



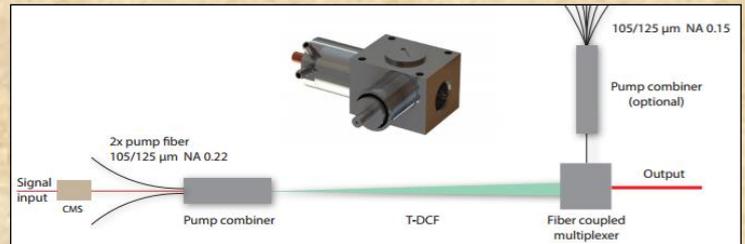
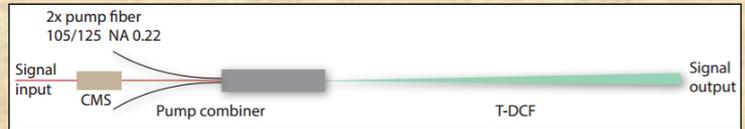
Quality and Excellence, presented by Sintec Optronics

Optical Fiber amplifiers to amplify picosecond ultrashort pulses *NEW

Our ultrafast all-fiber amplifiers and lasers offer a wide range of pulse lengths in >1 picosecond range, pulse energy as high as 300 μ J and optical peak power in megawatt range. We offer all optical fiber gain modules incorporating patent protected ultra large mode area ytterbium doped tapered double clad fibers (T-DCF), **designed for high power ultrafast amplifiers and lasers**. T-DCFs contains largest known polarization maintaining (PM) ytterbium doped core (100 μ m or more) operated in single mode regime with perfect beam quality ($M2 < 1.15$). The entire setup with the pump combiners and T-DCF can be housed in an aluminum casing for better protection. Available in SM or PM.

Key Features:

- Largest in the world mode field area of 5500 μ m²
- Strictly single mode operation with $M2 < 1.15$
- High gain (30-50dB)
- High pump absorption (20-30 dB at 976nm)
- Peak Power up to 5 MW
- Low level of nonlinear effects
- Mill joule-level extractable energy
- High threshold of SBS
- Immunity to mode instability

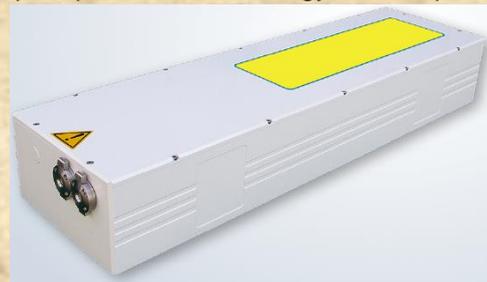


STZK-Hyper-FS series high energy ultrafast sub-ps pulsed lasers *NEW

STZK-Hyper-FS series of high energy ultrafast sub-ps lasers employs advanced SESAM clamping, it is stable and reliable, and requires no external start-up. The internal seed oscillator is fiber optic which results in miniaturized design. Regenerative amplification technology ensures high contrast. Multi-pass amplification technology to ensure good beam quality. The design is highly reliable and maintenance-free. With the use of follow-up light pump amplification technology, can output 1J

Features:

- Output wavelengths can be selected for infrared and visible light
- Up to 50W of average power
- Excellent beam quality, $M2 < 1.3$
- Fiber femtosecond seed, highly reliable
- Pulse width of about < 800 fs

