available. The supply voltage of the amplifier is 5V and the supply current is 80mA.

First I measured the device with my noise measurement setup which covers the range 50 MHz to 1900 MHz. Here are the results:



You can see that the gain (dark blue curve “Verstärkung” with the left scale) is almost constantly about 10dB in the range from 750 up to 1900 MHz and the noise figure (brown curve “Rauschzahl” with the right scale) at the same frequency range is about 5dB. Next I measured the gain from 400 MHz up to 3 GHz using a signal generator and power meter. Here are the results:



I am always grateful to get feedback and will be happy to answer questions.

Please direct them to the Email address which you will find below.

Best regards

Matthias DD1US

Email: DDIUS@AMSAT.ORG

Homepage: <http://www.dd1us.de>