

# THE NEWPORT NEWSLETTER



N° 34

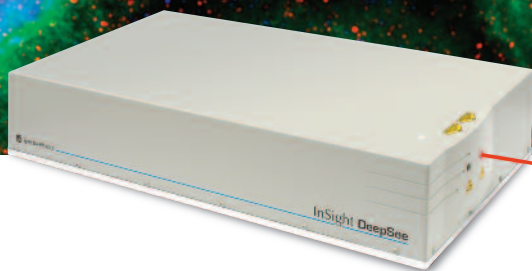
Solutions to Make, Manage and Measure Light<sup>SM</sup>

FALL 2011

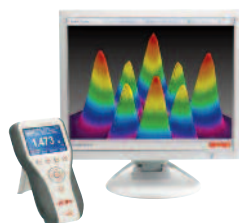
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# CORPORATE NEWS

## Newport Corporation Completes Acquisition of Ophir Optronics Ltd

Newport Corporation (NASDAQ: NEWP) announced that it has completed the acquisition of Ophir Optronics Ltd. ("Ophir"), a global leader in precision infrared optics, photonics instrumentation and three-dimensional non-contact measurement equipment, for \$8.43 per share in cash.



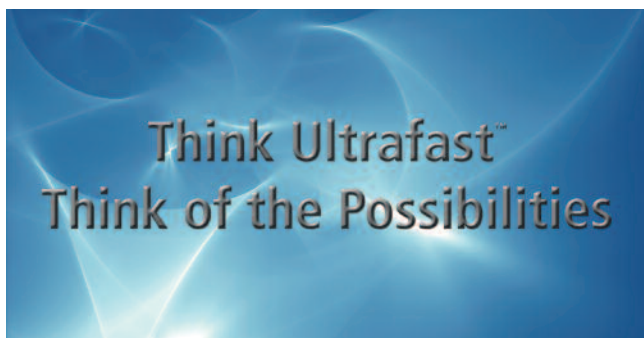
This acquisition expands our global footprint and further diversifies our end market participation. It represents an important step in the implementation of our strategy to become the world's premier source for photonics technology and products.»

Robert J. Phillippy, Newport's President and Chief Executive Officer, said, «We are delighted to have Ophir join the Newport team, and we are confident that the addition of Ophir's outstanding products, technologies and customer relationships will further strengthen Newport's leadership position in the photonics industry. Ophir has a long history of strong and consistent revenue growth and profit generation, and we expect this acquisition to help Newport deliver significantly higher levels of revenue and profit in the future. We will immediately begin implementing our integration plans, and we expect the transaction to be accretive to our earnings in the fourth quarter of 2011 and thereafter.

Ophir ([www.ophiropt.com](http://www.ophiropt.com)) is headquartered in Jerusalem, Israel, with manufacturing operations in Israel and the U.S. and sales offices in the U.S., Japan and Europe. For the six month period ended June 30, 2011, Ophir had revenue of \$60.5 million, an 18.1% increase over the first half of 2010, and operating income of \$6.8 million. Newport expects Ophir to achieve slightly higher levels of revenue and profit in the second half of 2011 compared with the first half of 2011. Ophir will operate as a wholly-owned subsidiary of Newport Corporation

**WEB** See our website for more info.  
[www.newport.com/Ophir](http://www.newport.com/Ophir)

## Newport Corporation Completes Acquisition of High Q Technologies



As Newport's Spectra-Physics celebrates the 50th year of its founding as the first commercial laser company, we are pleased to announce another major industry development, the acquisition of High Q Lasers. Spectra-Physics, the innovator in ultrafast laser technology, now has the added capabilities of High Q Lasers, the largest European manufacturer of ultrafast lasers. High Q brings a set of complementary products including high performance, high-rep rate ultrafast oscillators and amplifiers for OEM and scientific applications. With the acquisition of High Q, Spectra-Physics further expands its portfolio of market leading technologies, products and applications in ultrafast lasers.

**HIGH Q LASER** joins **Spectra-Physics**  
A Newport Corporation Brand

**WEB** See our website for more info.  
[www.newport.com/High-Q](http://www.newport.com/High-Q)

We believe that this combination will result in more solutions and further innovations to meet our customers' most demanding requirements. We are excited to have the High Q Laser team and customers join our family and look forward to working with you on your latest laser applications and requirements.



