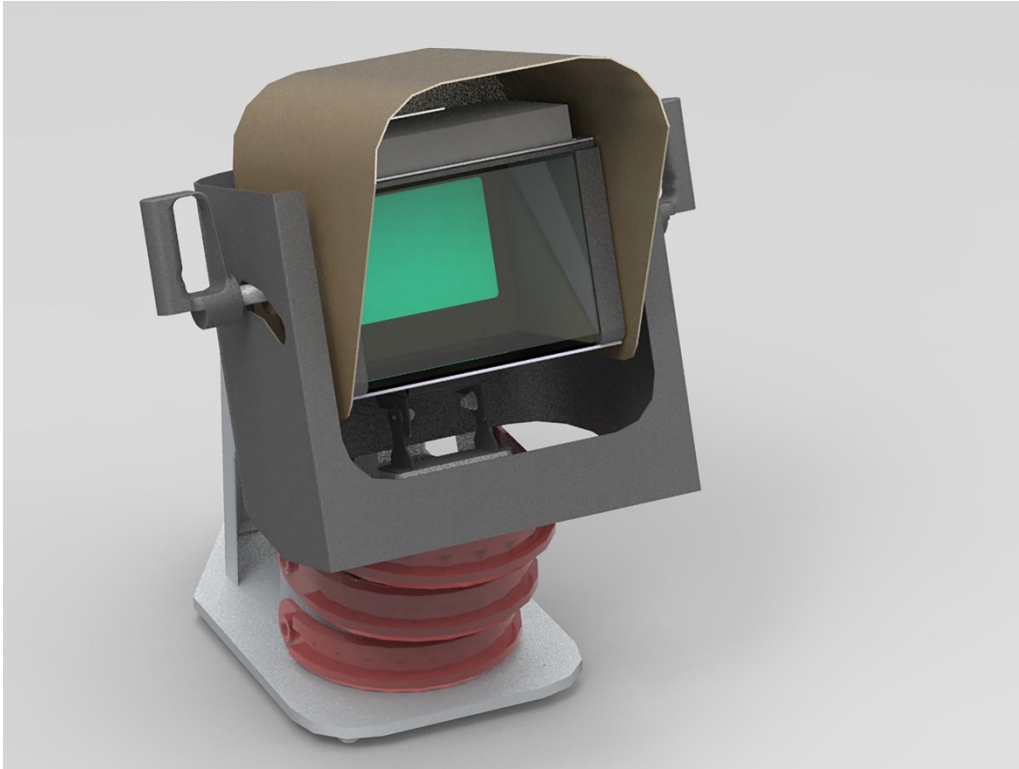


# Digital Stereoscopy Microscope



## Technology Overview

The digital stereo microscope offers the ability to manipulate specimens and send images to a computer and so has become a widely used instrument. Students, researchers, manufacturers, and hobbyists find stereo microscopes to be easy to use while providing real-time three-dimensional images. However, current conventional microscope requires the user to look through a pair of eyepieces which has caused great discomfort to many users.

## Technology Features & Specifications

Employing stereoscopic digital display panels to replicate the sense of depth similar to conventional stereo microscopes, the DSM system effectively reduces eye fatigue for end users. The DSM provides a 3D (stereoscopy) real-time imagery on large bright display panels, streamed from a pair of high-resolution cameras. The user will put on a pair of passive glass to allow the correct images to be projected into the correct eye positions, thus creating the effect of stereoscopy.

## Potential Applications

Industries that require stereoscopy inspection with magnification under prolong hours. Contemporary, these needs are met by use of two eyepieces microscope.

1. For optical inspection in semiconductors devices,
2. For optical investigation for precision engineering components
3. Use by a surgeon in the operation theater,
4. For biologist observation on life samples of small animals.

## OVERVIEW

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- Technology Category Electronics - Sensors & Instrumentation  
Life Sciences - Biotech Research Reagents & Tools
- Technology Status Available
- Technology Readiness Level [TRL7](#)
- Keywords stereoscopy, 3D, digital, microscope, Real Time



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