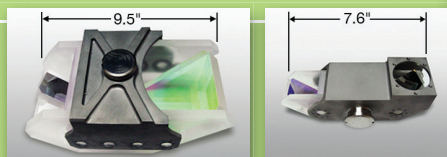


**The Canadian Astro-H Metrology System (CAMS) is an alignment system for the Hard X-Ray Telescope aboard the Astro-H observatory satellite**

CAMS is designed to measure the lateral/rotational displacement in the spacecraft's optical bench relative to the instruments. PLX designed a 1.94" [49 mm] Invar mounted retroreflector with a 0.5 arc second accuracy, which was used for alignment monitoring.



**AMCS Alignment monitoring and Control System**

AMCS is an alignment instrument for the Advanced Topographic Laser Altimeter System (ATLAS) aboard the ICESat-2 satellite. The Ice, Cloud and Land Elevation Satellite-2, will measure the height of a changing Earth.

PLX designed two Lateral Transfer Hollow Retroreflectors (LTHR's) that are used to keep the laser and receiving telescope bore-sighted to each other during orbit.

**For more information email [info@plxinc.com](mailto:info@plxinc.com) visit our website [www.plxinc.com](http://www.plxinc.com) or call 631-586-4190.**

PLX Inc. extensive in-house manufacturing and environmental testing facilities, performance testing capabilities and state-of-the-art optical analysis equipment provide total quality management and accountability.

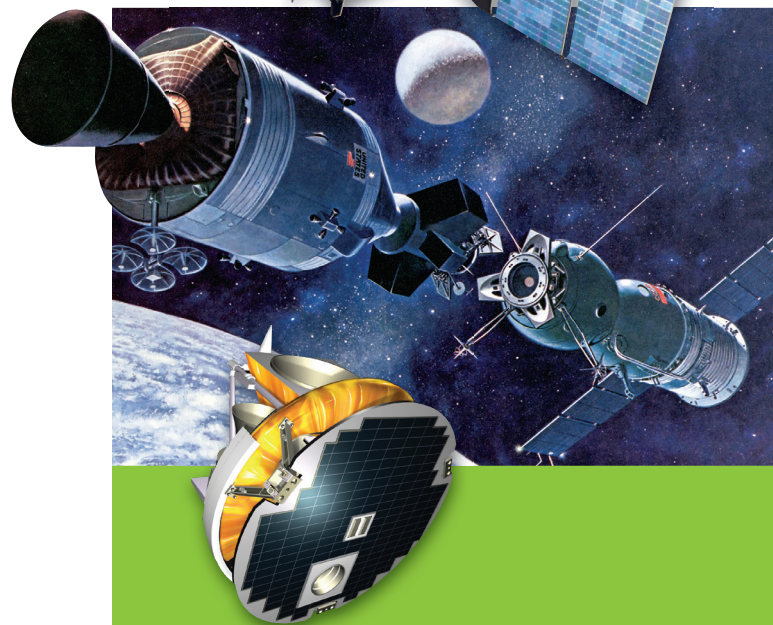
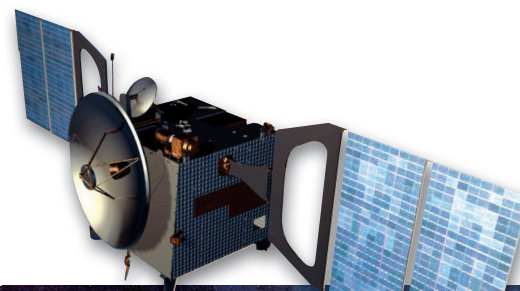
PLX is a registered ISO 9001 company and is fully compliant with ISO requirements. We design and manufacture instruments and systems that are space qualified and meet military specs.



PLX Inc. 40 W. Jefryn Blvd.  
Deer Park, NY 11729  
**Tel:** 631.586.4190  
**Fax:** 631.586.4196  
**www.plxinc.com**  
**e-mail:** [info@plxinc.com](mailto:info@plxinc.com)



**OPTICS IN SPACE**



**PLX's optical technologies are a part of the WORLD'S MOST NOTABLE SPACE MISSIONS**

PLX optical systems and instruments perform with exceptional accuracy and stability, even under sever temperature and launch conditions.