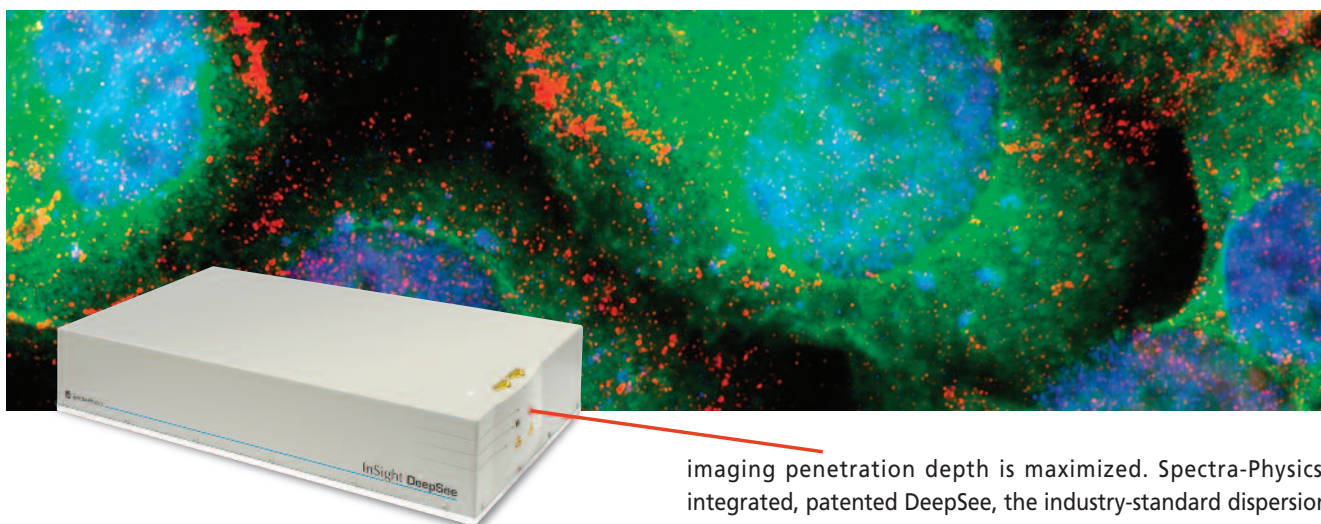
# MAKE LIGHT



**InSight™ DeepSee™**

## Spectra-Physics Pioneers New Ultrafast Laser for Deep Tissue Imaging

*InSight™ DeepSee™ delivers revolutionary performance in a turn-key system.*



### The InSight DeepSee Advantage

- Broadest tuning range: 680 nm to 1,300 nm for deepest imaging
- Short pulse width and highest peak power for maximum fluorescence
- Integrated DeepSee™ to deliver short pulses to the sample
- Ideal beam characteristics optimized for multiphoton imaging
- Fully automated, turn-key system
- Dual wavelength option for uncaging, CARS and multi-modal imaging

Based on a novel proprietary technology, the new InSight DeepSee delivers nearly double the tuning range of existing ultrafast lasers and provides seamless access to long infrared wavelengths for deepest in vivo imaging, taking multiphoton imaging to new depths. InSight DeepSee is robust and fully automated, providing easy-to-use, hands-off operation and freeing users to focus on their critical research.

InSight DeepSee features an unprecedented 680 to 1300 nm continuous tuning from a single source, short 100 fs pulse widths and highest peak power levels into the infrared where

imaging penetration depth is maximized. Spectra-Physics' integrated, patented DeepSee, the industry-standard dispersion pre-compensator, delivers the short pulses through a microscope to the sample for maximum fluorescence. A dual wavelength option is available for advanced imaging techniques, including uncaging, coherent anti-Stokes Raman scattering (CARS) imaging, and multi-modal imaging.

This fully-automated ultrafast laser can be seamlessly tuned, with the click of a mouse, to any wavelength within seconds. The laser system also has ideal beam characteristics optimized for multiphoton imaging. InSight DeepSee is designed, built and tested to stringent quality standards for hands-free, reliable operation.

### Applications

- Multiphoton microscopy
- Multimodal imaging including CARS and SHG
- Time-resolved photoluminescence
- Non-linear spectroscopy
- Optical computed tomography
- Surface second harmonic generation
- Terahertz imaging
- Semiconductor metrology

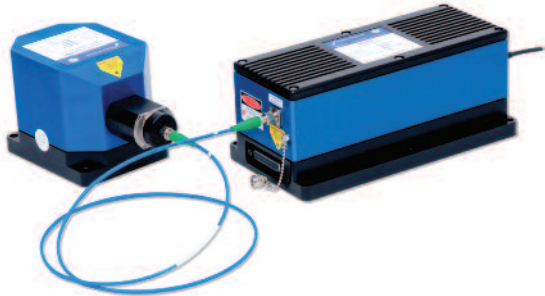
**WEB**

See our website for more info.  
[www.newport.com/InSightDeepSee](http://www.newport.com/InSightDeepSee)

## **[v] New Focus** | **TA-7600 VAMP**

### Tapered Semiconductor Amplifiers

*New VAMP at 671 nm and 2 W at 780 nm.*



The New Focus VAMP™ series of Tapered Amplifiers is designed to provide up to 2 W of amplified power at a variety of infrared wavelengths. The VAMP will faithfully amplify tunable single-frequency light produced by External Cavity Diode Lasers as well as other light sources of appropriate wavelength.

