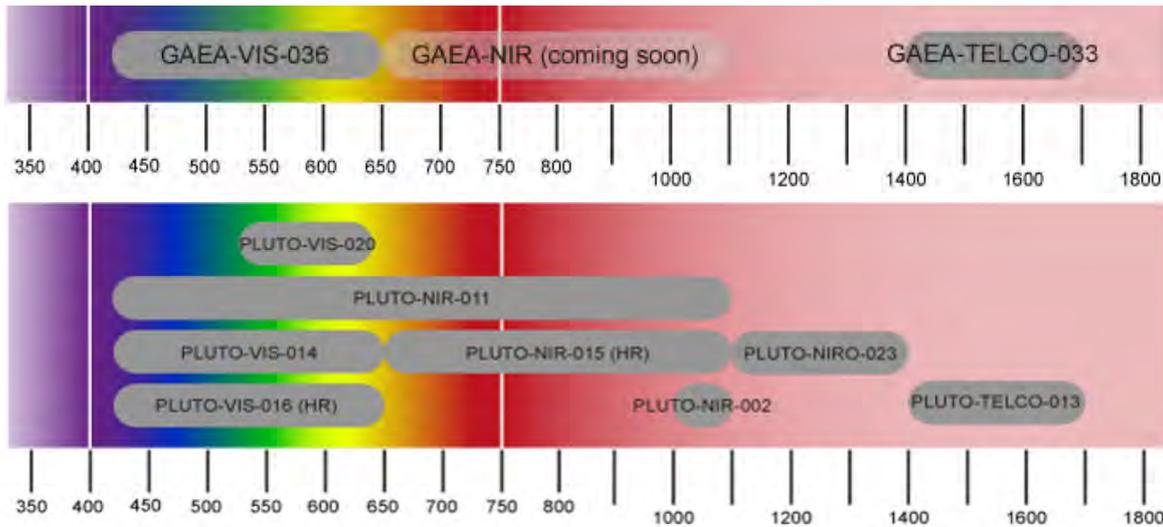


HOLOEYE introduces GAEA Ultra HD 10MP SLM; also improves PLUTO specifications

Spatial Light Modulator manufacturer **HOLOEYE Photonics** has just released a 4094 x 2464 pixel resolution SLM with the introduction of the **GAEA** range of Spatial Light Modulators (SLM). In addition, the **PLUTO** range of 1920 x 1080 pixel panels have recently been expanded with 8 models optimised for wavelength bands in the visible, infrared, or both.

The new GAEA phase only SLMs will be available in three models: TELCO (IR), NIR and VIS(ible). They will consist of a driver unit with HDMI digital video interface, and a phase only LCOS (Liquid Crystal on Silicon) 10 megapixel (4K) microdisplay panel with a 0.7" active area as measured diagonally. The very small 3.74 μm pixel pitch will enable high diffraction angles.



Device	Wavelength Range	Fill Factor	Comment
PLUTO-VIS-014	420 – 650 nm	93 %	
PLUTO-VIS-016	420 – 650 nm	93 %	High Retardation Version
PLUTO-VIS-020	530 – 640 nm	93 %	
PLUTO-NIR-011	420 – 1100 nm	93 %	
PLUTO-NIR-015	650 – 1100 nm	93 %	High Retardation Version
PLUTO-NIR-002	1000 – 1100 nm	87 %	
PLUTO-NIRO-023	1000 – 1400 nm	93 %	
PLUTO-TELCO-013	1400 – 1700 nm	93 %	

Standard panels provide a phase modulation up to and above 2π , while *High Retardation* versions offer up to 4π or even up to 6π phase functions to be addressed. This can be beneficial for wavefront functions, as it enables higher slopes and reduced transition points compared to the usual 2π encoding.



For more information about these and other SLM products, please visit our [HOLOEYE pages](#) or [contact us](#) direct.

Mad City Labs introduce new low profile 3-axis nanopositioner



Nano-LPMW with re-entrant slide holder.

Ideal for applications in optical trapping, microscopy, fluorescence imaging, single molecule spectroscopy and super resolution microscopy (SRM), the new **Nano-LPMW** from **Mad City Labs** is a unique 3-axis nanopositioning system designed to hold multiwell plates, slides, dishes and environmental chambers.