**Our System Integration Capability and Monolithic Optical Structure Technology (M.O.S.T.™) achieve these goals.**

PLX's space heritage dates back to 1975 when the company provided hollow retroreflectors to the Apollo-Soyuz Russian-American space hookup program. The units were used in the docking procedure to align the two vehicles.

Ever since, PLX has been part of some of the world's most important space missions, with clients that include some of the industries most prominent Space and Defense contractors.

Whether it's Mapping and Topography, Environmental and Atmospheric or Science applications, PLX will partner with you to help you get the most out of your optical system.



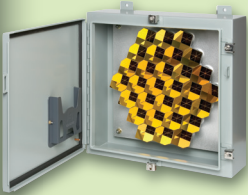
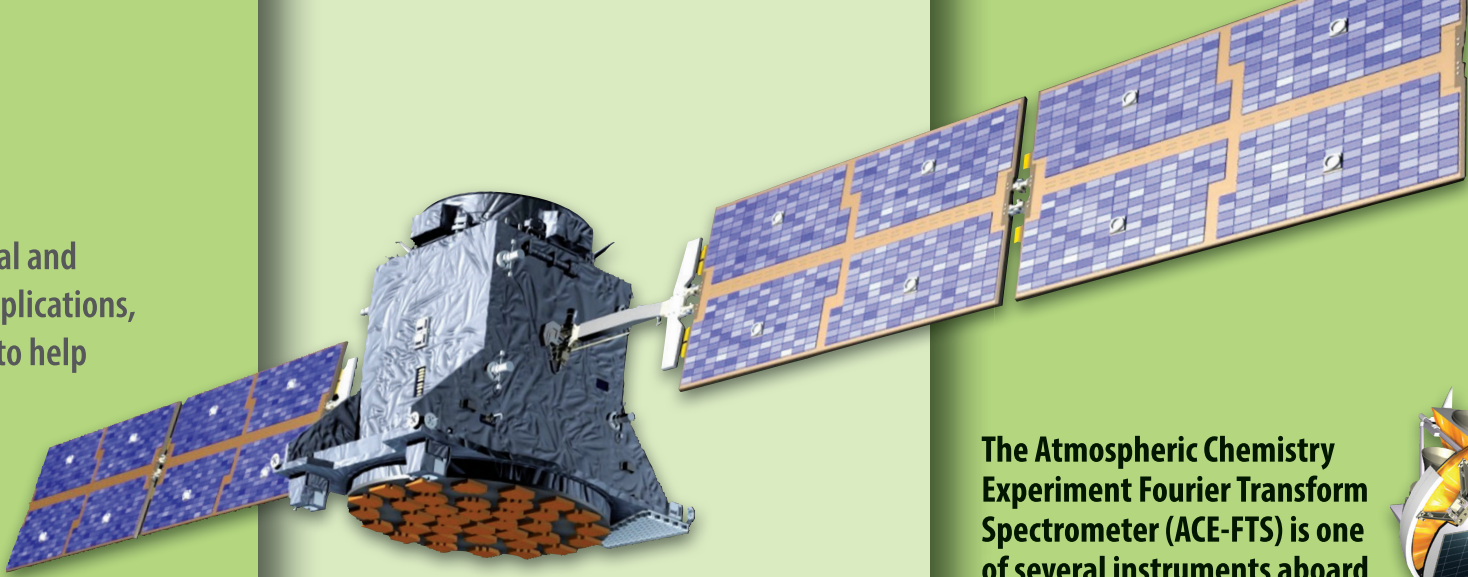
**NASA Laser Test and Relay Mirror Experiment**

In 1985, as part of NASA's Long-Distance Laser Test, PLX built an 8" [203mm] diameter Retroreflector that was mounted on the space shuttle Discovery. The test was so successful that PLX was awarded a contract with Ball Aerospace to work on the Relay Mirror Experiment (RME).