The New Focus engineering team designed reliability and ease of use into the VAMP as well as performance. Fiber-coupling input ensures fast, easy, and reliable alignment. Simply make a secure connection with your FC/APC fiber and that's it - no

tweaking. Active input power monitoring insures that self lasing won't damage the tapered amplifier chip. A power lock loop monitors and levels the output power to provide quiet, low-drift output all day long even when your laboratory environment changes. A simple USB driven GUI provides all the control you need.

When seeded with a low-ASE source such as the Vortex™ II or Velocity™ lasers the VAMP faithfully reproduces the narrow linewidth and high contrast ratio. The VAMP will also accept other seed sources, including many home-made ECDLs.

We are offering bundle pricing to academic customers on both Vortex II and VAMP, asaving of 21% until the end of this year.

**WEB** See our website for more info.  
[www.newport.com/TA-7600](http://www.newport.com/TA-7600)

## **[v] New Focus** | **TLB-6700 Velocity™**

### Widely Tunable Lasers

*The all new laser is a complete redesign of our well established Velocity laser series.*



#### The TLB-6700 Velocity Advantage

- Mode hop free tuning range across entire wavelength range
- Fiber-coupled and free space options
- Higher power and wider tuning on all new 6700 Velocity
- <200 kHz linewidth integrated over 50 ms
- >40 dB side mode suppression ratio
- Wavelength and power readouts
- Automatic laser head recognition

Introducing the world's most advanced tunable diode laser Velocity offers complete single mode tuning across its entire output spectrum with no mode hops and closed loop wavelength position control.

The integrated wavelength monitoring system allows the user to dial up a wavelength with 0.01 nm accuracy and scan across all or part of the tuning range. We've enlarged the drop tested and shock proof cavity housing, added more powerful temperature control, and introduced our unique Starflex™ Magnetic Dampening to the 6700 Velocity™.

This means we can now bring you higher power output but with an even further reduced linewidth. That's more power with even greater precision. For our fiber coupled version, we now provide a permanently aligned fiber fixed in place. The isolator and coupling are within the temperature controller and shock proof housing. This new design increases efficiency and maintains power stability

**WEB** See our website for more info.  
[www.newport.com/TLB-6700](http://www.newport.com/TLB-6700)

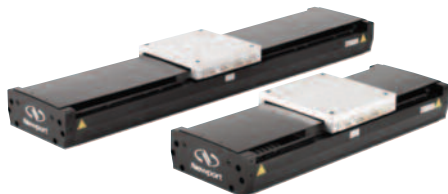
# MANAGE LIGHT



## IMS-LM Series

### High-Performance Long Travel Linear Motor Stages

*Travel range goes up to 1200 mm.*



The IMS-LM series linear motor stages are designed for self-supporting applications with travel ranges from 300 mm to 1200 mm. The stages feature a robust design with high performance and are cost-effective solutions for precision industrial applications such as semiconductor wafer inspection, micro-electronics test and assembly, pick and place, DNA sequencing, or laser machining. The IMS-LM-SA version with 4-point mounting is ideal for delay lines and other applications with non-flat mounting surfaces. The series also utilizes an FEM optimized extruded aluminum body that is extremely stiff.

#### Key Features

- Stiff body design allows for rigid XY assemblies (up to 600 mm for Y)
- Single axis or gantry configuration up to 1200 mm travel
- High-efficiency ironcore linear motor minimizes heat generation for rapid and repeatable point-to-point positioning
- High resolution linear encoder feedback for accurate positioning and sub- $\mu$ m repeatability
- Turnkey solutions including control and drive electronics

Unlike-screw driven stages, the IMS-LM employs a center-driven linear motor. This linear motor is absolutely noise-free and has the advantage of higher speed, acceleration and system responsiveness without wear of motor brushes or drive screws. Due to the fully integrated linear motor, the IMS-LM is more than 100 mm shorter in length than a comparable screw driven stage. Thus, the IMS-LM is the optimum solution for space constrained applications that require high-throughput, high reliability, and ultra-quiet operation.

