PLX: exceptional Boresighting, Beam Delivery, Targeting, and Image Transfer Optics that deliver extreme accuracy and stability under harsh military conditions.

Whether it's an upgrade or a new challenge, PLX's experience, Optical System Integration capability, and M.O.S.T™ technology will help you reach your target.

Our 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 exhibits exceptional thermal and mechanical stability and never needs adjusting.



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.





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PLX optics excel even in COMBAT AND HARSH environmental conditions

PLX is a valued and award-winning supplier for Lockheed Martin Corporation, Northrop Grumman Corporation, Raytheon, amongst others.

## Modernized Boresight Module (M-BSM)

In conjunction with Lockheed Martin

Corporation, Missiles and Fire Control division, PLX produced the Modernized Boresight Module (M-BSM) for the Arrowhead Program. The Arrowhead system is designed to enhance the targeting capabilities of the AH-64D Apache Longbow Combat Helicopter. The M-BSM is part of the sensor suite, which is the modernization of the Apache's Target Acquisition Designation Sight and Pilot's Night Vision Sensor.

It allows simultaneous viewing of multiple lines of sight. The module uses two LTHRs configured in a stable housing that provides one arc-second parallelism under the most adverse conditions.

## **Boresighting System Instruments**

The PLX Lateral Transfer Hollow
Retroreflector™ (LTHR) is an
innovative Retroreflector tube that is
a segment of a large hollow Retroreflector.
It is perfect for folding parallel light 180° and
displacing it any given distance while maintaining
perfect parallelism between the incoming and outgoing
beams, even while the system is vibrating.



The PLX Lateral Transfer Hollow Periscope™

(LTHP) enables a transfer of a parallel beam to any given distance while maintaining perfect parallelism between the incoming and outgoing beams, even while the system is vibrating. In many applications, an LTHP may be used for Boresighting.

Use the PLX Rotary Movement
Device™ (RMD) to attach two
or more instruments at their
respective entrance and exit
apertures. The RMD enables a

connection between any desirable combinations of LTHRs and LTHPs.

Because it achieves sub arc second accuracy and operates with great stability

under harsh environmental conditions, it is the optimum alignment system for military use.

PLX has also designed LTHRs™ for the Army's TOW missile IBAS and ITAS, up-grade programs.

The LTHRs™ in these systems function as an image-transfer optic for an automatic Boresight compensation sub-system.

As Boresight image-transfer devices, the ITAS and IBAS LTHRs™ must relay the image without distorting it. They also must accurately reflect the Boresight reference direction for line-of-sight corrections, in both active positions. The use of PLX LTHRs™ with first-surface mirrors is necessary for operation at multiple wavelengths.

PLX Hollow Roof Mirrors™
(HRMs) are ideal for redirecting light in one coordinate. The HRM is an orthogonal assembly of two plane mirrors attached to each other along one "roof edge." They can be used in almost every application where a "roof top" or Porro prism can be used.



PLX also designed and is manufacturing a highly accurate, **customized Hollow Retroreflector™**, which is a

critical component in the primary gunner's sight of the M1A1 and M1A2 tanks. PLX has been the sole supplier of this instrument since the inception of the M1 program more than 20 years ago.