

HP ENVY ISS Printer

Fact Sheet



In 2016, NASA began launching HP ZBook Workstations to the International Space Station (ISS). Approximately 120 ZBooks will be deployed to support its mission operations and utilization objectives including sparing.

In 2017, NASA selected the HP OfficeJet 5740 Printer as a “Next Generation Printer” to replace the existing printing capability onboard the ISS. In response to this selection, HP developed a custom HP ENVY ISS Printer for use in the ISS.

While the bulk of the HP ENVY ISS Printer is off-the-shelf, NASA had a list of requirements that the printer needed in order to safely operate onboard the ISS including:

- Paper management in zero-G
- Flame retardant plastics*
- Waste ink management in zero-G
- Glass removal
- Wired and wireless connectivity
- Printing in multiple orientations (0°, 90°, 180° & 270° positions)
- Environmental Testing (EMI, Materials, Acoustics, Flammability*, Off-gassing, Power Compatibility, etc.)

The zero-G requirements were the most challenging to meet and verify due to their unique nature. Through creative reengineering and the use of specialized materials, including components 3D-printed using HP’s Multi Jet Fusion technology and 3D High Reusability PA 12 Glass Beads material, the HP ENVY ISS Printer successfully met all of NASA’s requirements.

The ISS Crew members print about two reams of paper a month in total across all printers. Hardcopies are used for procedural and mission critical information like Emergency E-Books, inventory Return trajectories, timelines, and personal items, including letters and photographs from home.

The first HP ENVY ISS Printer launched to the International Space Station on the Space-X 14 rocket on April 2, 2018.

The International Space Station Partnership consists of NASA (National Aeronautics and Space Administration), CSA (Canadian Space Agency), ESA (European Space Agency), JAXA (Japanese Aerospace Exploration Agency) and the RSA (Russian Federal Space Agency). This includes 15 countries: Canada, Japan, Russia, the United States, Belgium, Denmark, France, Germany, Italy, The Netherlands, Norway, Spain, Sweden, Switzerland and the United Kingdom.

*applies to Injection Molded case parts for the HP ENVY ISS Printer only