

# AV-TEST Windows Home User Test of Avast One Free

The test was commissioned by Avast and performed by AV-TEST.

Date of Report: 3<sup>rd</sup> September 2021

## 1. EXECUTIVE SUMMARY

Avast commissioned AV-TEST to perform a dedicated test of their new product Avast One against the test categories PROTECTION, USABILITY and PERFORMANCE which are part of the AV-TEST certification tests.

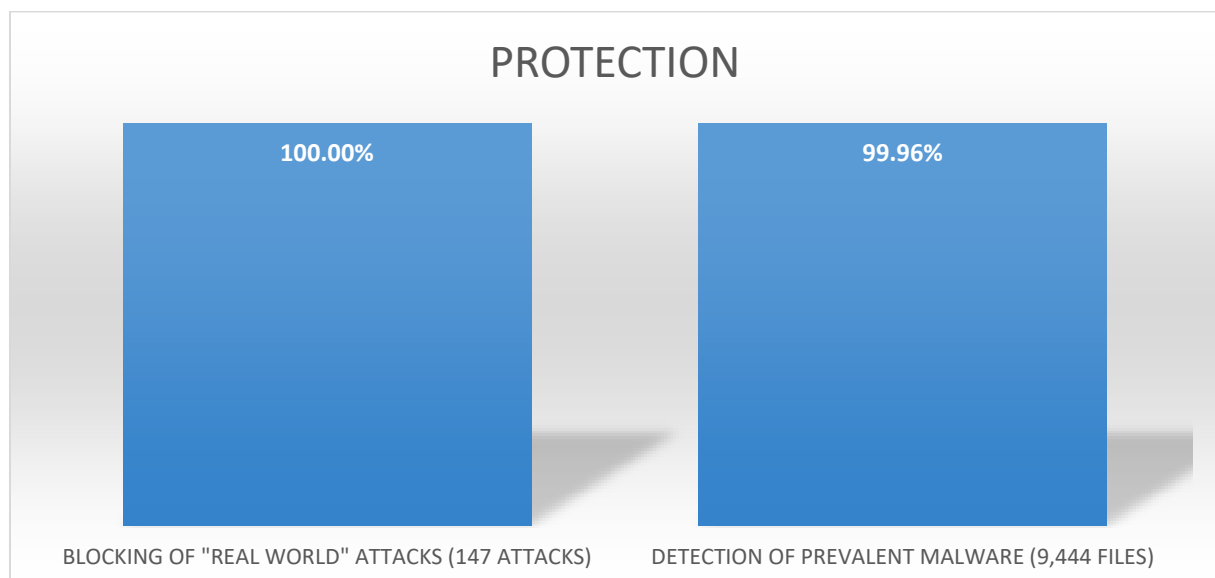
We tested the version 21.5.2470 of the Avast One Free product. The test was carried out on Windows 10 Professional (English), 64-Bit, in July 2021.

Avast One Free scored very well in the PROTECTION part and perfectly in the USABILITY testing. Besides this, the slow-down of the system is below the 10% check-mark in the PERFORMANCE part.

## 2. TEST RESULTS

### 2.1 PROTECTION

This category tests whether the product is able to defend a system against current and widespread attacks. The test is divided into the Real-World (malicious URLs and E-Mails) protection test and the detection of prevalent malware. All tests are carried out with an active internet connection and up-to-date products.



#### *Real-World*

In this test, the product has to defend the computer against malicious URLs that are visited with a browser or E-Mails with malicious attachments that are retrieved with a regular e-mail client.

For this assessment 122 malicious URLs and 25 malicious E-Mails have been used.

During the test, both detection as well as protection are being rated. Avast One detected 100% of the 147 malicious test cases.

### *Prevalent Malware Detection*

This test consists of malicious PE files that are not older than 2 weeks. Only files that have been reported as widespread and prevalent are included in this test. In total 9,444 malicious files have been used in this assessment.

During the test, the files are scanned to determine the static detection rate. Afterwards we collect all not detected files and execute them file for file to test for dynamic detection. In the last step we repeat the scan to make sure no file was missed initially.

9,440 out of 9,444 test cases were properly blocked, resulting in a very good detection rate of 99.96%.