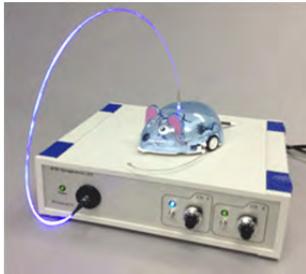
The Nano-LPMW has a low profile and extra-large centre aperture with 200 micron range of motion in all three axes. The low height of the Nano-LPMW Series allows it to be easily integrated into existing inverted optical microscopes and is compatible with a large range of microscope stages.

Like the related Nano-LPS Series, the Nano-LPMW is ideal for demanding microscopy applications which require long range travel, high stability, and three axes of motion.

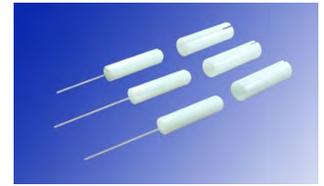
The Nano-LPMW is the only 3-axis nanopositioning system which can hold multiwell plates and incubators, and deliver precise and repeatable motion. A function made possible through closed loop control combined with PicoQ® position sensors.

To discuss this or other **Mad City Labs'** products, please [contact us](#).

In-vivo and In-vitro products for Optogenetics from Prizmatix



Prizmatix offer a full range of modules for in-vivo and in-vitro optogenetics. Starting from single wavelength plug-and-go Optogenetics-LED kits, to multi-wavelength systems in the same fibre for activation and silencing. From light sources to cannulae and everything in between, Prizmatix provides all the components necessary for researchers working in neuroscience, neurobiology, biochemistry and biophysics.



Fibre-coupled high-power Prizmatix **Optogenetics LED light sources** can be triggered by an external TTL input and are specially designed to provide violet, blue, green or red light for activation or silencing of various opsins such as Channelrhodopsin (ChR), Halorhodopsin (NpHR), Archaerhodopsin (ArchT) and many others.

With better than millisecond-scale temporal precision, Prizmatix has been the researcher's equipment choice in **over 200 published scientific papers**. For zebrafish larvae, Prizmatix also offer an Ultra High Power LED illumination system for microplate Optogenetic set-ups.

Visit our **Prizmatix product pages** or **contact us** for more details about this scientist-designed *Optogenetics Toolkit* range.

OZ Optics add to their component range



Variable Bandwidth Tunable Filter

OZ Optics has introduced a new tunable filter that has the ability to tune both the centre wavelength and the transmission bandwidth.

Two independently adjustable thin-film filters allow the setting of the lower and upper edges of the pass-band region. With this method, the pass-band can be tuned from 1 to 18 nm FWHM and the centre wavelength shifted by over 40 nm.

The transmission band features a flat-top profile, providing uniformly low losses and low PDL across the pass-band region, and high rejection ratios outside the pass-band. Devices can be custom made for wavelength regions of interest and can use either singlemode or polarisation maintaining fibres.

Two manual controllers to set the upper and lower pass-band regions, with an electrically controlled model due later this year. Applications include WDM testing, spectral filtering, spectral imaging or microscopy, and others.

Electronic Polarisation Controller/Scrambler

OZ Optics now offers a high speed electrically operated Polarisation Controller (EPC) that provides continuous polarisation control with negligible insertion and return losses in a compact, easy to operate package. Four birefringence transducers, each controlled by an analogue input signal, modify the polarisation in orthogonal directions. The device can be operated from 1260 to over 1650 nm (custom wavelengths available) with the response speed of each transducer surpassing 30 kHz.

The redundant transducer design allows continuous control of polarisation without having to *reset* voltages.

High Speed Polarisation Controllers are offered as base modules requiring external electrical signals to operate, OEM modules with driver electronics and control interface, or stand-alone benchtop test instruments.

To discuss these or other **OZ Optics' components** in more detail, please **contact us**.

Polarisation controller applications include:

- PDL control
- Polarisation scramblers
- PMD compensation modules

Elliot Scientific will be exhibiting this month alongside our Japanese distributor **Autex**, at...



OPIE'16

18th to 20th May 2016
Pacifico Yokohama, Japan

...and on our own next month at...



Photonex Scotland Roadshow

8th June 2016
Heriot-Watt University
Edinburgh



SPIE Astronomical Telescopes & Instrumentation Expo

28th to 29th June 2016
Edinburgh International Conference Centre



Website



Product Overview 2016



Optical Tweezers 2015



Components Catalogue 2013



2015 Newsletters



2014 Newsletters



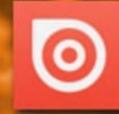
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