



Quality and Excellence, presented by Sintec Optronics

NEW Diffractive Optical Elements (DOE) for Semiconductor Wafer Fabrication

DOE are used in many semi conductor applications, mostly in the UV and visible wavelengths. Our high grade UV fused silica DOE give unparalleled performance stability for direct writing lithography applications and wafer metrology applications common in the semiconductor industry. In these precise applications, our DOE provide superior performance due to the almost absolute angular accuracy, excellent thermal stability and high laser damage threshold

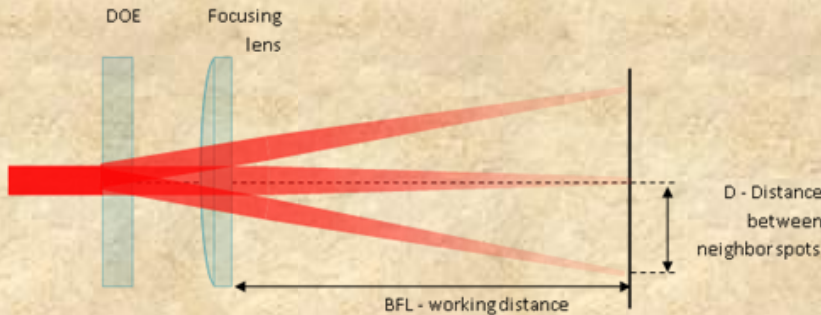


Figure: Beam Splitter 1D

Many applications in the semi conductor industry require high throughput direct laser writing of multiple lines. These include flat display mask writing, solar panel electrodes writing and other multi-line exposure processes. For these applications, our high quality beam splitter DOE offer unparalleled precision and uniformity, eliminating line thickness variation and enhancing throughput. **Relevant products: Beam Shapers, collimated beam shaper, diffuser**

NEW ALIGNMENT-FREE Autocorrelator for ultrafast laser measurements

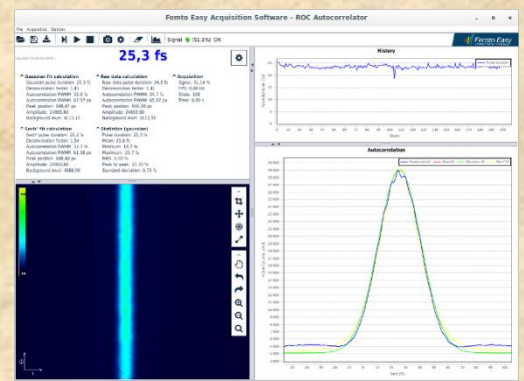
Our new product-line includes a single shot autocorrelator, capable of measuring few cycle pulses with interferometric resolution, and an innovative SHG single shot FROG. Both are suitable for several wavelength ranges (from UV to mid-IR) and several pulse durations, down to 5 fs. We also develop a innovative compact spectrometer and beam profilers.



Beside their intrinsic technical performances, our products are very easy to use, compact, portable and versatile, which make them the ideal tools for customer services. The products are associated with a high quality user-friendly software which contributes to make them easy and pleasant to use. We also make vacuum compatible measurement devices and custom products upon request and we provide our expertise on ultrafast metrology.

Our 2 major products can be installed in only **2 minutes** with **no necessary calibration**. It comes in an ultra compact (50x50x150mm) package for the long pulse model and a 50x50x250mm package for the fs one.

Our autocorrelator provides single shot measurements up to 200 kHz and down to 5 femtosecond pulses while our achromatic and non-dispersive single shot FROG can go down under 5 femtosecond pulses. They are designed specifically to be ultra easy to use and to align onto the laser beam. They **cannot be misaligned**, There is **NO internal freespace alignment!!!** There is no need for calibration or tweaking and they are easily transportable. And yes, they are rock-solid! Save your time for experiments instead!





NEW Spatial Light Modulators (SLM)

KEY FEATURES

- High speed
- Pure analog phase control
- High bit-depth controllers (high phase resolution)
- High power handling
- Synchronization / Triggering
- Wavelengths from 400 – 1650 nm, customization for MWIR or LWIR



DESCRIPTION

Our Liquid Crystal on Silicon (LCoS) Spatial Light Modulators (SLMs) are uniquely designed for pure phase applications and incorporate analog data addressing with high refresh rates. This combination provides user's with the fastest response times and highest phase stabilities commercially available. Meadowlark offers both transmissive and reflective SLMs in either one or two dimensions. Phase-only SLMs can also be used for amplitude-only or a combination of both. The 512 x 512 SLM is good for applications requiring high speed, with synchronization / triggering capabilities. The optional dielectric mirror coating provides users with 100% fill factor, which increases optical efficiency.

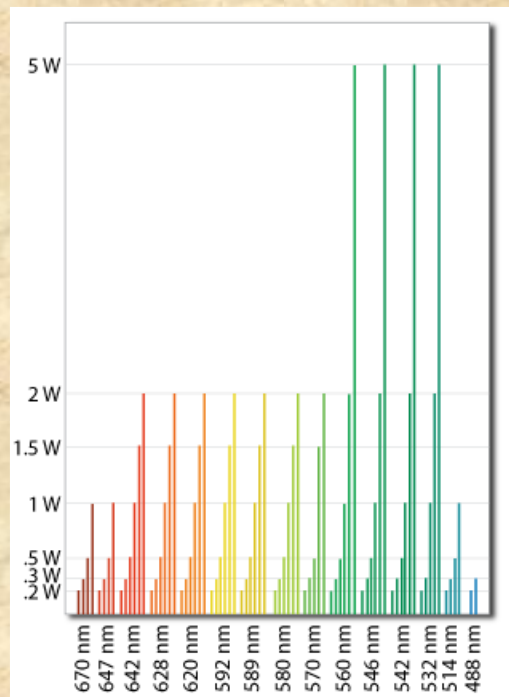
NEW* Single frequency visible fiber lasers for Microscopy applications

WE are pleased to offer High Power Visible Fiber Lasers in partnership with leading research laboratories worldwide which target wavelengths previously unavailable. The flexibility of our technology allows for the development of novel emission wavelengths for use in Super Resolution Microscopy where beam quality (TEM00, M2 < 1.1) and stability is a must.

For many applications, especially in microscopy, only the "diffraction limited part" of the beam can be used and the usable part of the beam is proportional to $(1/M2)^2$ (i.e. less the 40% of a beam with $M2 = 1.6$ is usable). This means that, in a microscopy application, a laser with $M2 = 1.6$ needs to have an output power more than twice that of a laser with $M2 = 1.1$ to provide an equivalent usable optical power.

Using these novel wavelengths our research partners have been able to open up areas of investigation which have led to ground breaking developments.

Let us know which wavelengths you need ! **We also offer femtosecond and picosecond sources for multi-photon microscopy applications at customized wavelengths !**



Promotional items!

We are currently overstocked on items such as Q-switch drivers, laser lamps, CO2 focusing lens and CO2 f-theta lens, high power fiber cable, ceramic reflectors, Optical galvanometers that supports 12-30mm apertures, and galvo drivers. Inquire about our stock items now and receive large discount! Our LSLC-DIGI self-tuning scanheads are on offer too!

Sintec Optronics (India)

Bangalore
E-mail: india@sintec.sg

Sintec Optronics Pte Ltd (Headquarters)

10 Bukit Batok Crescent #07-02 The Spire Singapore 658079
Tel: +65 63167112 Fax: +65 63167113
E-mail: sales@sintec.sg, sales@SintecOptronics.com
URL: <http://www.sintec.sg>, <http://www.SintecOptronics.com>