



lasers  
spectroscopy  
micropositioning

SYSTEMS FOR INDUSTRY & RESEARCH

**GMP**

GENERAL  
MICROTECHNOLOGY  
& PHOTONICS



# Lasers

## teem photonics™

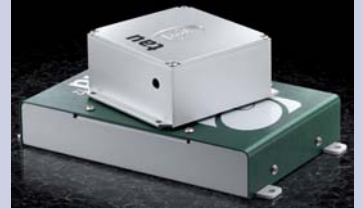
**teem photonics** - picosecond passively Q-switched DPSS Nd:YAG lasers at 1064nm, 532nm, 355nm and 266nm. Now up to 150 kHz repetition rate and up to 200 J per pulse with fiber amplification. Ideal for two-photon microfabrication, high quality marking and micromachining as well as sensing/analytcs.



## Laser QUANTUM

INNOVATIVE RELIABLE INTELLIGENT

**Laser Quantum** – High power CW DPSS lasers, TEM00, up to 12W @ 532nm, 350mW @ 473nm, 400mW SLM @ 532nm, 3W @ 1064nm, 500mW @ 660nm & 671nm. These lasers are suitable for such applications as fs Ti:Saph pumping, PIV, microscopy, spectroscopy, fluorescence imaging and Raman.



## GSI Lasers®

**GSI Group** – High power industrial fiber lasers, up to 400W @ 1080 nm, CW & pulsed Nd:YAG lasers up to 2000W, Q-Switched Nd:YAG lasers for industrial applications. For use in laser welding, cutting, drilling and marking. A complete range of fiber coupled process tools is available.



## SYNRAD



**Synrad** – Industrial CO<sub>2</sub> lasers and marking systems from 10–400W for a wide range of processing applications – on different materials – such as marking, drilling, engraving, cutting and many more.

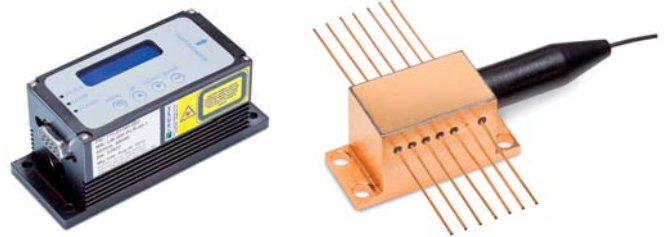
## JDSU



**JDSU** – He-Ne lasers, argon lasers, fiber lasers, CW DPSS lasers, marking systems. High power DPSS, 12 W, 50 kHz at 355 nm; 150 mW, 100 MHz at 355 nm; 500 mW CW SLM at 532 nm or 1064 nm. CW, 10 and 20 mW at 488 nm free space or fiber coupled.

## ONDAX

**ONDAX** – Wavelength stabilised laser diodes and systems, with wavelengths ranging from 405 nm to 808 nm. For use in Raman spectroscopy, biomedical instrumentation, holography, data storage, microlithography...



## MODU-LASER™

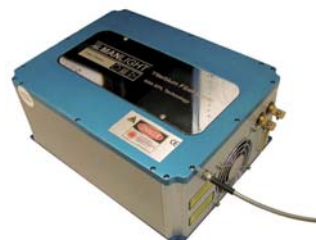
FLEXIBLE LASER SOLUTIONS

**Modu-Laser** – Air-cooled compact Argon & Argon/Krypton lasers. Selectable multiline operation, 458 nm, 488 nm, 514 nm, 568 nm, 647 nm.



## MANLIGHT

**Manlight** – Ytterbium and Erbium doped fiber lasers: 1µm CW 5 to 100W random polarisation; 1µm pulsed up to 30W 1mJ, up to 30kW peak power; 1.5µm CW up to 20W; 1.5µm pulsed up to 100µJ for LIDAR; full range of 1.5µm EDFAs; OEM or Bench top units, compact multi-port gain block, polarization maintaining and SLM units available.



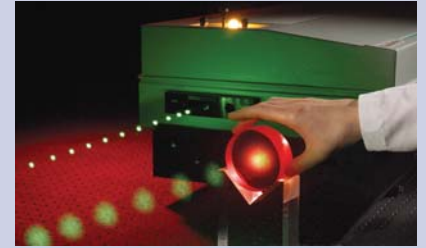
# Lasers

**QUANTRONIX**  
An Excel Technology Company



**Quantronix** – High power solid state lasers. Ultrafast high energy femtosecond and picosecond systems, amplifiers and the OPA with the widest tuning range on the market. Micromachining and marking systems from 175 nm up to 22  $\mu\text{m}$ .

