

## PRESS RELEASE

## GENTEC-EO ANNOUNCES BEAM SAMPLER FOR HIGH POWER LASERS

**Quebec City, Canada** Gentec-EO, a provider of laser beam measurement instruments, has announced a new beam sampler for kilowatt-level lasers. The BA32-1KW is enabling technology that allows camera-based beam profiling for high power lasers. This water-cooled beam splitter is ideal for inline beam profiling in a variety of high-power applications, from military to industrial materials processing and R&D.



The BA32-1KW beam splitter measures laser beam profiles with power from milliwatts to 1 kW, and at power densities of up to  $10 \text{ MW/cm}^2$ . This device attenuates extremely high power density beams with an attenuation ratio of 1:1900. This enables the use of very sensitive laser beam profilers to measure beam shape, focal spot and even beam waist. The BA32-1KW can also be equipped with a power meter at the second residual beam window to monitor the laser's power simultaneously with the beam profiling.

### Polarization-neutral attenuation

The BA32-1KW operates by reflecting a fraction of the incoming laser beam into the camera through the front surfaces of a pair of orthogonally oriented wedges. This reflects the beam in three directions: approximately 0.05% to the beam profiler camera, 7.4% to the power meter sensor, and 92% to the working beam. The result is uniform attenuation of any beam shape, from Gaussian to flat-top and even doughnut.

### In-line power measurement

A common application for beam samplers is picking off a portion of a beam in order to track changes in beam power vs time using a detector. This information may be used as part of a feedback loop to regulate power, or could simply be

used to log power in order to normalize experimental results at a later time. With approximately 92% of the beam that is transmitted, a laser process can keep running while its power and beam profile are monitored.

#### High-quality optics for UV & broadband applications

The BA32-1KW contains two optical wedges with excellent surface quality and flatness, to provide a transmitted beam with very low wavefront error. Its wedges are made of UV Grade Fused Silica, a colorless silica glass of extremely high purity, providing maximum transmission from 200 to 2100 nm. This glass combines a very low thermal expansion coefficient with good optical qualities, and excellent transmittance in the ultraviolet region. It will not fluoresce under UV light and has extremely high laser damage thresholds.

This beam sampler comes with screw-on caps for each aperture to keep the optics dust-free and clean. Accessories to mount a power detector and beam profiler are sold separately.

To learn more about this new product, check out the [product page](#) or [get in touch](#) with a laser beam measurement expert in your area.

#### Availability & Pricing

The BA32-1KW beam attenuators are available for purchase today. OEM prices available on request.

#### About Gentec Electro-Optics

Located in Quebec City, Canada, Gentec Electro-Optics is a leader in the laser measurement field with over 50 years of experience. In 2000, Gentec Electro-Optics, Inc. was formed from Gentec, Inc. so that the focus was entirely on laser measurement. The company now manufactures a complete range of laser power and energy meters, high speed joulemeters, THz sensors, beam diagnostics and diffractive optics. Gentec Electro-Optics is also known as the first worldwide supplier of large aperture calorimeters to measure the highest pulse energies. Their products are sold around the world, with distributors and representatives in over 35 countries and offices in Canada, USA and Japan.

#### PR contact:

Gabrielle Thériault, Marketing Director

T: 418.651.8003 #330

@: [gtheriault@gentec-eo.com](mailto:gtheriault@gentec-eo.com)  
www: [www.gentec-eo.com](http://www.gentec-eo.com)