Princeton Instruments is committed to providing our OEM partners innovative imaging, x-ray, and spectroscopy detection systems – as well as precision optical components – that deliver superior results and exceptional value.

Each of our OEM partners is unique. Bearing these individualities in mind, we tailor our OEM program to help every partner achieve:

- Reliable core components
- Faster market entry
- Increased profitability

A Framework That Fosters Success
Princeton Instruments, combined with Acton Research, has been supporting companies in their pursuit of excellence in spectroscopy, optics, and imaging for more than fifty years and benefits from both the financial and the intellectual backing of Roper Industries (NYSE: ROP). Our OEM program draws upon decades of experience meeting client-specified needs. Whether helping develop highly specialized products in scientific imaging and spectroscopy, or contributing to advancements in x-ray, industrial imaging, and high-performance laser optics solutions, we continually strive to deliver the quality products and services our clients demand.

Our Philosophy Is a Simple One
Princeton Instruments is committed to the success of our OEM partners. And over the years, we’ve learned that the best way to ensure this success is to nurture close and mutually beneficial working relationships.

Capabilities That Enable Custom Solutions
The Princeton Instruments OEM program exists solely to aid companies that are seeking optical solutions to incorporate into their unique products. The program facilitates the creation of value and the maximization of market share. Princeton Instruments’ OEM customers can choose to maintain their private brand name or to leverage our own established brand name in the marketplace, depending on which strategy best fits their business model.

We know that each OEM partner has unique requirements that demand creativity, technical depth, special expertise, and personalized execution. Princeton Instruments provides OEM partners access to our technical and commercial teams in order to design, manufacture, and market a successful product. Princeton Instruments works hand-in-hand with partners from design to launch and beyond through positioning, marketing, and support in the field. This fully integrated business relationship represents a paradigm shift from vendor to collaborator – the optimal arrangement for achieving mutual success.

Bold Construction via Clever Deconstruction
The name “Princeton Instruments” is synonymous with state-of-the-art optical detectors and spectrographs. Our OEM program effectively deconstructs these products, identifies their specific capabilities, and offers the elemental strengths to our OEM partners for integration into their own unique systems for resale. By translating desirable Princeton Instruments product attributes into an OEM-specific solution, both we and our OEM partners win. Most importantly, so do the end users.
Our OEM partners can benefit not only from Princeton Instruments’ capabilities, but from the capabilities of our sister companies within the Roper Industries family.

A component of the Fortune 1000, S&P MidCap 400, and Russell 1000 Indexes, Roper Industries provides engineered products and solutions for global niche markets, including water, energy, radio frequency, and research/medical applications.

Princeton Instruments leverages the relevant core competencies of Media Cybernetics, Photometrics, QImaging, and Gatan, Inc., highly renowned Roper Industries companies that offer our OEM partners advanced imaging software, FireWire-compatible cameras, electron microscope enhancements, and more.
Structure

- Manufacturing in Trenton, New Jersey and Acton, Massachusetts
- Approximately 70,000 sq. ft. cell-oriented manufacturing space
- Domestic service/repair team
- Domestic sales engineers for local technical/sales support
- Offices located around the world
- Quality improvement process based on both lean methods and methods from Six Sigma components
- ISO-certified 9001:2008
Imaging Group — CCD, ICCD, and EMCCD cameras for astronomy, BEC, combustion, PIV, single molecule, surface and material analysis, PSP, nanotechnology

Spectroscopy Group — CCD cameras, spectrometers, monochromators, and systems for Raman, LIBS, NIR, absorption, fluorescence, luminescence

X-ray Group — CCD cameras for EUV, lithography, XRS, plasma, diffraction, microscopy, tomography

Industrial Group — MEGAPLUS® high-resolution cameras for semiconductor, web inspection, document and film capture, digital radiography, ophthalmology, solar module inspection

Acton Optics & Coatings — high-performance mirrors, filters, and coatings for medical, semiconductor, material processing, analytical instrumentation, aerospace, and defense
Our approach is simple... Princeton Instruments is committed to the success of our OEM partners.