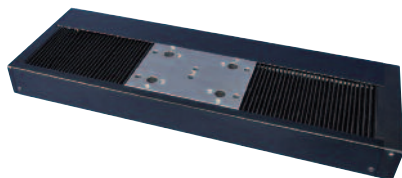
**WEB** See our website for more info.  
[www.newport.com/IMS-LM](http://www.newport.com/IMS-LM)



## FMS Series

### Precision Linear Stages

*Designed specifically for surface metrology applications.*



The FMS series of precision linear stages is Newport's latest innovation in high precision motion control technology. These stages address the unique needs of surface metrology applications for smooth motion, low noise, high straightness and flatness. The FMS linear stages run highly flat and straight and combined with steel construction, enable higher accuracy performance. Travel options include 100 mm, 200 mm and 300 mm and can be ordered with either a DC or stepper motor. As with all Newport motorized stages, there is a wide choice of ESP-compatible, integrated controller/driver products, ranging from the single axis SMC100, to the 3-axis ESP301 and high-performance 8-axis XPS Universal Controller.

#### Key Features

- All-steel construction combines high stiffness and thermal stability resulting in robust and repeatable measurements
- Anti-creep crossed roller bearings provide exceptional straight and smooth motion, reducing measurement noise and eliminating measurement variability
- Precision ground ball screw made for high speed motion, enabling higher throughput capability
- Ideal for surface metrology applications

**WEB** See our website for more info.  
[www.newport.com/FMS](http://www.newport.com/FMS)

The FMS stages have a nominal speed of up to 100 mm/s, easily improving throughput compared to other products on the market. Controlling with Newport integrated motion controllers and drivers like the ESP301 or the XPS, adds more flexibility in gathering metrology data. The FMS linear stages are outstanding solutions for applications in surface metrology, surface profilometry and tribology.





## CONEX-AG-PR100P

### Integrated Rotation Control Device

*Competitively priced integrated miniature piezo motor rotary stage and controller.*



#### Key Features

- Highly repeatable angular motion
- High sensitivity (MIM)
- Compact size
- Affordable with quick delivery
- Integrated and easy to set up

**WEB** See our website for more info.  
[www.newport.com/CONEX-AG-PR100P](http://www.newport.com/CONEX-AG-PR100P)

The CONEX-AG-PR100P is a piezo motor rotary stage integrated with a closed-loop piezo motor controller/driver. Initially targeted for repeatable positioning of polarizing optics, it can also be used as a miniature rotation stage for precision positioning of other optics or lightweight samples. The Agilis AG-PR100P rotary stage comes with a built-in direct read encoder, enabling high angular position repeatability. The footprint is maintained while delivering 0.002° uni-directional

repeatability expected from direct read encoder technology. The rotary stage is very compact, but is capable of 340° travel, and 0.001° MIM.

The CONEX-AGP is a very compact and inexpensive single axis motion controller and is delivered already pre-configured for the stage. The controller is compatible with the NSTRUCT Instrument Manager platform, simple and intuitive to use and conveniently accessible via USB, which also supplies power to the controller. For OEM applications, an optional retainer to secure the USB and power cables is available. In addition, RS232 and RS485 communication are available at the board level.



## CONEX-AG-M100D

### Compact Absolute Positioning Mirror Mount with Integrated Controller

*Priced affordable and compatible with the simple and intuitive to use NSTRUCT Instrument Manager platform.*



#### Key Features

- Very compact size
- Repeatable positioning
- Recoverable position
- Set-and-forget long-term stability

**WEB** See our website for more info.  
[www.newport.com/CONEX-AG-M100D](http://www.newport.com/CONEX-AG-M100D)

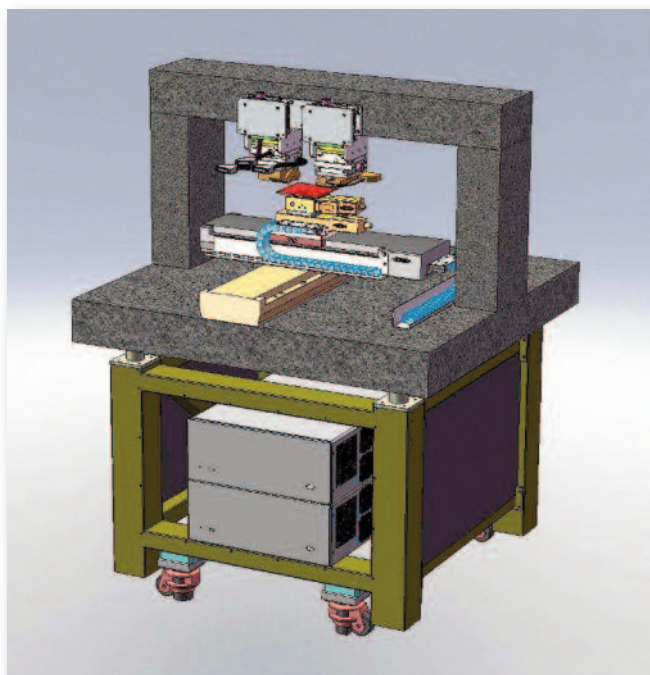
The CONEX-AG-M100D is a piezo motor driven mirror mount with a built-in 2-axis, absolute angle position sensor. The absolute position sensor not only provides highly repeatable positioning, but also enables the recovery of a previously saved position. Utilizing the proven Agilis piezo-motor, direct-drive technology, the CONEX-AG-M100D will hold its position even when the power is turned off. The absolute position sensor enables 0.001° closed-loop MIM and 0.01° bi-directional

