

## Space heritage

**The exceptional conditions in space require high demands on the products and their engineers.**

We meet the requirements of our customers with our know-how. Beyond that our fascination of the universe and curiosity to gain new perspectives enable high-quality products.

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### **Attitude and orbit control sensors for satellites and spacecrafts**

Our Portfolio comprises precise and robust sensors for state-of-the-art AOCS to ensure stable performance of satellites:

- Star Sensors/Star Tracker (ASTRO<sup>®</sup> product family)
- Rendezvous- and Docking Sensors (product family RVS<sup>®</sup>)

with a broad application range from LEO to GEO orbit: Constellation – Earth Observation – Space Transportation – GEO Telecom – Deep Space and Science. Up to today more than 450 AOCS sensors have been sold and are used worldwide within national and international projects.

Sun Sensors are no longer part of our product portfolio.

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### **Space optics and electronics for Earth observation satellites**

With the development of the multi-spectral imagers for RapidEye Jena-Optronik successfully entered the market of satellite-based Earth observation Instruments enabling us to become a member of the core teams of Sentinel-2, Sentinel-3, Sentinel-4 and Sentinel-5 within the European Earth observation

program COPERNICUS.

COPERNICUS continuously observing the global changes - contributions from Jena:

- Electronics and optical filter for Sentinel-2 - objectives: land monitoring
- Opto-mechanical structure, subsystems, telescope and scan systems of for Sentinel-3 - objectives: marine observation
- Optics for Sentinel-4 - objectives: air quality monitoring
- Optics and filter for Sentinel-5 - objectives: air quality Monitoring

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## Space exploration

The Jena-based company develops components and systems to explore the solar system and planets:

- Instrument for the NASA Fermi Mission (former GLAST)
- Components of the camera HRSC for ESA's Mars Express
- Anticoincidence System ACS for INTEGRAL (ESA Mission)
- Instrument Processing Facilities for ENVISAT and EPS instruments
- Re-entry capsule MIRKA
- Contingents for the ROLIS camera within Rosetta Mission
- Earth-Observation camera MOMS-2P for Mir space stations
- Laser Scanner for EXOMars/Mars Sample Return
- Scientific Small Satellite CHAMP