

INSTANT™ AIR PURIFIER TESTING INFORMATION



At Instant Brands, we take product performance claims seriously.

That's why we selected third-party, independent testing laboratories with reputations for excellence and significant biosafety expertise to evaluate Instant Air Purifiers.

SARS-CoV-2 (the virus that cause COVID-19) Testing

Instant Brands engaged a world-class, U.S.-based research and testing company that holds many certifications, including ISO 9001, ISO 17025, FDA GMP and GLP, for test and evaluation. It operates in the business areas of national security and defense, global health and security and energy and environment.

Rather than simply testing on a surrogate, we elected to separately test how effectively the AP100 and AP300 Instant Air Purifier units remove the actual virus that causes COVID-19 disease, SARS-CoV-2. The testing was conducted inside a primary aerosol chamber that was 13 cubic feet in size, which was placed within a Class III biological safety cabinet. Although the models tested are designed for use in larger areas, the lab utilized this smaller chamber to protect the safety of the scientists.

The SARS-CoV-2 virus was first aerosolized using a nebulizer to replicate the respiratory droplets by which the virus spreads, and then introduced into the chamber. The lab first took air samples to evaluate virus concentration in the chamber at three points of time without the Instant Air Purifiers operating. This served as the baseline, or control.

The tested units were then turned on and allowed to operate on low fan speed. Each unit operated for the period of time it took for the air within the chamber to circulate through each model a total of 10 times, referred to as 10 air exchanges. The lab again measured viral concentration in the chamber at three points in time.

The results of this lab testing showed that the AP100 and AP300 Instant Air Purifiers were effective at removing more than 99.9% of SARS-CoV-2 from the chamber.

Testing did not demonstrate that the tested models eliminate SARS-CoV-2. Not proven to prevent COVID-19 transmission.

Mold, Bacteria and Other Virus Testing

Instant Brands also engaged another well-renowned testing vendor with over 130 years of experience and certified under ISO 9001 and ISO17025, to evaluate the Instant Air Purifier's ability to remove additional contaminants, including mold, bacteria and other viruses from treated air.

For the AP300 model, the test chamber was 1000 cubic feet and for the AP100, the test chamber was 544 cubic feet. The lab introduced aerosolized A. Niger (mold) E. Coli (bacteria), S. Epidermidis (bacteria) or Phi-X174 (virus) into each test chamber, one at a time, and turned the tested model on at full fan speed. Scientists separately measured the concentration of each particle in the chamber at 10, 20, 30, 40, 50, 60, 120, 180 and 240 minutes. Those measurements were compared to the baseline concentrations of each particle present in the chamber at the same time intervals, but without the air purifiers operating.

The results of this testing showed that the AP100 and AP300 removed 99.9% of the tested particles after 60 minutes of operation.