**Continuum**<sup>®</sup>  
The High Energy Laser Company<sup>™</sup>



**Continuum** – High performance solid state laser systems. High pulse energy nanosecond and picosecond Nd:YAG, wide range tuneable OPO's and dye lasers.

**World Star Tech**



**World Star Tech** – Laser modules and systems from 405 nm to 1064 nm. For machine vision, alignment, process control and biomedical applications. Compact RS232 modules, TEC cooled lasers, laser diodes, laser line and cross generators...

**NANOBASE**



**Nanobase** – Tuneable lasers 630–700 nm & 770–850 nm, (other wave lengths available on demand), integrated spectrometer and lamp systems, spectrometers from 200 nm to 1100 nm.

# Laser Measurement & Accessories

**gentec-EO**



**Gentec-EO** – Pyroelectric, thermopile & photo detector based laser power and energy meters from fW to kW & fJ to kJ. New products for THz sources and high rep rate (130 kHz) energy measurement. Full range of monitors with full touch screen display or PC interface. Beam diagnostic tools: full beam analysis, M<sup>2</sup>. Large aperture calorimeters for kJ pulses.



**SPERIAN**  
Protection you can trust



**Sperian** – All the laser goggles you need. From CW to femtosecond pulse laser protection! Laser protection curtains, polymer windows, reusable and disposable eye shields for medical and cosmetic treatments..

**Electrophysics**  
Scientific Imaging A SOFRADIR EC COMPANY



**Electrophysics** – Handheld infrared viewers delivering remarkably bright images with focusing ability as close as 6 inches, the perfect tool for in the lab and in the field. Near infrared cameras 0.4 – 2.2 $\mu\text{m}$ , high sensitivity, high resolution, compact size, low price.



**Swamp Optics** – Most complete and accurate characterization of an ultra-short laser pulse available by Frequency Resolved Optical Gating. (FROG).

# Vibration Isolation



Magnetic field cancellation, electric field shielding & acoustic enclosures.



High performance vibration isolation lab tables, workstations and table top platforms.



Optical tables, optical tops, breadboards and supports.



Tables can also be joined allowing for the creation of tables of almost any size.



Active piezoelectric vibration cancellation systems.

# Optics and Electro-Optics



**Comar** – Custom and stock optics and optomechanics, lenses, prisms, filters, polarisers, tube mount systems, rails and carriers.



**HINDS** – Broad range of instrumentation for evaluating polarization and light. Including photoelastic modulators for the DUV to Far-IR, photo detectors, lock-in amplifiers, avalanche photodiode detectors, and high speed optical choppers.



**Inrad** – Nanosecond harmonic generation systems, ultrafast harmonic generation systems, autotracker, crystals and custom optics, optical thin films, pockels cells.



**Conoptics** – Electro-optical laser phase and intensity modulators and beam deflectors. Optical isolators and polarisers. Laser noise eaters, pulse selection and regen switching systems, phase shifters.



**ILX Lightwave** – Laser diode instrumentation, optical power meters, laser diode test systems, fiber optic sources, current sources, and temperature controllers



**ASAHI** – Halogen, Xenon & Electrodeless light sources, especially for inspection, optical filters, solar cell IV measurement system and monochromatic light source.



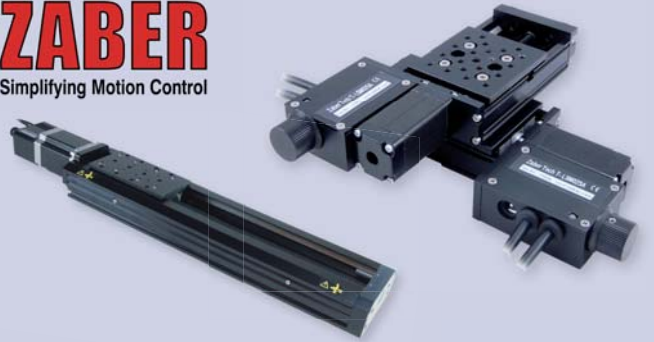
# Positioning Systems & Motion Controllers

**micos**



**miCos** – High performance precision positioning systems. Linear, rotary, tilt and gonio stages as well as multi-axis systems, hexapods and drives. Solutions available for industry, clean room, cryo & UHV ( $10^{-9}$  mbar) applications.