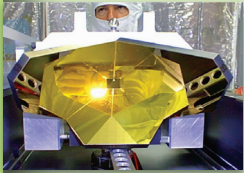
**The Retroreflector in Space (RIS) is one of several instruments aboard NASDA's (now JAXA) Advanced Earth Observing Satellite (ADEOS)**

RIS is a retroreflector for an Earth-Satellite-Earth laser used in long-path absorption experiments of atmospheric trace gases. PLX designed and manufactured a 20" [508 mm] diameter light-weighted retroreflector that achieved an accuracy of one arc second. To date this is the largest retroreflector ever sent to space.



**For the Endeavor Radar Mission, PLX Inc. designed a Retroreflector Array™ for creating a high-resolution digital topographic database of the Earth**

JPL deployed retroreflectors during the mission. These are highly reflective structures that appear as a bright point in the radar image. These reflectors, deployed with precisely measured coordinates, served as control points in the Shuttle Radar Topography Mission data.



**The Tropospheric Emission Spectrometer (TES) is one of four instruments aboard NASA's Aura Earth Spacecraft (formerly known as EOS-Chem 1)**

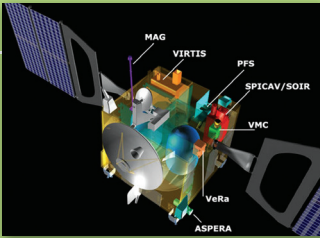
The spectrometer's main function is to study the chemistry and dynamics of the Earth's troposphere, the lowest level of Earth's atmosphere. PLX provided high-accuracy beryllium mirrors and retroreflectors that were instrumental to the success of the spectrometer.

**The Atmospheric Chemistry Experiment Fourier Transform Spectrometer (ACE-FTS) is one of several instruments aboard the Canadian Satellite SCISAT**

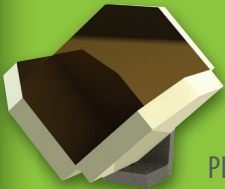


The spectrometer's main function is to measure and understand the chemical processes that control the distribution of ozone in the Earth's atmosphere. PLX specially designed retroreflectors provided modulation which was instrumental to the success of the spectrometer.

**The Planetary Fourier Spectrometer (PFS) is one of several instruments aboard the Venus Express Satellite. Another PFS is aboard the Mars Express.**

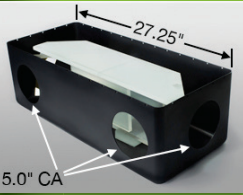


The spectrometer's main function is to study the atmosphere of Venus and Mars as well as the soil composition on Mars. PLX specially designed retroreflectors provided modulation on rotating interferometers.



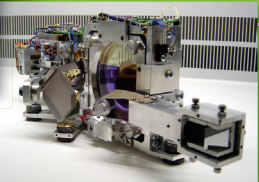
**The Keldysh Space Program**

PLX designed hollow retroreflectors for one of the instruments aboard the Meteor-M Satellite. The device's main function is for hydro-meteorological purposes, remote sensing of the surface and atmosphere of the Earth. These specially designed retroreflectors experienced sinusoidal modulation in the range of 10-100 Hz. Data from this device is used for obtaining temperature/humidity profiles and trace gases monitoring, as well as for weather forecasting and prediction of climatic changes.



**ICESat-2 Testing**

PLX supplied NASA a vacuum-compatible Lateral Transfer Hollow Retroreflector (LTHR). This unit was part of the ground support equipment for testing and verifying the Advanced Topographic Laser Altimeter System (ATLAS).



**TIRVIM, a high-resolution thermal infrared-imaging FTIR spectrometer**

The (TIRVIM) Spectrometer is one of three spectrometers on the Atmospheric Chemistry Suite (ACS) instrument on board the ExoMars 2016 Trace Gas Orbiter satellite. The spectrometer's main function is to monitor temperature profiles and measure aerosol content during nadir observations. PLX Inc. retroreflectors were used for their ability to perform in harsh environments while maintaining exceptional stability and accuracy.