

508 TPI - Astounding new screw pitch from Kozak Micro



The world's first commercially available **508 TPI (0.05 mm pitch)** ultra-fine adjustment screw sets are now available in the UK and Ireland through Elliot Scientific.

Proprietary manufacturing on a variety of customised machine tools enables **Kozak Micro** to produce adjusters in a range of pitches that are superior to industry standards. Thread classes exceed the highest 3A-3B Unified Thread Standard (UTS) by as much as 50%.

Elliot Scientific offers 6 imperial and 4 metric thread pitch ranges of matched-set micropositioning adjustment screws and unbraked bushings that deliver the highest precision and smoothest movement by far for the most demanding of OEM applications.

Contact us now for more information.

**508
TPI**

FEMTOLASERS selected for prestigious project



FEMTOLASERS has been awarded a significant contract to develop and build the "front-end" source to generate ultrafast, high stability, ultra-low noise pulses for the prestigious pan-European High Repetition-Rate Advanced Petawatt Laser System in the Czech Republic. The systems they will be supplying are:

- **INTEGRAL™ element™ PRO 500** ultrashort pulse seed oscillator
- **FEMTOPOWER™ compact™ PRO** first stage multipass amplifier
- **FEMTOPOWER™ V** booster amplification stage
- **FEMTOOPTICS:** temporal pulse cleaning, spectral amplitude and phase shaping

HAPLS is being assembled by Lawrence Livermore National Laboratory (LLNL) for the ELI-Beamlines facility in Prague. This new facility will deliver pulses lasting less than 30 femtoseconds at a repetition rate of 10 Hz, with peak powers greater than one Petawatt.

FEMTOLASERS was selected by LLNL and the ELI-Beamlines team as only they could fulfil the technical requirements and meet the strict timescales required for construction of the facility.

HAPLS is being designed to significantly advance the state-of-the-art for high power lasers, allowing international scientific research in areas as diverse as medical imaging, particle acceleration, biophysics, chemistry, and quantum physics.

For more about FEMTOLASERS products, **contact us** now.

Lake Shore 8501 THz Characterisation System and New Measurement Catalogues available now



The new **Lake Shore Model 8501 THz System** is the first affordable, integrated, convenient solution specifically tailored for characterisation of research-scale electronic and magnetic materials. It enables fully automated high-resolution THz spectroscopic characterisation of electronic, magnetic, and chemical samples over a wide range of frequencies, temperatures, and magnetic fields, yielding detailed profiles of material responses.

Researchers interested in measuring spin materials can opt for an additional cryostat insert with opposite helicity THz emitter and detector to expand the instruments' capabilities.

In addition, Lake Shore have also released two new catalogues for their **Temperature Measurement & Control** and **Magnetic Measurement & Control** ranges.

Please **contact us** for us for printed copies of the catalogues, or for more information about the THz system.

Vescent D2-125 Reconfigurable Servo Loop Laser Controller



The D2-125 laser servo from **Vescent Photonics** is designed for low-noise servo control of lasers and other experimental systems. It incorporates a PI²D loop filter, with two-stage integral feedback, that provides tight locking to cavities and atomic/molecular transitions.

The reconfigurable PI²D Loop Parameters enable full user-control, giving servo-loop optimisation for a wide variety of systems such as: acousto and electro-optic actuators, voice coils, piezo actuators, and so on.

- Both PZT & Laser Current Feedback
- Double Integrators For Tight Locking
- Peak Lock Option
- Smooth Lockup
- Frequency Jumping and Lockup via Computer Control
- Internal Ramp Generator
- High Bandwidth (10 MHz)
- Reconfigurable PI²D Loop Parameters

Other modules from Vescent Photonics include:

- **D2-105 Laser Controller**
 - Lowest noise current source commercially available
- **D2-135 Offset Phase Lock Servo**
 - Offset Phase Locks up to 10 GHz
 - Extremely tight phase lock between the master and the slave
- **D2-100-DBR Laser Module**
 - Highly Vibration Insensitive: No Moving Parts or Piezos
 - 40 GHz Mode Hop-Free Tuning via High Bandwidth Injection Current

To learn more about how these products advance science, [contact us now](#).

Next month: analytica 2014 in Munich, and SU2P in Glasgow



For four decades, **analytica** has been the leading international fair for state-of-the-art laboratory technology and pioneering biotechnology. No other trade fair in the world covers the range of subjects related to the laboratory in industry and science in such breadth and depth, and on such a scale.

Elliot Scientific will be demonstrating our **Optical Tweezers** system in **Booth 240**, alongside our German distributor Mountain Photonics, which can be found in **Hall A2**. We will also be showing our range of **precision mechanics**, from ultra-small slides to our world-renowned high-resolution Flexure Stages.

The event takes place from the **1st to the 4th of April at Messe Munchen**.

At the end of the month, Elliot Scientific will be at the **Fifth Annual SU2P Symposium**. This will be held on the **31st March and 1st April** at The University of Strathclyde. The Symposium features a small exhibition and includes a list of exceptional speakers from around the world who will present leading edge research on a wide range of photonics and related topics.



Website



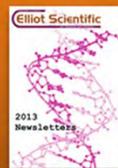
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