## 2.2 USABILITY

The Usability category tests whether the product influences the usability of the system by causing false detection and false alarms. The test is divided into different parts: A static false positive test against different test sets and a dynamic false positive test.

### *Static False Positive Test*

In this part, the product scans different sets of confirmed clean files to see if any false detections happen. There are three different file sets used:

1. Clean files from Windows and Office installations (575,717 files)
2. Clean files from computer games obtained from different game download platforms (22,299 files)
3. Clean files from 3rd party software (734,880 files)

It is clear that absolutely no false positive should occur for the first set because this could harm the overall stability of the system. False positives in the other two sets can still be unpleasant, but are not a critical problem.

During the test, Avast One had no false positives in the three different sets.

### *Dynamic False Positive Test*

In this part normal user interaction is simulated by downloading clean software from the internet, installing and using it. During these actions the product is monitored to check whether it issues any false alarms or even blocks certain legitimate actions.

The test cases include widespread software such as Adobe Reader, Google Chrome or Java (19 different programs).

There were absolutely no warnings or other problems during this test.

### 3. PERFORMANCE

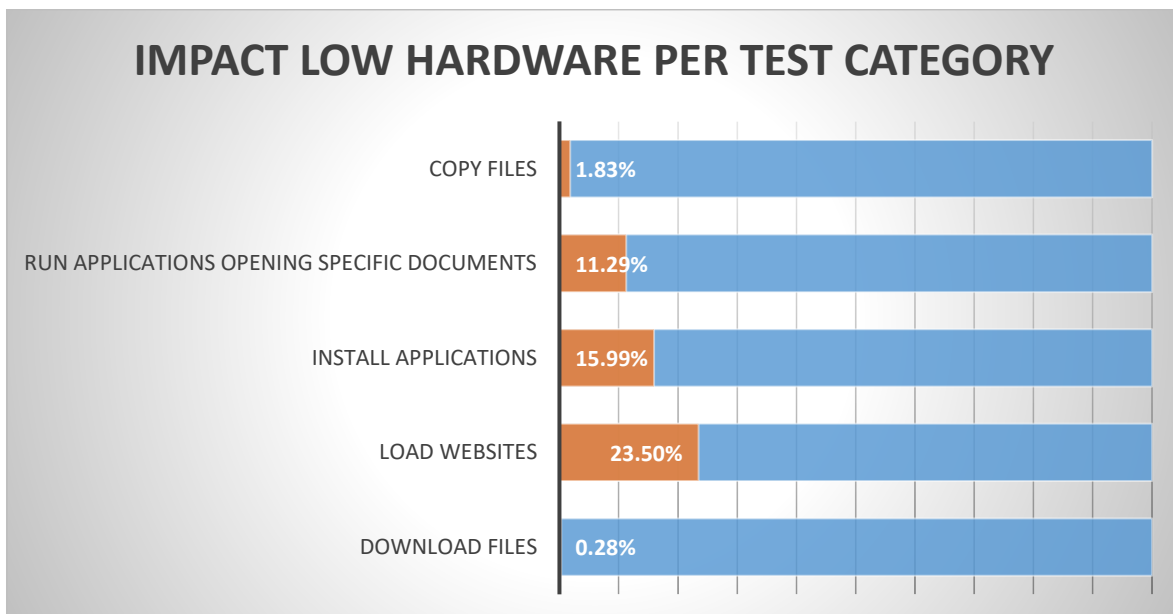
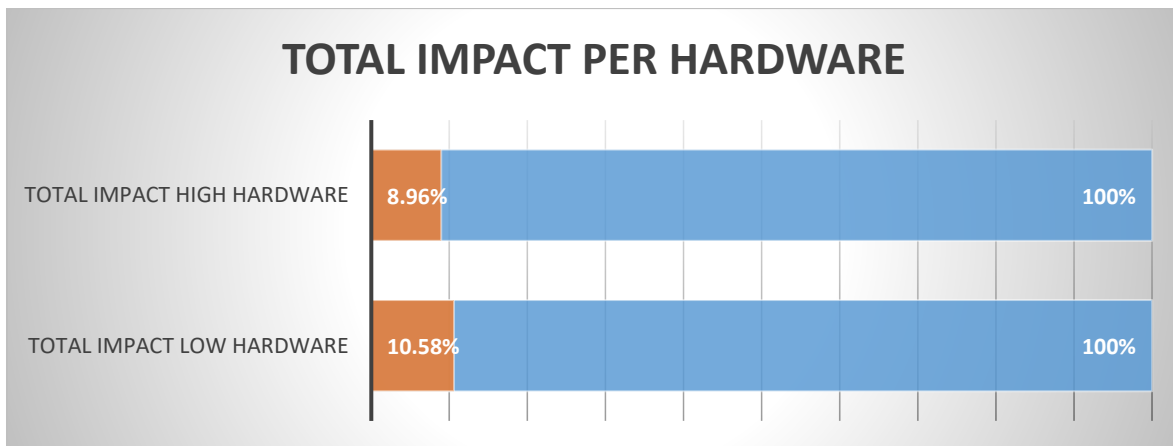
The performance test examines how security solutions influence the system in typical operations on daily work on computers. AV-TEST uses 2 different hardware specs in this test:

