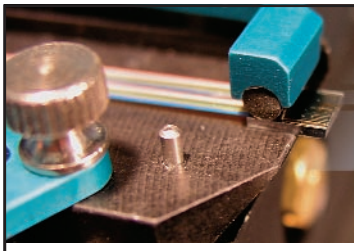
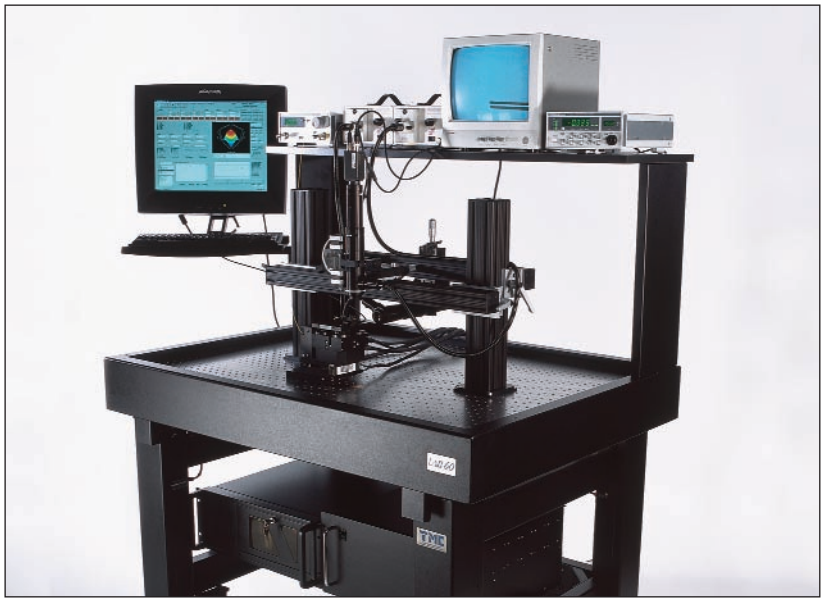


Fiber Array Characterization

FAST ACE

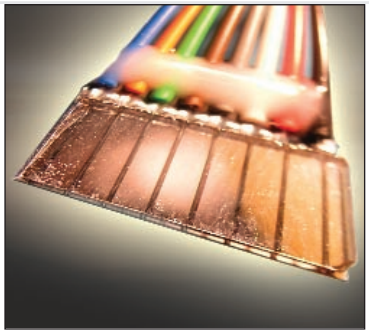
High Accuracy Array Characterization

Palomar Technologies FAST™ ACE is a turnkey automation platform for high accuracy, high throughput core-to-core measurement and characterization of fiber arrays.



KEY FEATURES

- **Active measurement** of actual optical center, spatially accurate to ±0.15µm
- **Accurate** cleave angle measurement
- **Programmable fiber count** and array pitch for instant reconfiguration
- **Multi-axis positioner** with long travel and fine resolution for precise alignments
- **Integrated control** of motion, vision, power meter, and peripherals for fully automated device characterization
- **User-friendly** data analysis software tools for easy device characterization and measurement



TYPICAL APPLICATIONS

- Fiber array certification, quality check, and sorting
- Fiber array characterization and mapping

PALOMAR TECHNOLOGIES

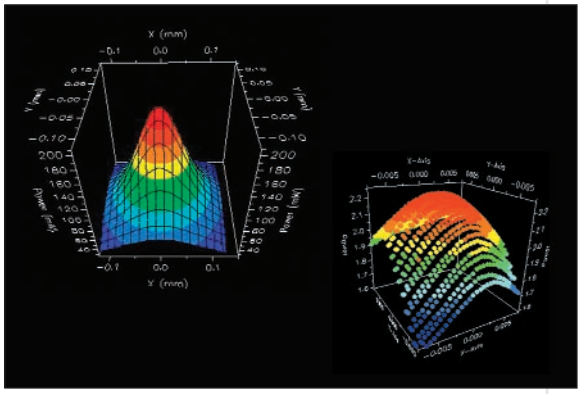
REV 3.2003

Perform Array Inspection and Mapping Accurately and Quickly

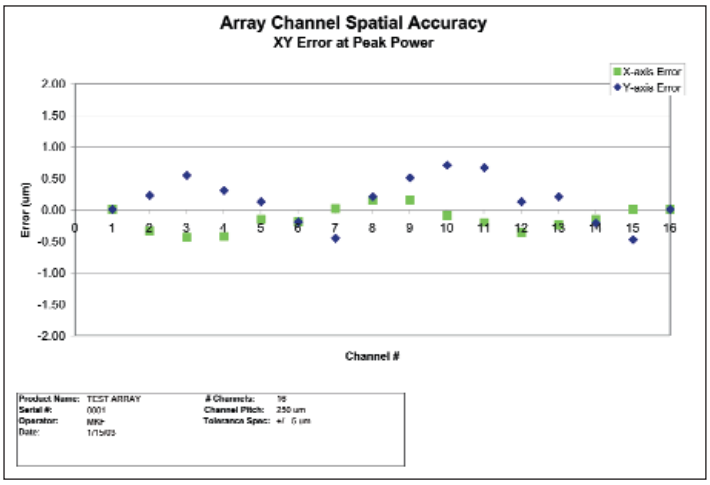
—Verify the quality of arrays, predict final device performance

WHY CHOOSE THE PALOMAR TECHNOLOGIES FAST™ ACE?

- Quick-load fixturing and long travel stages for fast load / unload of devices under test
- Testing protocol simulates final assembly for close correlation to actual usage
- Production-grade construction and non-contact drive system ensure long-term, reliable operation in lab or manufacturing environments
- Open-architecture PC bus-based control system is powerful and easy to use
- Turnkey solutions of proven, tested, standard processes bring manufacturing online quickly
- Advanced Process & Photonics Labs available to assist in new device process development
- Worldwide applications and service support.



Optical Align: FAST ACE performs an active alignment simulating actual device usage.



Channel Error: Metrology report for a 16-channel fiber array.

CORE-TO-CORE MEASUREMENT

- A calibration report is automatically generated of array performance on a per-channel basis.
- Active optical alignment to each channel accurately determines true optical center
- Less susceptible to pointing error than vision based systems
- Channel error mode reports XY displacement of each channel for accurate spatial mapping
- Insertion loss mode reports power loss of each channel to predict final device performance upon attach to a waveguide.

PALOMAR TECHNOLOGIES

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