**ZABER**  
Simplifying Motion Control



**Zaber** – Cost effective entry-level motorized linear and rotary stages, linear actuators, long travel linear slides and motorized mirror mounts. All Zaber stages come as a kit for quick set-up and include all accessories for basic operations.



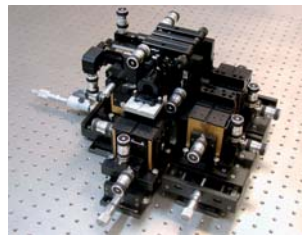
**Galil** – Full range of single and multi-axis motion controllers designed to solve any kind of motion control application. PC based solutions and stand-alone controllers with RS232, PCI, USB & Ethernet connectivity.



**Siskiyou** – Full range of highest quality modular opto-mechanical components and building blocks for life science and photonics researchers. Micromanipulators, microscope sample positioners, motion control systems and multidimensional stages.



**Lumen Dynamics** - Piezoelectric-based positioning systems and high-performance mounting solutions for life science applications.



**Elliot Scientific** – Award winning optical tweezer systems, range of mounts and flexure stages, fiber launch systems, waveguide manipulators, automated alignment equipment and micropositioning slides.



**Queensgate** – Nanomechanisms, objective lens positioners, tip-tilt nanomechanisms, digital piezo translator (DPT), nanosensors, control electronics



**Nanomotion** – Ceramic servo motors for precision motion control. Highest available force/volume ratio. UHV and non-magnetic models available as well as complete motorized stages, autofocus z-stages and miniaturized motors.

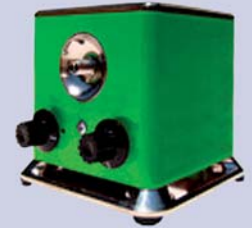
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# Spectroscopy



**Ultra-Compact Spectrometers** – UV, VIS, NIR and Raman, covering the range 200 nm to 2500 nm with resolution as small as 0.2 nm FWHM.



**Light Sources** – Deuterium, Halogen & Xenon lamp systems available to cover the entire range from UV to NIR, as well as LED sources for fluorescence and Raman covering the region from DUV to VIS. Radio-metric and wavelength calibrations available.

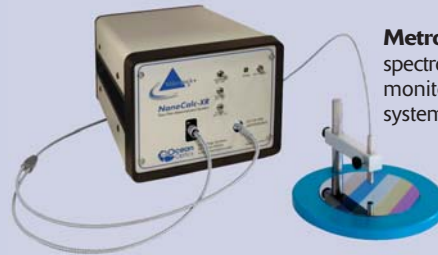


**Scanning Infrared Spectrometers** – SIR spectrometers operating in the range from 0.9 – 2.6nm and 1 – 3.4nm, with resolutions as small as 0.1nm.

**Micro Spectrometers** – The STS range of microspectrometers for OEM applications offer a footprint of only 40mm x 42mm.



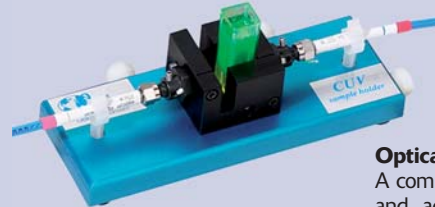
**Portable Spectrometers** – The Jaz range of spectrometers can incorporate internal batteries, memory cards and sources for measurements in the field.



**Metrology** – Thin-film metrology, spectroscopic reflectometer, plasma monitoring and process control system, spectroscopic ellipsometer.



**Optical Sensors** – pH sensors, oxygen sensors in probe format or as patches for integration into packaging. Also available in portable version for field measurements.