repeatability. In open loop, it has a 2 μrad MIM over a large motion range of ±0.75°.

The CONEX-AGAP is a very compact and inexpensive two axis motion controller and is compatible with the NSTRUCT Instrument Manager platform, simple and intuitive to use, and conveniently accessible via USB, which also supplies power to the controller. For OEM applications, RS232 and RS485 communication are available at the board level



## Twin Head Fiber Alignment for Flexible and Efficient Silicon Photonics Wafer-Scale Measurements



Research and development in silicon photonics requires an immense amount of time on optical measurements in varying conditions. For the fabrication and testing of complex circuitry at the wafer level, high speed and high accuracy are critical for reliable testing. Newport worked closely with the photonics research group at Ghent University's IMEC group to provide the most efficient and flexible solution for wafer scale measurement.

### Newport Solution

The setup consists of 4-axis stage stack mounted on a granite table and twin fiber alignment 4-axis heads mounted upside down on the granite bridge structure. The 4-axis stage stack on the base moves the wafer samples of various sizes to the precise location. The IMS stages provide more than 300 mm travel in XY to move the wafers between loading and test positions. The twin fiber alignment heads provide the fine adjustment of the fibers, and the M-VP-25XL-XYZ provide the superior 5 nm resolution with excellent position stability which is critical for

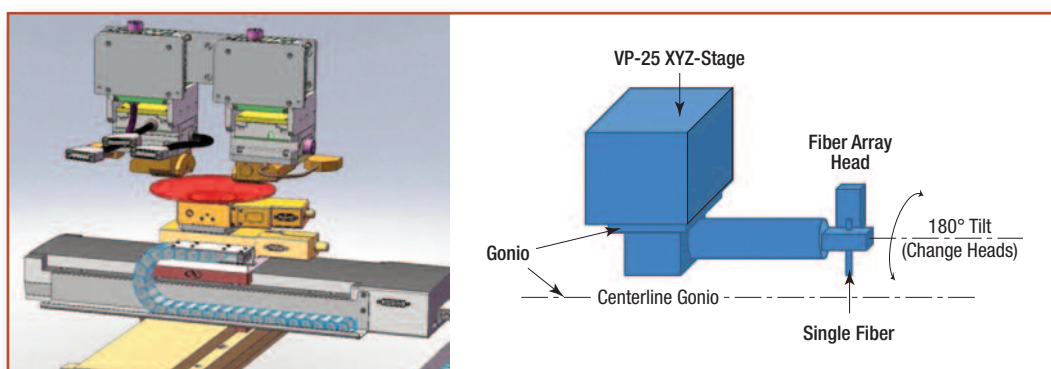
continuous measurement over a long period of time. The fibers are positioned above the wafer and the light from the fiber output is coupled into the optical chips. During the process, the light is coupled into the waveguide through a diffraction grating. While the location of the gratings is fixed in most cases, the BGS50CC on the fiber alignment heads provide angular adjustment of the fiber, in order to optimize the coupling with custom gratings and for different wavelength settings.

The entire system is designed to accommodate the different needs in various test conditions. For example, the single fiber head can be easily replaced by fiber arrays. By de-coupling the fiber stage assemblies from the sample stages stack, it not only enables better thermal control to avoid position drift but also allows the setup to be applied on commercial wafer testers.

### Standard Product List

- M-IMS400CCHA high performance linear stage
- M-IMS300CCHA high performance linear stage
- UZS80PP vertical stage with stepper motor
- URS100BPP precision rotation stage with stepper motor for  $\Theta_z$  axis
- (2) M-VP-25XL-XYZ compact XYZ stage stack for fiber alignment heads
- (2) BGS50CC goniometric cradles for  $\Theta_y$  fibers
- XPS-C4 controller for wafer stack
- XPS-C8 controller for 2 fiber alignment heads stack

Having the BG series goniometric cradle on top of the M-VP-25XL-XYZ stage provides the flexibility allowing more than  $10^\circ$  angular adjustment for fibers. Since the two fibers are required to be in close proximity, the fibers are cantilevered as shown below. Newport motion system helped meet the challenging requirement of maximum position drift within  $\pm 50$  nm in all axes after the commanded move.





