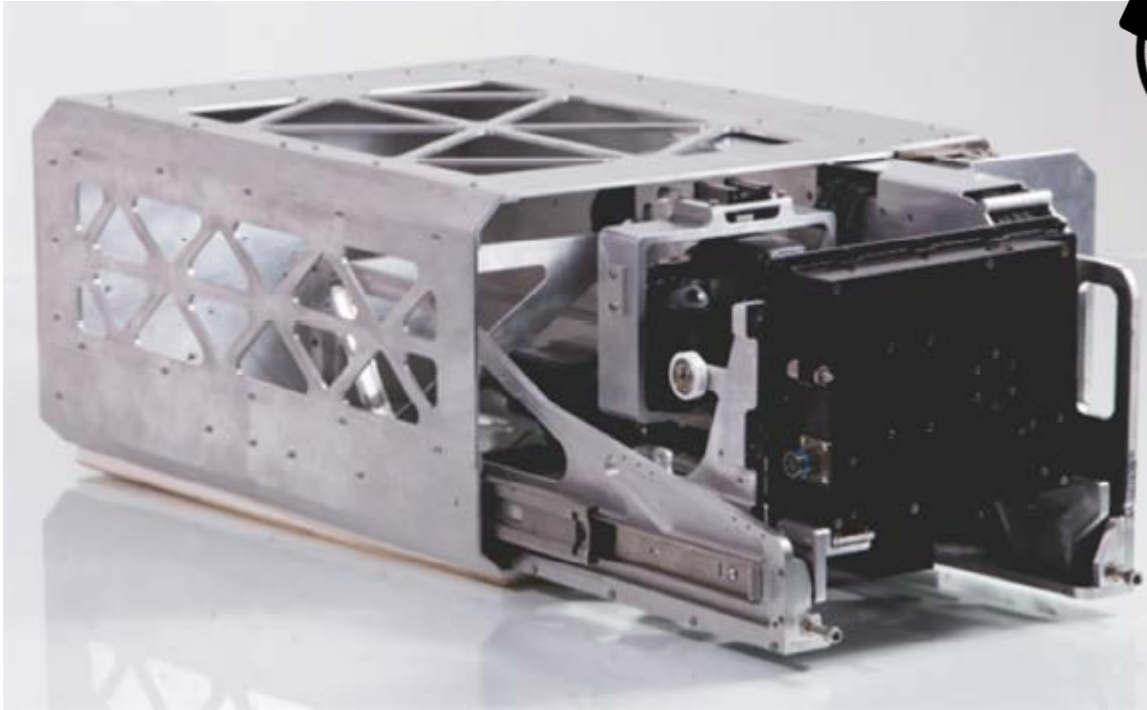


Microscope-EXPRESS



The Mic-E payload is a highly-capable light microscopy system completely contained within a single EXPRESS Rack locker. Quick and easy to set up and use, Mic-E can be algorithmically or remotely controlled.

Mic-E is a solution to the immediate and intense need for increased professional-grade microscopy capabilities aboard ISS. Imaging is accomplished in a wide variety of highly capable and customizable modules placed over a novel illuminator-condenser with no moving parts, coupled to a high-resolution color digital single-lens reflex (DSLR) camera fitted with a turret with objective lenses at several magnification levels. This system is capable of brightfield, phase contrast, darkfield and fluorescence.

Besides materials science and protein biophysics investigations, Mic-E also is capable of increasing the throughput of research in the life and molecular sciences. It will be an excellent platform for the on-orbit analysis of plants, cells, small mammals (bone and muscle loss) and model organisms, such as *Drosophila*, *C. elegans*, and yeast.

Microscope-EXPRESS

The Mic-E development program takes full advantage of existing enabling technologies that were designed, built, and tested by Techshot. Prior microscopy development research has been supported by several NASA contracts with the company, including SBIR contracts NNX12CE76P and NND12AD94C. These existing SBIR technologies developed by Techshot allow it to decrease the development time period and reduce the overall project schedule.

Provides an LED based Sub Stage Condenser Featuring:

- **Bright Field**
- **Dark Field**
- **Phase 1 Contrast**
- **Phase 2 Contrast**
- **Fluorescence**
- **Confocal**



Techshot offers a comprehensive suite of professional tools for conducting research in space. Mic-E can work in combination with many of them as a single, complete, and effective solution for transferring, processing and analyzing high-value samples on orbit.

Mic-E+DMS-B+ACT²+ADSEP+MVP