

Space Exploration

Our know-how in the development and production of high-tech opto-electronic instruments is also applied in the field of Space Exploration.

We develop components and systems to explore the solar system and planets:

- Instrument for the NASA GLAST mission
- Components of the camera HRSC for Mars Express
- Anticoincidence System ACS for INTEGRAL
- Instrument Processing Facilities for ENVISAT and EPS instruments
- Re-entry capsule MIRKA
- Contingents for the ROLIS camera within Rosetta mission
- Optics and test facilities for of HRSC for ESA Mars Express mission
- Laser Scanner for EXOMars/Mars Sample Return

The lens systems of the High Resolution Stereo Camera HRSC on ESA's highly successful MarsExpress mission were developed in Jena. Moreover, the complex optical test equipment for this camera was also made by the specialists from Jena-Optronik.

The Anti-Coincidence System ACS for the Spectrometer Instrument on ESA's INTEGRAL mission was designed, assembled, integrated and tested in Jena. The mission was launched in 2002 and will end in 2010.

The company gained various experiences in developing cameras for orbiters and landers of planetary missions, like NetLander, DAWN, BepiColombo and Space shuttle flights. Jena-Optronik contributed to ESA's ROSETTA mission by delivering the ROLIS-D lens system and camera housing. The mission has a planned operational duration of 12 years and was launched on March 4th 2004. Future planetary missions can use the Smart Panoramic Optical Sensor Head, which was developed in Jena within the framework of an ESA study. Its features include a maximum light sensitivity, collection area and time coverage as well as real time analysis and object detection.

Source: <http://www.jena-optronik.com>



Furthermore the company lead Germany's first successful re-entry experiment: The Micro Re-entry Capsule MIRKA was launched in 1997 and re-entered the atmosphere 14 days later providing very valuable data on aero-thermo-dynamical re-entry parameters.