

New 3-Channel Piezo Controller from Elliot Scientific



The all new **E1100 Piezo Controller** is an open loop, three channel amplifier suitable for driving low voltage (up to 150 V) piezo actuators and stacks. The E1100 has been especially designed to incorporate the latest technologies, and combines low noise and outstanding stability with a high power output. This makes it ideal for open loop, high resolution control of piezoelectric devices, in particular, the **MDE123** and **MDE125** Piezo-driven Flexure Stages by Elliot|Martock.

Key features

- USB interface
- Output noise: <math>< 50 \mu\text{V}_{\text{RMS}}</math>
- Output stability: <math>< 0.01\%</math> over 16 hours
- Voltage control by BNC, potentiometer, or USB



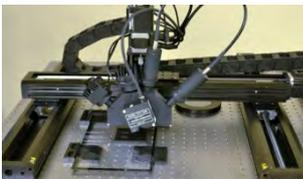
The E1100 is equipped with a digital front panel display and three methods per channel for input voltage control. These are: high-resolution BNC inputs, potentiometers, and a USB 2.0 interface. One or more of these methods can be employed, however all inputs are summed together to produce the 0-150 V output.

The rear panel features the Windows™-compatible USB port for 16-bit digital voltage commands. Software drivers, LabVIEW examples, a LabVIEW tutorial, and C# graphic user interface are all included. LabVIEW and C# examples are open source and can be used as a starting point for user defined routines. The rear panel also contains the three BNC output connectors for interfacing to the user's piezo devices.

Although designed mainly for benchtop use, a rack mount option is available for purchase. Please **contact us** for full specifications and pricing information.

See the new controllers at **Laser World of Photonics** in Munich next month **Hall B3 Booth 260**

Gamma Scientific Thin Film Measurement Systems for High Volume Testing



Gamma Scientific's Thin Film Measurement Systems deliver a number of unique features that maximise **production** line uptime and enable faster inspection of components.

By blocking bottom surface reflection on transparent substrates, Gamma Scientific's spectral gonireflectance measurements save time and money by measuring only the first surface reflection - without the need to cut, blacken, or coarse grind the second surface of the sample under test.

Gamma Scientific thin film measurement systems also excel in high volume testing applications where speed is crucial. Systems feature industry leading spectroradiometer performance, fast algorithms and optimised mechanics and optics. Typical applications are:

- | | |
|-----------------------------|----------------------------|
| ▪ Mobile & Wearable Devices | ▪ Touchscreen Devices |
| ▪ Anti-Reflective Coatings | ▪ CMOS Image Sensors |
| ▪ LED Lighting | ▪ Photovoltaic/Solar Cells |
| ▪ Multi-Function Displays | ▪ Head Up Displays |

For more information about these **Thin Film Measurement Systems** available from Gamma Scientific, **contact us now**.

Diode-pumped fibre amplifiers and lasers from IPG Photonics



IPG Photonics offers reliable diode-pumped amplifiers and lasers using Ytterbium, Erbium, or Thulium doped optical fibres as gain media. All are compact, air-cooled and use direct diode pumping for optimum efficiency.

IPG designed and manufactured, these commercial/non-telecommunications lasers are used in a broad range of OEM and lab applications such as optical tweezers and trapping, graphics and imaging, marking and materials processing, remote sensing and research, medical and defence.

Elliot Scientific can supply continuous wave (CW), linearly and randomly polarised, standard linewidth or single frequency diode-pumped solid-state fibre lasers, as well as diode-pumped fibre amplifiers, with up to 20 W output power.

IPG's advanced fibre devices are a quantum leap forward, providing the best in diode-pumped solid-state reliability and performance. To determine the ideal fibre laser for your application, please **contact us**.

Vescent Photonics ICE™: Integrated Control Electronics



Precise control and stabilisation of a broad range of semiconductor lasers and an associated array of photonics tools is possible via the **Vescent Photonics ICE™** system.

ICE, short for Integrated Control Electronics, is easy to integrate into a variety of systems. For example: gravity, magnetic or inertial sensor applications, quantum computing and cryptography systems, or atomic clock, BEC and cold atom experiments can all benefit.

ICE is a compact suite of digitally controlled analog electronics that will drive, frequency and temperature stabilise, and offset lock DBR or DFB lasers. It offers the following features:

- Precise laser control and stabilisation
- Control up to four locked lasers
- Current and Temperature control
- Frequency locking
- Offset locking
- Beat Note detection
- Serial commands or GUI



Contact us now for more information, or **download a datasheet** detailing an ICE-controlled four-laser system (*lower photo*).

International Year of Light: Events to end of June



INTERNATIONAL
YEAR OF LIGHT
2015

Making light work for you

Birmingham: May 19th

Optical Demands of Astronomy

Edinburgh, June 16th

Actinic

Edinburgh: June 26th to July 26th

- *Need to measure light or colour?* Then have a look at **Gamma Scientific**

Next month, meet Elliot Scientific at...



Photonex Roadshow Scotland: University of Strathclyde

3rd June 2015

Stand S3



Laser World of Photonics: Messe München, Germany

22nd-25th June 2015

Hall B3 Booth 260



Website



Product
Overview
2015



Optical
Tweezers
2015



Components
Catalogue
2013



2014
Newsletters



2013
Newsletters



Blog



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