

Alfa 300mW AWUS036EH vs. Gsky 500mW adapter

This test was completed by Rokland LLC, online at <http://www.rokland.com>. *Please note that in each test we test the adapters that are part of the specific test at the same time in the same location. A separate test of other products done on a different date may not have been from the same location, and thus you may notice that the same model adapter detects a different number of APs in a different test. That is the reason why. It is only accurate to compare the results of adapters in a specific test against one another, comparing an adapter's results in one test to another adapter's results in a completely different test will likely result in an inaccurate comparison.*

We completed a head to head test of the Alfa AWUS036EH 300mW USB adapter and the Gsky 500mW adapter. To keep things simple for the layman, we used the Windows XP utility to show a basic read of how many networks each picked up, and what the rough signal strength was of each. We find this to be better for novice users than Netstumbler readouts where the negative dBm numbers (and duplicate SSIDs) can be confusing. The results below were on par with some testing we did using Netstumbler though.

Our testing was done at the same time, with each adapter in the same location, connected to the same 8 dBi gain dipole antenna. Each test ran about two minutes. We tested the Alfa 300mW adapter first, disconnected it from the computer and disconnected the 8 dBi antenna from it, and then connected the antenna to the Gsky and connected the Gsky to the computer. The images you see are from the first test. We ran the same test again to make sure there were no anomalies, and there were not, each adapter picked up the same number of signals and the average signal strength per access point detected was within 1/10 of a point.

Because the Windows XP scanning utility cannot be expanded (meaning you have to scroll to see all the available networks), we had to take multiple screen shots of the utility screen in some cases and have combined the screenshots together so that there is just one image for each adapter.

The testing begins on the next page- please proceed to page 2. The Alfa 300mW results are on page 2, the Gsky 500mw results are on page 3, and a conclusion is also on page 3.

Please note that to protect the privacy of owners of the access points detected during the tests, we have blacked out the AP names.

Test 1- Alfa 300mW USB adapter (model AWUS036EH)

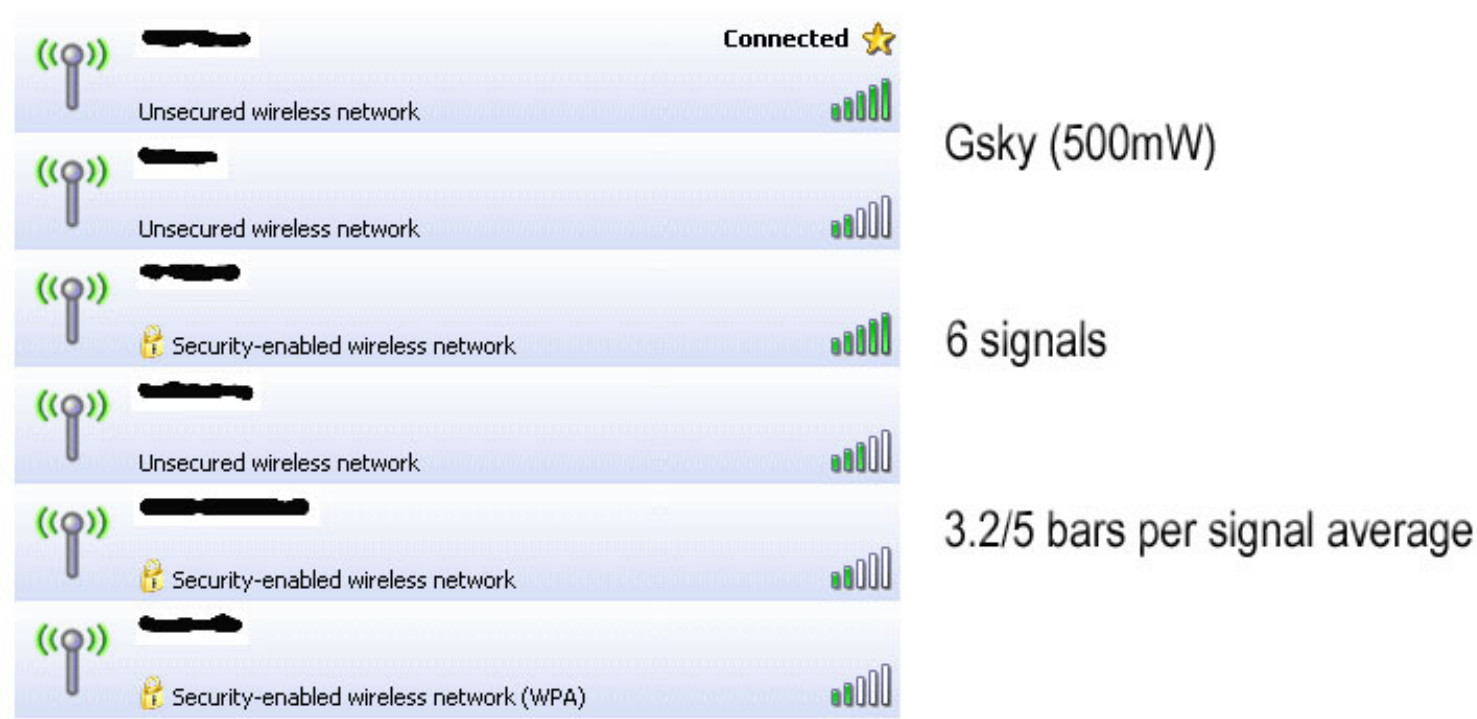


Alfa AWUS036EH (300mw)

7 signals

3/5 bars per signal average
*3.3/5 when calculation only
the APs also detected by the
Gsky

Test 2- Gsky 500mw Wireless USB adapter



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Conclusion: This testing demonstrated that the Alfa AWUS036EH 300mW adapter and the Gsky 500mW adapter are similar in terms of their abilities, but the Alfa model still did a bit better. It picked up one more access point, though the signal on that AP was low. If you remove that added signal from the equation, the Alfa also demonstrated slightly better signal strength. As the time of this publication, the AWUS036EH adapter is available at market for about \$5.00 less than the Gsky. The Gsky is capable of a higher max output power, but has a chipset with a weaker sensitivity compared to the Alfa. The Alfa unit has the same Realtek chip that the popular 500mW AWUS036H model from Alfa has. It is also important to note that once you get above 200mW, the max output rarely comes into play unless you are using a very high gain outdoor antenna. In most environments the max output power is not as important as the receive sensitivity of the device, but the output power does matter. The other key difference between the products is that the Alfa unit can connect directly to a computer, where as the Gsky is a palm-style adapter that must be connected via a USB cable.