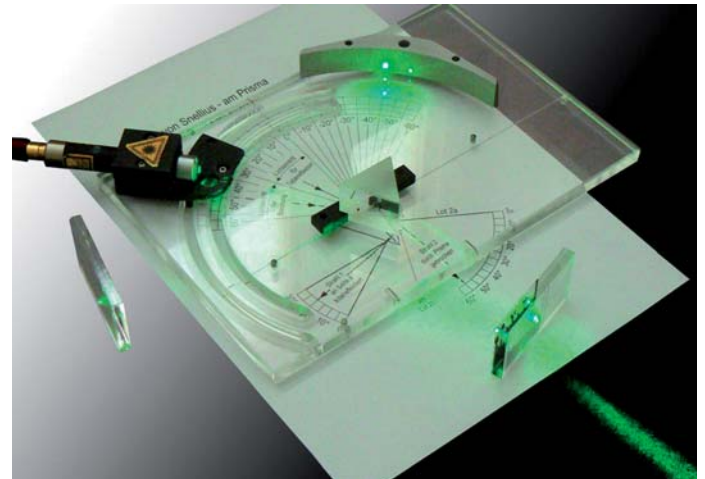
**Optical Fibers and Accessories**  
A complete range of optical fibers and accessories to complement your ocean optics spectrometer.

# Educational Systems



**NEW**

**miCos Educational Systems** – Practical training systems dedicated to universities, secondary and high schools covering optics fundamentals, laser basics, laser metrology, fiber optics and telecommunications, laser material processing, and other laser applications. Support is provided to help integrate these systems into your curriculum.



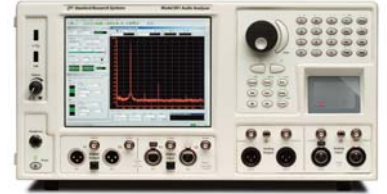
# Electronic Instruments



**Vacuum and analytical instruments** – Melting point apparatus, quartz crystal microbalance, nitrogen laser, ion Gauge controller, residual gas analyzers, high pressure sampling systems up to atmospheric pressure.



**Time & frequency instruments** – Frequency standards/oscillators, time interval and frequency counters, distribution amplifiers.



**Scientific instruments** – Laser diode controller, temperature controller, small instrumentation modules, lock-in amplifiers, optical chopper, optical shutter systems, preamplifiers, digital delay generators, high voltage power supplies up to 20kV, gated integrators and boxcar averagers, photon counters.

**Test & measurement instruments** – Clock generators, synthesized function generators, FFT spectrum analyzers, LCR meters, thermocouple monitor, dual channel programmable filters, audio analyzers.

# Assembly, Engineering and Support

When a comprehensive solution is required, GMP can provide you with a turn-key system to meet the specifications and requirements of the proposed application. Working with its in-house engineering team GMP undertakes the design, assembly and testing of your complete solution.

GMP can put together custom built turn-key systems in the areas of:

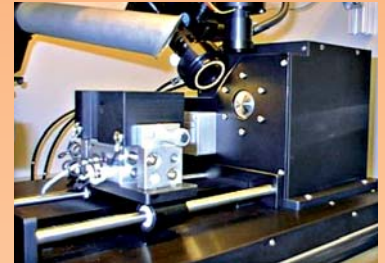
- Photonics
- Electronics
- Precision mechanics
- Software Engineering



*Laser engraving and marking system*



*Custom design linear stage with ceramic servo motor*



*Welding machine for medical applications*



*Technical support and services*



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**Industrielle Laserlösungen**

Since 1977, GMP has been active in the fields of lasers, spectroscopy, photonics and micropositioning. Thanks to an efficient sales and service organization, GMP has become not only a top distributor of high technology products, but is also able to propose turnkey solutions for equipment integration, developed by GMP's engineering department.

Depuis 1977, GMP exerce ses activités dans les domaines du laser, de la spectroscopie, de la photonique et du micropositionnement. Dotée d'une organisation de vente et de service efficace, GMP conçoit son rôle non seulement comme celui de distributeur de produits de haute technologie, mais l'entreprise offre également des possibilités d'engineering conduisant à des systèmes clé en main.

Seit 1977 ist GMP in den Bereichen Laser, Spektroskopie, Photonik und Mikropositionierung spezialisiert. GMP verfügt über ein effizientes Verkaufs- und Serviceteam und erfüllt nicht nur die wichtige Rolle des Vertreters von beratungsintensiven Hochtechnologieprodukten, sondern bietet auch kundenspezifisch entwickelte Systeme an.

[www.gmp.ch](http://www.gmp.ch)

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