- Hardware specs “High Hardware”: HP Z240 (Y3Y82EA): Intel i7-7700, 256 SSD, 16 GB RAM
- Hardware specs “Low Hardware”: HP 280 G2 (1EX45EA): Intel i3-6100 256 SSD, 8 GB RAM

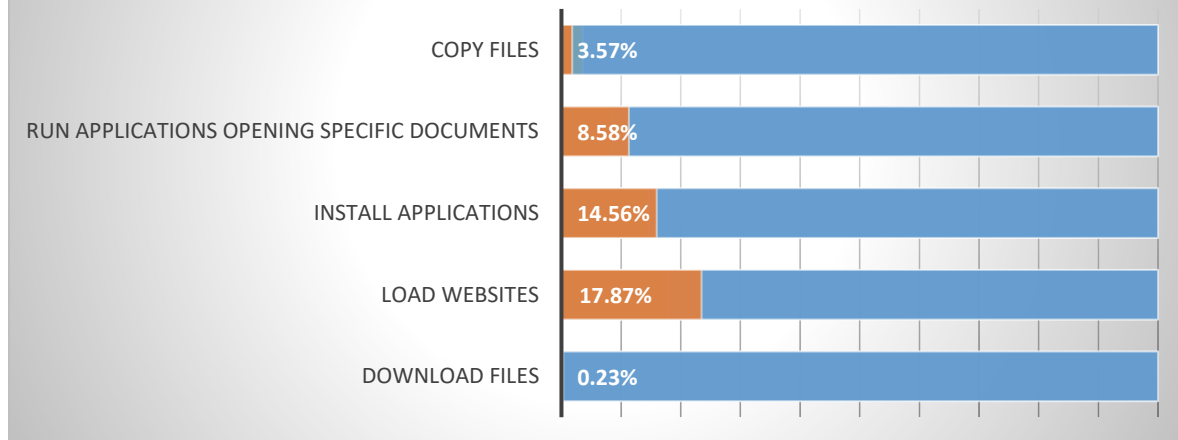
The test sets are changing over the year, to avoid bias. Special attention is placed on:

- Slowing-down when launching popular websites
- Slower download of frequently-used programs
- Slower launch of standard software programs
- Slower installation of frequently-used programs
- Slower copying of files (locally and in a network)

Avast One has minimum impact of around 9% (average of both hardware platforms) to the system, which is a very good result.



## IMPACT HIGH HARDWARE PER TEST CATEGORY



#### 4. SUMMARY

In all test categories - PROTECTION, USABILITY and PERFORMANCE - Avast One achieved very good results. Both, PROTECTION AND USABILITY results are flawless. In the PROTECTION section, Avast One achieved a perfect Real-world protection rate of 100% and very good 99.96% in the Prevalent malware detection test. The USABILITY section result was also perfect, without any false alarms. Also, the PERFORMANCE impact is at a very low level, reaching the best marks possible in our test.

Overall, the results of Avast One Free would definitely be sufficient to reach high scores in the official AV-TEST certification test and the product would get an "AV-TEST Certified" seal.