## Suprema

### Clear Edge Mirror Mount



#### Key Features

- All stainless steel base material
- Exceptionally compact design
- Both right-hand and left-hand versions
- Clear quadrant with edge access
- Excellent stability and adjustability
- English and metric compatible

The SN200 is a stainless steel mount for 2 in (50.8 mm) diameter optics and is sold with locking adjustment screws for precision pitch/yaw positioning. This Suprema mount is designed to be more compact than other mounts of its size, allowing unencumbered access to the edge of the mirror. This means that mirrors held with this mount can make physical contact with each other (the SN200 is available in right-handed or left-

handed versions for just this purpose). This precision mount utilizes micro-polished carbide pads which enable smooth, low-friction adjustment and outstanding stability.

**WEB** See our website for more info.  
[www.newport.com/Suprema\\_CE](http://www.newport.com/Suprema_CE)



## Integrity™ VCS Series

### Vibration Control System

*Economical isolation platform with superior isolation performance.*



#### Key Features

- Available in 6, 8 and 12 inch thickness
- Athermalized design for excellent thermal stability
- Surface Flatness of  $\pm 0.15$  mm ( $\pm 0.006$ ") over any 1 m<sup>2</sup>
- Proprietary constrained layer damping attenuates broadband vibrations
- Non-corrosive sealing of holes and honeycomb cells
- Field upgradable pneumatic isolation with automatic leveling valves
- Integrated leveling feet

Newport's new Integrity™ VCS vibration control system combines the performance and value of our patented Newport optical tables with a new, innovative isolation platform that features integrated shelf and mobility accessories to optimize laboratory space, organization and safety.

Integrity Series Vibration Control Systems (VCS) are composed of two components: a damped stainless steel work surface and either rigid or pneumatic isolators with automatic leveling valves integrated into a new frame design to deliver an economical isolation platform with superior isolation performance.

Integrity Vibration Control Systems are available in the most popular sizes and several performance levels to fit any budget. An optional overhead shelf is available to improve lab space utilization, organization and safety. Integrity VCS systems are available in three performance levels: Integrity 1, Integrity 2 and Integrity 3 Series.

**WEB** See our website for more info.  
[www.newport.com/Integrity\\_VCS](http://www.newport.com/Integrity_VCS)





# MEASURE LIGHT



## Enhanced calibrated Integrating Sphere Detectors

*Ideal for measuring high power laser beams.*



Ideal for the measurement of output light power of high-power light sources, the newly enhanced calibrated Integrating Sphere Detectors spheres optimize the measurement geometry for laser beams and other light sources, whether collimated or divergent. The new series includes Model 819C (collimated) and Model 819D (divergent); both deliver excellent NIST traceable calibration uncertainties of less than 3% for most measurement ranges specified.

The calibrated integrating sphere models with a silicon (Si) detector operate from 400–1100 nm, and those with indium gallium arsenide (InGaAs) detector cover the spectral range from approximately 800–1650 nm. To accommodate various power range requirements, the calibrated integrating spheres are available in 2-inch, 3.3-inch, and 5.3-inch diameters.

The new design includes a robust port frame plus a variety of attachments and accessories to provide greater configuration flexibility. All sizes of the spheres include an SMA fiber optic connector on the north pole as a standard feature, allowing a small amount of light pickoff for wavelength measurement or any further analysis, without affecting the overall system calibration.

**WEB** See our website for more info.  
[www.newport.com/sphere](http://www.newport.com/sphere)



## GHz Nirvana

### Introducing the High-Speed Receiver with Automatic Balancing

*Allows perfect power balance between the reference and signal beams.*



The New Focus™ GHz Nirvana™ High Speed Receiver is the world's only photoreceiver with automatic balancing, featuring 2000 times higher bandwidth and new fiber coupling, along with completely automatic signal balancing. Our patent-pending auto-balance feature allows the elimination of background noise from dynamically changing systems, including thermal drift and wavelength dependence, allowing you to achieve perfect power balance between the reference and signal beams.

The GHz Nirvana Receiver has an operating wavelength range of 900–1650 nm and can cut the effects of laser noise by 25 dB, making even very small signals easy to see. Rise time is less than 1 ns and peak responsivity is 30,000 A/W.

