PLX's Optical System Integration capability and M.O.S.T.™ technology achieves exceptional accuracy, thermal and mechanical stability, and can be custom-designed to fit your special applications.



Our proprietary Monolithic Optical Structure Technology™ (M.O.S.T.™) combines all of the elements of a complex optical setup into a single monolithic unit. Because we permanently align the assembly, it never needs adjusting and can last indefinitely. PLX provides unique optical instruments, technologies, and solutions to problems of achieving and maintaining state-of-the-art optical accuracy and stability under severe environmental conditions.

PLX is a registered ISO 9001 company and is fully compliant with ISO requirements. We design and manufacture products that meet a variety of operating conditions, including demanding military applications.

Our 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 products and systems are available in a wide variety of materials, mirror coatings, special metals, sizes, and configurations or can be customized to fit your specific requirements.



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# COMMERCIAL AND INDUSTRIAL OPTICS



Designed to provide ACCURACY AND STABILITY (for any wavelength) even in the HARSHEST ENVIRONMENTS

# PLX offers a wide variety of commercial, scientific and industrial solutions.

- Process Control Metrology / Laser Tracking
- Spectroscopy Instrumentation 
  Long Path Spectroscopy
- Laser Systems and Targeting
- Laboratory Instrumentation and Devices
- Optical Testing, Machinery Alignment, Bore-sighting Systems and more

#### Hollow Roof Mirrors<sup>™</sup> (HRM)

The HRM can be used in almost every application where a roof or Porro prism can be used. Because the optical path is in air, there is neither refraction nor any reflecting front prism surface. It is also insensitive to tilt or misalignment in one coordinate.



#### Lateral Transfer Hollow Periscope™ (LTHP)

The LTHP shifts a beam laterally to any distance while maintaining the beam direction. It is extremely temperature stable and has a beam output as accurate as one arc second. The LTHP is also useful where one of the mirrors is a 50-50 beamsplitter.

#### Lateral Transfer Hollow Retroreflector™ (LTHR)

The PLX LTHR is perfect for folding light 180° and displacing it any given distance. Ideal for applications where the major beam must be aligned with two or more other optical axis.



## PLX Hollow Retroreflectors™

Self-compensating mirror configurations with extraordinary beam return accuracy and can withstand harsh environments. They can be coated for maximization over a spectral range from UV to far IR.

#### Michelson Interferometers and Retroreflector Instruments

Rugged construction and permanent alignment make the PLX monolithic interferometers suitable for your most demanding FTIR analyzer applications.



#### PLX Ball Mounted Hollow Retroreflectors™

PLX BMRs for laser tracking are the most accurate in the industry. They can significantly improve performance and are compatible with laser tracking systems from all manufacturers. They are available in a unique Break-Resistant configuration as well as in a range of sizes and materials for specific applications.



#### PLX Electronic Autocollimators™

High-accuracy instruments that feature built-in lasers for course alignment and a base with leveling adjustments and

bubble level. Included is a software suite for recording and documenting measurements. Choose from our All-in-one Autocollimator / Telescope or our high-resolution and wide field of view electronic Autocollimators.

## **The PLX Tool Cube**

Provides 3 mirror surfaces oriented at 90 degrees to each other, providing reference surfaces that can be used for a variety of both

optical and mechanical alignments. It is mounted in a housing that includes two adjustment knobs for leveling/aligning the tool cube.



#### Hollow Penta Mirror (HPM) and Penta Roof Assemblies

Offers the performance of

a Penta Prism with more control and wavelength transmission, its invariant assembly permits movements without compromising deviation. Achieve accuracies to better than 1 arc second.