• Mewport Ophir | Spectra-Physics

Your Research Journey Starts Here MKS New Lab Program

Newport

Your Research Journey Starts Here

Congratulations! You're ready to start the journey of building your new research lab. It's exciting, yet there's much to be done. MKS is here to assist you every step of the way with our New Lab Program.

Introducing the MKS New Lab Program

Let us put together a complete laboratory solution you can depend on. This includes all of the high-quality products and solutions you know and trust across our MKS, Newport, Ophir, and Spectra-Physics brands. Plus, get exclusive, members-only discounts.

- 20% discount on all optics
- 15% discount on all opto-mechanics
- 10% discount on all other standard catalog products except motion controllers*
- 5-15% discount on our MKS Pressure, Flow, Valve, Programmable Automation Controller (PAC) products, and Gas Analyzers

Plus, get exclusive, members-only discounts for two full years.

* Lasers, Service (including contracts, parts, labor and zone charges), Specials, and Custom items are not included in the New Lab Program. The New Lab Discount cannot be combined with any other discount or promotion. Program is subject to change without notice.

* The New Lab Program is valid for customers in the U.S. & Canada only. Contact your local sales representative for your country specific programs. Please visit www.newport.com/newlab to learn more.

Dedicated New Lab Specialists

As part of our New Lab Program, you will receive personalized support geared towards the unique requirements of your research program. Our New Lab Specialists have a broad range of applications knowledge and will work with you to select the right components, assist with laboratory design and layout, as well as make sure your new equipment arrives when it's needed. The New Lab Program will have your research group taking better data faster.



Make, Manage and Measure Light

We are the experts with light – from lasers to mirror mounts to power meters – and have extensive experience with new labs. We've worked with thousands of researchers around the world to help configure their new labs by optimizing their space and budget, saving valuable time. We look forward to working with you, too!

• MKS | Newport" | Ophir" | Spectra-Physics"

Your Journey Requires New Lab Essentials...

We make, manage and measure light precisely to help pave the way for you to focus on exciting scientific discoveries. You'll find everything you need for your new lab right here:



Lasers

We deliver breakthrough laser technologies that fuel our customers' success in demanding applications from bio-imaging to materials characterization to atomic physics and beyond. Spectra-Physics and Newport offer the most comprehensive range of laser solutions include ultrafast oscillators and amplifiers, DPSS, fiber lasers, and high resolution CW lasers. Our versatile product line provides complete coverage from femtosecond to CW, from UV to MIR and from Hz to MHz.



#1 in Ultrafast Lasers

- · World's largest installed base
- Broadest range of ultrafast technologies and products
- Pioneering ultrafast innovation and leading performance



CW Tunable and Non-tunable Lasers

- Broadest portfolio in the industryTunable and non-tunable lasers with wide
- wavelength coverage
 High power and compact low power, fibercoupled and free space configurations

Light Sources

We offer a wide variety of light sources optimized for characterization and testing applications. The Oriel portfolio provides decades of experience in solar simulation for photovoltaic cells and materials testing, as well as Arc Lamps, Quartz Tungsten Halogen Lamps, and Tunable Light Sources for detector characterization, microscopy, and materials science.



Solar Simulators

- Certified to all standards to match solar light
 From 1.5 to 12 inch (38 to 305 mm) output
- sizes for cell or module characterization
- Xenon arc lamp and LED based options, with complementary I-V and QE measurement solutions available



UV to IR Light Sources

- Wide selection of lamps for various spectral range
- Simple to install and use with intuitive power supply and housing included
- Wide range of accessories for coupling to a monochromator or stand-alone use



Tunable Light Sources

- Monochromatic light for sensor characterization
- All-in-one instrument, including a universal power supply, light source, and monochromator
- Widely selectable wavelength ranges and monochromator configurations





Vibration Control

With over 50 years of experience in vibration control, we bring confidence to your new lab from the very start. Our optical tables and isolation products are designed, manufactured and tested to deliver the highest level of isolation and stability. We offer the broadest range of vibration control products to meet all of your application needs.



Optical Tables

- Highest performance passive and active tables with field upgradeable features
- Cost-effective Integrity $\mathsf{VCS}^{^{\mathrm{TM}}}$ table systems
- Expertise in designing and manufacturing custom vibration control systems



Optical Breadboards & Workstations

- Broadest range of breadboard selectionsPassive and active ergonomic workstations
- for maximum stability
- User friendly design features and accessories



Isolators and Platforms

- Compact, maintenance-free tabletop mechanical isolators
- Pneumatic and elastomeric isolators for many applications
- Pre-configured isolated platforms for microscopes and instruments

Opto-Mechanics

Our Opto-mechanic components provide quality you can see and feel. With the tightest machine tolerances, we deliver top performance across every application. We also offer the broadest range of optical mounts and post assemblies in the industry to suit your budgetary and application needs.



ZeroDrift[™] Mirror Mounts

- Resists a temperature-induced
 misalignment
- Reduces thermal drift by 85%
- OEM and low wavefront distortion versions



LP-Series Multi-Axis Lens Mounts

- Gimbaled Angular adjustments
- Precision zero-freeplay positioning
- mechanism
 2, 3, or 5 axes of precision lens adjustment



OpticsCage+™ Optical Cage System

- Snap-in design for easy assembly
- Large selection of fixed and adjustable mounts for lenses, mirrors and polarizers
- Compatible with lens tubes, A-Line[™] and 30-mm cage systems



Forkless Optical Pedestals

- Takes up 1/3 the space of standard pedestals
- Highly stable for maintaining long-term alignment
- Eliminates bending stresses induced by clamping forks

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Motion

Our motorized and manual motion products boast proven specifications. Motorized stages feature ESP Enhanced System Performance, plug and play capability and one step configuration for quick setup. Comprehensive test reports are included with each motorized product. Our specifications are guaranteed to consistently deliver repeatable results. Over 1000 standard precise to ultra-precise motion products are in stock or available within two weeks.



