Satellite Payload System Laboratory

Services Provided:

- Developing payload remote sensing systems
- Design and testing opto-mechanical support systems and space optics systems
- Developing of signal and image processing techniques
- Implementation of the software for visual testing of the space payload of satellites
- Implementation of electronic testing software of satellite space payload
- Testing and optical assembly of satellite payload
- Developing artificial intelligence techniques for space imaging system

Facilities Available:

- Optical bench
- Optical collimator
- Optical telescopes
- Guide scopes
- Auto-guiders
- Set of miniaturized and rugged space cameras
- USAF glass resolution target
- High speed data processing workstations
- Dry cabinet
- Optical, hardware, mechanical development software packages

Samples from our Projects / Products:

- EgSACubeSat-1 & 2 (former NARSSCube series)
- EgSACubeSat-3
- Space Plasma Nanosatellite experiment- COSPAR Project
- Hyperspectral camera system
- Payload camera for NExSat series
- Space monitoring telescope
- Remote sensing applications using AI techniques

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Global Online Education Website:
egsa-space-technology-portal.com

Part of our Facilities / Services:

Optical bench

An optical bench is the base of building an optical experiment. It is designed to fit high performance, and space requirements. The setup has an optical equipment to enable developing, integrating and testing high reliability camera systems.

Optical space monitoring telescope

An optical telescope is used for monitoring very far objects in space orbits, it is equipped with a very high speed artificial intelligence system for space object detection and identification in real time.

Cubesat development facility

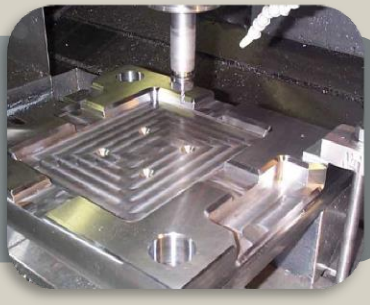
The CuDF is dedicated to the development of CubeSat platform and its associated payload. The platform has space heritage since 2019 and can accommodate different variety of payload missions; including - but not limited to- high resolution camera, RGB camera, Hyperspectral camera, and space environment payload sensors.

High resolution satellite camera

A HR satellite camera is developed for the purpose of earth observation space missions at EgSA. It is small size and has relatively high resolution (5m @ 550Km Panchromatic)

High Speed Workstations with CNC

High speed processing / large capacity workstations are used for data and image processing using AI techniques, and heavy duty tasks.
The CNC is attached to the workstation to allow high speed and precise manufacturing of cubesat and camera systems.



And many others... Contact us and Enjoy our Services.

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