

Ultra-compact high-performance MatchBox™ series lasers from Integrated Optics



The MatchBox™ series of CW Micro Lasers manufactured by **Integrated Optics UAB** is a new range of very compact lasers introduced by Elliot Scientific for applications in chemistry and biophotonics, in particular Raman spectroscopy and fluorescence imaging.

The MatchBox™ series includes both DPSS and diode lasers with a wide range of output wavelengths - **from 405 nm to 1342 nm** - with either free space or fibre coupled outputs.

With a small, robust and easy to integrate form factor, which is enabled by the monolithic design and semi-automated precision assembly process, the MatchBox™ series has the best power/size/price ratio in the market for research-grade lasers in its class.

- Over 25 wavelengths
- Optional SLM models
- Ultra-low optical noise
- > 50 mW output powers
- Sealed laser head
- Very compact size
- Optional fibre coupling
- Prices start at < £1,000

For pricing, availability, and technical specifications of these lasers and details of **special SERS and SEF substrates** for enhancing Raman and fluorescence spectroscopy, please **contact us**.

Photodigm's Mercury puts big features in a small laser diode package



Mercury with 2" flex cable



Mercury mounted for testing

Photodigm has redefined the definition of *high power* in single frequency spectroscopic laser diodes by utilising advances in epitaxial design and wafer fabrication, allowing users to immediately notice lower threshold and higher slope efficiencies when compared to earlier generations.

To accommodate these higher powers, Photodigm has developed the Mercury package to overcome the limitations of the commonly used 1950's designed TO-3 mount. Mercury offers many advantages:

- Small volume, only 9.2 x 5.5 x 5.4 mm
- Capacity to handle up to 1 W of laser power
- Low thermal mass for rapid wavelength tuning
- Flex cable breakout of electrical connections
- Test mount for laboratory use (see photo)
- Built-in Peltier and thermistor for rapid closed-loop feedback temperature control

Laser wavelengths currently available in the Mercury package are **780 nm, 785 nm, and 852 nm**, with up to 280 mW of laser power in a diffraction-limited single lateral- and longitudinal-mode free-space beam. Other, lower power, wavelengths are available in the standard Photodigm package.

For the specifications of these or other products Photodigm offer, **contact us** now



Next month: Photonics West



Photonics West is said to be the most influential conference and exhibition for biophotonics and biomedical optics, high-power laser manufacturing, optoelectronics, microfabrication, and green photonics in the world. With 1,300 exhibitors and an expected 20,000 visitors, it's going to be a busy show.

Elliot Scientific will be exhibiting in **Booth 4827**, from 4th to the 6th of February, at San Francisco's Moscone Center. If you're in the area then, come see us and say hello.

FEMTOOPTICS™ - Ultrafast optics from FEMTOLASERS



FEMTOLASERS design and manufacture their own range of high performance precision optics specifically for the high-speed laser community. Products include:

Enhanced Ag mirrors

- Special reflectance enhancing dielectric multilayer overcoating
- High reflectance and low GDD over approximately one optical octave
- Distortion free manipulation of few cycle pulses

Dielectric beam splitters

- Constant splitting ratio over a large spectral bandwidth
- Minimum GDD upon both reflection and transmission
- Compatible with sub-7 fs pulses
- p-polarised and s-polarised versions

Ultra broadband achromatic waveplates

- Wavelength-independent performance over a large bandwidth
- Small GDD upon transmission
- High throughput

Download the **FEMTOOPTICS™** catalogue, or **contact us** for more information.

New EXFO catalogue available now



EXFO has released a new catalogue covering their entire range of products for the fibre-based telecom engineer. Equipment for network engineers and R&D/Manufacturing is covered but, as Elliot Scientific only specialises in the latter, we have made available a special abbreviated version for **download** from our EXFO product pages. Examples of the test equipment covered include:

IQS Series

- Light Sources
- WDM & Tunable Laser Sources
- Variable Attenuator
- Optical Spectrum Analyser
- Standard & MEMS Optical Switches

PSO Series

- Optical Modulation Analyser
- Optical Sampling Oscilloscope

Handheld & Benchtop Systems

- Power Meters
- Variable Attenuators
- Laser & Light Sources
- OTDR

Contact us now for more details.

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