Who are our OEM partners?

Those who seek state-of-the-art, research-grade detection systems to differentiate themselves and succeed in a competitive market.

Those who are looking for integrated partnerships from project inception through launch, support, and beyond.

We achieve this by providing capabilities that maximize the value of each partner’s product, allowing them to offer it for a premium price, thus increasing profit margin.
Transforming Products into Capabilities

Our OEM program decouples products and distinguishes specific capabilities.

This approach allows each OEM partner to flexibly integrate key capabilities into a unique system for resale.

CAMERAS | OPTICS/COATINGS | SPECTROGRAPHS

Princeton Instruments

Win3

Approach:

A win for our OEM partner!
A win for Princeton Instruments!
A win for the end user!
OEM
Core Competencies

CCD, ICCD & EMCCD CAMERAS
- High Sensitivity / Low Noise
- Compact Footprint
- Customizable Design
- Lifetime Vacuum Guarantee*
- Deep Cooling Options

SPECTROGRAPHS
- High Reproducibility / Accuracy
- Flexible Configuration
- High-Efficiency Optical Coatings / High Throughput
- Durability / Ruggedness

OPTICS & COATINGS
- Durable, High-Performance Optical Coatings
- Mirrors, Filters, and Coated Lenses
- Custom Coating of Customer-Supplied Materials
- Precision Optomechanical Assemblies

*for select cameras
Princeton Instruments is committed to each integrated OEM partnership from its inception. Working in concert with our partners’ R&D and Engineering teams, we transition from concept to design to product seamlessly in order to ensure technical synergy and on-time delivery for launch.

**Keys to Success**

- **Concept Validation** – Sharing ideas to ensure achievement of the technical and commercial goals of the project to the satisfaction of both parties.

- **Engineering Design Review** – Developing a design (based on the agreed-upon concept) that meets requirements; tandem testing of the design for compatibility and performance.

- **Engineering-to-Manufacturing Transition** – Upon design review and sign-off, Princeton Instruments carefully transitions the design from Engineering to Manufacturing, maintaining the technical integrity of the product, while ensuring efficiencies in volume capacity and output. Princeton Instruments utilizes the industry’s best practices and controls in our manufacturing facilities, incorporating Statistical Process Control to build quality and reliability into our manufacturing processes.

- **Assembly** – Comprehensive documentation of assembly and test procedures allows our production facilities to provide high repeatability and versatility. Princeton Instruments’ manufacturing cells are configured to handle any product volume requirement, with varying degrees of intricacy. Princeton Instruments adheres to the ISO Standard 14644-1, Class 7, previously Federal Standard 209, Class 10,000.

- **Test Alignment** – Princeton Instruments confirms the details of the required test procedure and will prepare documents and execute a controlled test procedure to certify the product’s performance. Thereafter, Princeton Instruments will collaborate to develop the tooling and fixtures needed, as well as use the proper metrology equipment to meet specific OEM requirements.

- **Technical/Commercial Support** – The OEM partnership does not end with product delivery. Our commercial team works in conjunction with our OEM partners to develop a sound launch plan and market placement strategy, offering marketing collaboration and support to help ensure success. This unique approach demonstrates Princeton Instruments’ commitment to the success of our OEM partners.
Princeton Instruments OEM products are used by many of the world’s leading manufacturers in both the life and physical science arenas. Here is just a small sample set of relevant applications and markets.

**LIFE SCIENCES**
DNA Inspection / Sequencing
Live-Cell / Tissue Analysis
Whole-Animal Imaging

**DRUG DISCOVERY**

**PROCESS/QUALITY CONTROL**

**SOLAR INSPECTION**
Solar Panels
Solar Research

**REMOTE MATERIALS DETECTION**
Raman Fluorescence Spectroscopy

**SURFACE SCIENCE TECHNIQUES**
Semiconductor Failure Analysis

**X-RAY**
MicroCT
X-ray Imaging
X-ray Diffraction