The receiver is ideal for use in commercial systems where easy assembly and reliable performance over both time and temperature are critical. It also improves the performance of swept-source optical coherence tomography (SS-OCT) using both high-speed balanced and auto-balanced detection. In this application the balanced detection allows subtraction of all common-mode noise and improves the ability to resolve low scattering features deep in the sample.

**WEB** See our website for more info.  
[www.newport.com/Nirvana\\_GHz](http://www.newport.com/Nirvana_GHz)



## 841-P-USB

### Virtual Optical Power Meter



#### Key Features

- Compatible with 818 & 918D photodiode detectors and 818P thermal detectors
- Virtual power meter software included
- Full statistics package
- USB interface with cable included

The Model 841-P-USB Virtual Power Meter is easy to use and intuitive enough to master in minutes. A USB cable is included with the meter to connect to your PC or laptop computer, and provide the unit with power.

The built-in features of the 841-P-USB Software include a complete statistics package, which lets you choose between a line plot and a histogram. Using the same screen, the user can set the data sampling parameters. It is easy to recover from measurement interferences. For example, the last value or the last period in the statistics buffer can be canceled, enabling you

to continue without stopping your work. There are also many options for saving data, saving statistics, or both.

The 841-P-USB meter is equipped with a DB15 input connector for direct compatibility with Newport's new 818P Series High Power Detectors and 918D Series Low Power Detectors.

**WEB** See our website for more info.  
[www.newport.com/841-P-USB](http://www.newport.com/841-P-USB)



## 1830-R

### Optical Power Meter



#### Key Features

- Drop-in replacement of legacy 1830-C
- USB2.0 (1830-R) and additional GPIB/RS-232 (1830-R-GPIB) Interfaces
- DC power measurements in the 10 pW–2 W range
- A chirping audible tone for alignment

The all new Model 1830-R Optical Power Meter is a completely redesigned optical meter, replicating much of the functionalities and specifications of the legacy 1830-C Model. The 1830-R is a perfect drop-in replacement for your existing 1830-C, which was also the most popular Newport meter used in fiber optic component production and testing.

DC power measurements can be displayed in units of W, dBm, dB, and Relative Measurement on the instrument's bright 4 1/2 digit annunciated LED, providing wide dynamic range with power sensitivities down to 10 pW and full scale readings up to

2 W (detector dependent). Relative power measurements, in reference to a previously stored value, is performed with the result displayed either as a ratio or dB.

USB2.0 is the standard computer interface, while the 1830-R-GPIB model offers additional IEEE-488 (GPIB) and the RS-232C ports. Both the 1830-C and the newer 19xx-C commands are supported.

**WEB** See our website for more info.  
[www.newport.com/1830-R](http://www.newport.com/1830-R)



## LAKIT Series

### Laser Alignment Tuning Kits



Newport's new laser power alignment kits are ideal tools for aligning various types of lasers in a research setup. The kits include the all new 1917-R laser power meter and a broad choice of optical detectors, so that one can find the best kit for the laser type. The kits also include the mounting accessories as well, thus simplifying product selection and ordering. You can simply need to purchase another power meter or a detector, should more complex measurement requirements arise.

The types of detectors available in the kits are: 918D Series detectors for low power ( $<2 \text{ W/cm}^2 \text{ CW}$ ) lasers in the visible or in the IR, and 818P thermopile detectors. The 918D Series photodiode detectors are equipped with an integrated OD3

attenuator, increasing the measurement dynamic range. For power density ranges below  $1 \text{ mW/cm}^2$ , we recommend setting the attenuator at the OFF position to maximize the signal to noise ratio. 818P Series thermopile detectors are slower and less sensitive than photodiode detectors but are a good choice for measuring the average power for high power lasers operating both in cw or pulsed mode. Fiber adapters are separately available for purchase for both the photodiode and the thermopile detectors.

#### Key Features

- Great tool kit for laser tuning and alignment
- Kits including an optical power meter, detector, and mounting assembly
- Choose from Si, Ge, or thermopile detectors
- Wavelength ranges between 200 nm to  $10.6 \mu\text{m}$ , up to 100 watt power
- Simple product selection and ordering processes

**WEB** See our website for more info.  
[www.newport.com/LAKIT](http://www.newport.com/LAKIT)



## Fiber Optic Strippers



Newport offers a variety of Fiber Optic Strippers that meet your requirements. The new F-STR-103D series fiber optic strippers allow stripping the 2–3 mm outer jacket, 900  $\mu\text{m}$  buffer, and the 250  $\mu\text{m}$  polymer coating for the standard 125  $\mu\text{m}$  fiber using only a single tool.