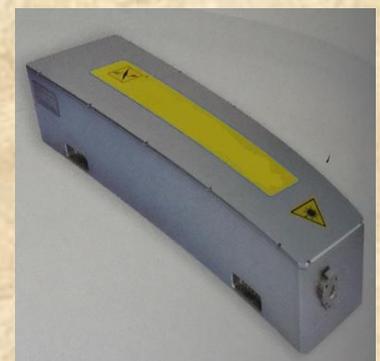


STZK series high energy pulsed ns lasers *NEW

STZK-DPQ-FM series of DPSS high-frequency ns lasers, the output beam is in the TEM₀₀ mode, pulse energy up to 400mJ @ 1064nm, repetition frequency up to unprecedented rate of 1kHz. The laser uses excellent industrial design, with light weight, high stability, high photoelectric conversion efficiency and long life. Laser power and cooling system is integrated as a whole, greatly reducing the volume of the system for scientific research and industrial fields. STZK-DPQ-FM series of lasers can be configured SLM seed light, can achieve narrow linewidth laser output. We are able to achieve these high energy pulses even without water cooling. Just conventional air cooling is needed, reducing the size required.

Features:

- Air-cooled
- Output energy up to 400mJ
- Repetition frequency up to 1000Hz
- Pulse DPSS
- TEM₀₀ mode output
- 1064nm, 532nm, 355nm





Diffraction Optical Elements (DOE) *NEW

Our DOEs are being used for various applications mainly involving high precision and high power lasers. Our main customers are laser system integrators in industries such as medical/aesthetical, material processing, metrology and many more. A DOE uses thin micro structure patterns to alter the phase of the light propagated through it. Those micro-structure, once properly designed, can manipulate the light to almost any desired intensity profile or shape.

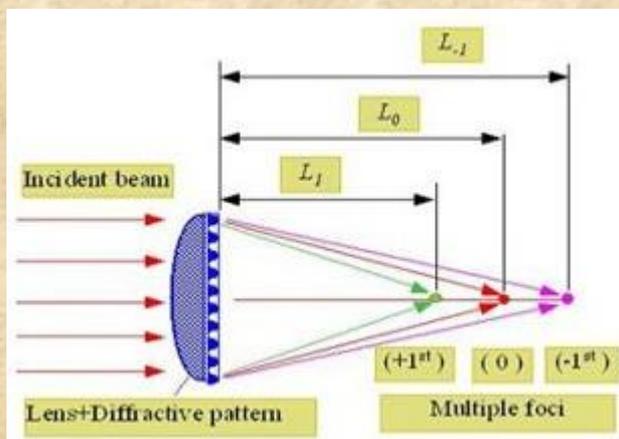
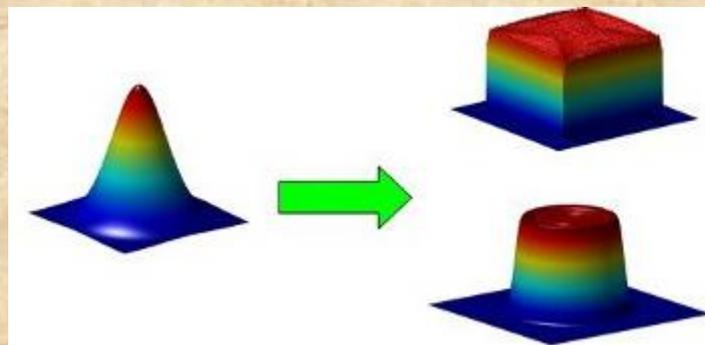
This technology enables many functions and light manipulations which are not feasible with standard refractive optics. In many applications those functions are very beneficial and significantly improve the system performance.

Our range of DOEs includes (but not limited to): beam splitters, beam shapers / top-hat, homogenizers/diffusers, multi-focal, beam samplers, vortex lenses, ring generator, dielectric mask and more.

Those elements can be designed for any wavelength, from UV to Mid IR. Our DOEs are thin optical windows/lenses, easily installed in any system. In addition to individual elements, we can also design and assemble refractive-diffractive modules and sub-systems.

Diffractive optics solutions have many advantages such as high efficiency, high precision, small dimensions, low weight elements and most important, flexible solutions to meet variety of different applications' requirements.

Inquire our DOE catalog to see how to shape your laser output !



Promotional items!

We are currently overstocked on items such as Q-switch drivers, laser lamps, CO2 focussing 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!

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