- **Motorized Linear and Rotation Stages**
- Motorized Linear and Rotation Stages
- Wide selection of travel, loads, MIM
- ESP Compatible
- MIM Minimum Incremental Motion

delivers consistent performance for all budgets.



- Motorized Actuators 12mm to 50mm travel
- Sub-micron level MIM
- · ESP compatible



NanoPositioners

- Nanometer level MIM
- Micron to 50mm travel
- 0.2 to 1000N load capacity
- · Up to 4-zxis piezo controller



Motion Controllers

- 1 8 axis Integrated Motion
- Controllers · ESP, Plug and Play configuration

Optics

Broad Selection of Ultrafast Optics

pulse manipulation

tuning GDD

· High quality optics at catalog prices

Low dispersion mirrors for femtosecond

• Ultra-thin transmissive elements for fine

Fiber Optics



We offer superior optics by using precision optical fabrication techniques, state-of-the art optical coating methods and strict quality control standards. Whether you need high end ultrafast optics or general purpose metallic mirrors, Newport optics

Laser Clean UV Microscope Objectives

- UV fused silica lenses for 245-440 nm
- Infinity corrected, ideal for laser applications
- Excellent wavefront quality



BroadBeam[™] Ultra-Broadband High **Reflector Mirrors**

- 350-1100 nm wavelength range
- 0° to 50° incidence angle
- R_{ave}>97.5% for both S and P polarizations

We provide various fiber optic instruments and components for different research areas including telecom/datacom, LIDAR neuroscience, AR/VR, OCT, silicon photonics and lasers. With a wide range of wavelengths and speed selections, we deliver the lowest noise and highest performance for your applications.



Photoreceivers

- High speed Optical-to-Electrical converters for oscilloscopes, network & spectrum analyzers
- · Balanced receivers for small signals
- Frequency response, Pulse characterization, Eye-diagram, BERT, RIN



Fiber Optics Cleavers

- · Electronic and Manual
- Unique low torsion fiber clamping
- Laboratory precise, field rugged



Fiber Coupler

- Variable ratio
- Very precise coupling ratio adjustment from 0-100%
- · Low insertion loss & high polarization isolation

Vacuum & Analysis

Innovative instruments, components, and subsystems for precise control and measurement of pressure, flow, and composition. Fully programmable automation control (PAC) for process monitoring, control, and data logging for smaller R&D and laboratory settings.



- Pressure/Vacuum Measurement
 Baratron® Direct Pressure/Vacuum
- Capacitance Manometers • Granville-Phillips[®] Indirect Vacuum Gauges, Modules, Controllers
- Mass Flow Controllers



- Vacuum Valves & Pressure Controllers

 Gate Valves
- Vacuum Isolation Valves
- Downstream Valves



Automation & Control

- EtherCAT® Remote I/O
- Automation & Control
- Hardware and Software



Gas Analysis

- MultiGas[™] FTIR Gas Analyzer
- Residual Gas Analyzer
- Residual Gas Analyzer Software





Power/Energy Meters & Beam Profilers

With over 40 years of experience in measuring light, our Newport and Ophir brands comprise a complete line of power meters and beam profilers. Dedicated to continuous innovation in laser and LED measurement, we hold a number of patents and proprietary measurement technologies to accurately measure and characterize any beam.



Power & Energy Meters

- Broad range of power meters
- Up to 10 kHz measurement rate
- Advanced measurement such as peak to peak, single shot energy, and position tracking
- · Compatible with a large number of detectors





- Choice of power detectors between 300 fW to 120 kW
- Choice of energy detectors between 1 nJ to 30 J
- Specialty detectors such as position sensors and lock-in sensors



Beam Profilers

- Patented noise subtraction algorithm for accurate spot size measurement
- World leader with the largest installed base
- Cutting edge technology with more R&D spending than any of our competitors

Laser Diode Control

ILX Lightwave laser diode control products incorporate our proven technology for industry leading laser diode protection and deliver outstanding performance, quality, and longevity. Easy to use and navigate, these laser diode drivers, temperature controllers, mounts, and power meters provide the reliable source and/or measurements that are critical when developing and testing devices.



Laser Diode Instruments

- Guaranteed performance
- LIV capable versions
- Precision current and/or TEC temperature control



Laser Diode Mounts

- Robust design
- Pin-configurable customization
- Butterfly, DIL, mini-DIL, TO-Can, C-Mount, and custom high power laser diode package mount options



Optical Power and Wavelength Meters

- Unique simultaneous power and wavelength measurement
- Supports wavelengths from 380nm-1650nm
- Free space and fiber optic versions available





Start Your New Lab Journey with MKS and Start Saving Today

Leverage the power of our complete portfolio with MKS, Newport, Ophir and Spectra-Physics



New Lab member benefits:

- Dedicated New Lab Specialists
- Exclusive discounts

MKS advantage:

- Industry leader in performance, innovation and quality
- Thousands of products in stock, ready to ship
- Enhanced search and filtering on Newport.com
 Plus FREE Two-day Shipping* on your favorite products

*For more details and restrictions visit www.newport.com/free2day

Sign up today: Call: +1 877-835-9620 email: sales@newport.com Visit: www.newport.com/newlab

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