The F-STR-152, -175, -203, and -305 Fiber Coating Strippers are for the reliable stripping of virtually any size buffer from standard and specialty optical fibers. Removal of buffer is accomplished by scribing the buffer which does not allow for nicking, cutting or scraping the fiber beneath. An exclusive centering device positions the fiber for precise scoring and the

removal of buffer coating. Cutting blades, made from razor quality steel score 5.3 in. (135 mm) length and 1.6 oz (45 g) weight.

The Model F-JS2 Wire Stripper can remove fiber jackets safely and efficiently to diameters of 0.4 mm to 1 mm, leaving an undamaged exposed fiber. Both regular and loose tube fiber cables can be removed with this easy-to-use tool

#### Key Features

- Highly Accurate and reliable fiber stripping
- Tools for various fiber diameters
- No adjustments necessary

**WEB** See our website for more info.  
[www.newport.com/Strippers](http://www.newport.com/Strippers)





## InstaSpec ISX

### IR and CCD Cameras

*High-performance scientific cameras and enhanced software for spectroscopy applications.*



Oriel®, a Newport Corporation brand, recently introduced two high performance scientific cameras, the InstaSpec® ISX CCD and the InstaSpec ISX IR. The cameras are available with new InstaSpec Pro™ software which provides complete system control of single or dual camera configurations and all the functions of any Oriel spectrograph.

The InstaSpec ISX CCD camera features a back illuminated CCD sensor with a 1024x122 pixel array (24x24 µm pixel size). This

affordable scientific camera is designed for operation in the 200–1100 nm spectral range, making it ideal for spectroscopy, Raman spectroscopy, laser-induced breakdown spectroscopy (LIBS), emission, reflectance, and multi-stripe absorbance applications.

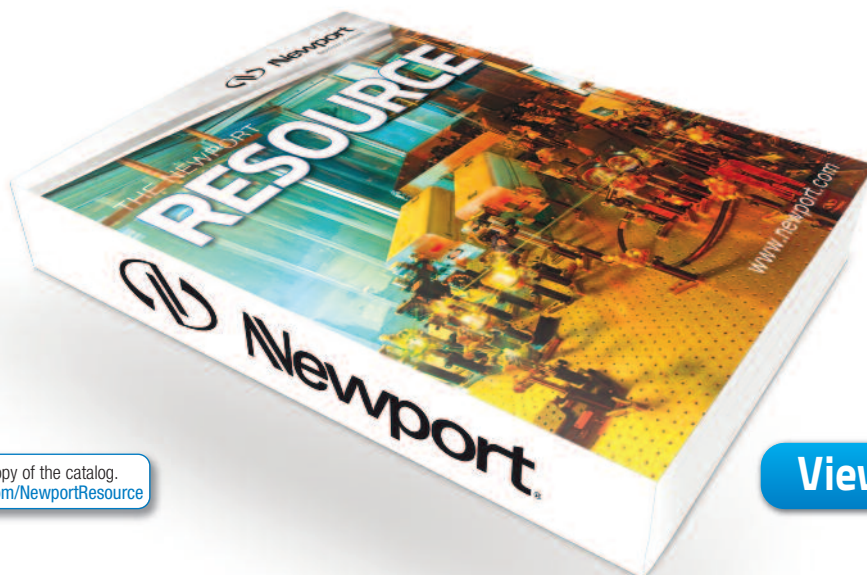
The InstaSpec ISX IR scientific camera is designed with an indium gallium arsenide (InGaAs) linear array (1x256 pixels) with a 50 µm pitch that operates in the 800–1700 nm spectral range. The high performance line scan detector is ideally suited for scanning applications in infrared, such as spectroscopy and Raman spectroscopy.

Both the InstaSpec ISX CCD and the ISX IR cameras feature high resolution and high dynamic range. They are thermoelectrically-cooled (TE air-cooled) and bundled with Oriel's InstaSpec Pro software, produce a powerful spectrograph. Other camera features include dual gain control settings, integrated digital signal processing (DSP), and both use standard USB 2.0 high speed interfaces, which conveniently eliminate the need for custom interface cards

**WEB** See our website for more info.  
[www.newport.com/InstaSpec\\_ISX](http://www.newport.com/InstaSpec_ISX)

# NEW Literature

The Newport Resource is designed as a learning resource and product guide for optoelectronics engineers, universities, and photonics researchers. It features 1,632 pages and highlights 2,440 new products. In addition, there are over 202 pages of technical and application notes, plus instructive reference information, e.g. definitions and characteristics for tunable diode lasers, manual positioning, picomotors, optical measurement devices, optics, and more.



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