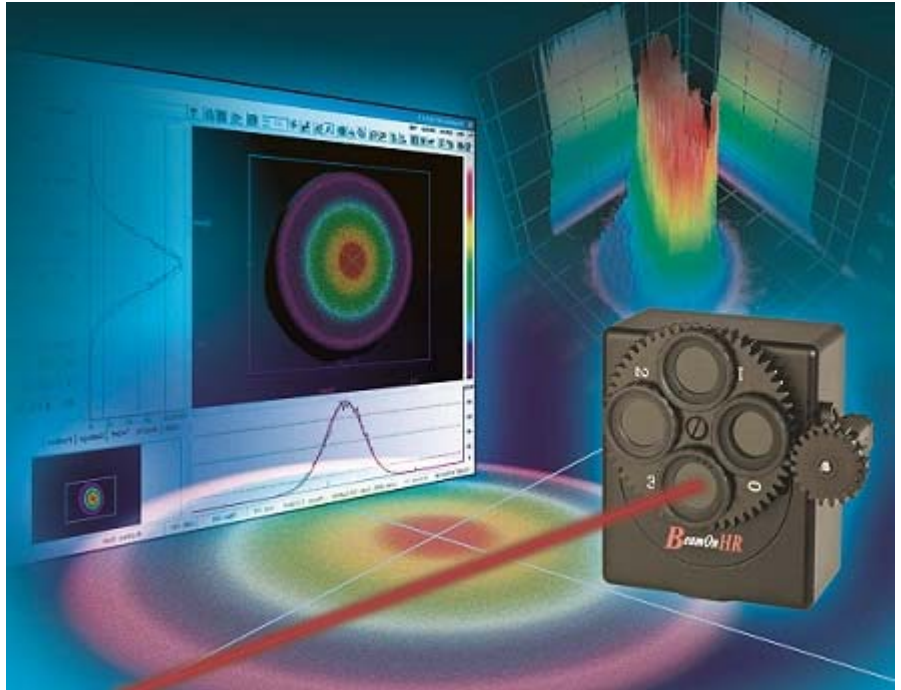


# Laser Beam Analysis Overview

## CCD type analyzers



### The advantages:

- High resolution device having a high dynamic range
- Cost effective means to control laser beams in real time
- A variety of measuring heads to accommodate a wider applications range: Si, UV-Enhanced, InGaAs type detector heads

### Enhanced Features:

- Aberration free beam attenuation is achieved by an optical filter placed behind the scanning plane.
- Industrial solutions – systems are supplied with a rugged small footprint device, which are simple to operate.
- A perfect solution for places with limited room, or where simplified mode of operation is required.
- A new 12 bit A/D high resolution sampling

High Resolution Laser Beam Profiler (1.4 Mega pixel) with motorized filter wheel (Software and ActiveX controlled)

High resolution CCD having 12 Bit true dynamic range. A complete test station measuring Profile, Power and Position, both for CW and Pulsed beams. Based on a USB 2.0 interface for notebooks. Offered with a complete set of accessories for larger beams and high power attenuation. The integrated motorized filter wheel with three different ND filters enables the profiler to be easily adapted to beam intensities from nanowatts up to 1W (stackable filters), where the software automatically changes the filter location in front of the sensor.

### CCD Laser Beam Profiler – Patented Technology

The CCD Laser Beam Profiler is a beam diagnostics measurement system for real-time measurement of continuous or pulsed laser beams. It provides an extensive range of graphical presentations and analysis capabilities of laser beam parameters, such as: beam width, beam shape, position, power, intensity profiles.

The CCD Profiler uses a video camera with a USB 2.0 interface, and control application software to image, capture, store and perform two dimensional intensity distribution analysis on laser beams.

The CCD Profiler overcomes the limited dynamic range of camera type Beam Profilers and accurately measures faint laser beam structures by sampling the beam several times. Each measurement is performed at a different attenuation or electronic shutter speed. This patented technology enables the users to view features that are smaller than 1% of the laser beam's maximum power density. The proprietary shutter activation allows examination of the laser beam with in a fraction of percent from the peak intensity.

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# Laser Beam Analysis Overview

## Sub-Micron Beam Analysis

A special member of the beam analysis family, offering both analytical and graphical capabilities for sub micron beam measurement and analysis applications. This is a custom measurement station composed of a CCD type sensor, supplemented with high magnification optics and the computing technology. This is a powerful beam diagnostics measurement system for real time measurement and display of small CW or pulsed lasers in the sub-micron range.

The main applications are in the CD pickup, laser diodes, adjustment of pickup lenses and optics components, and any application where the quality and shape of the beam affects system performance or where there is a need to analyze very small beams.

## Knife Edge type analyzers

A unique state-of-the-art technology (patented), enabling a knife edge profiling the beam at various intersection angles, followed by a tomographic reconstruction of the spatial intensity distribution map at the intersection plane. The instruments generate high-resolution beam width and profile measurements and capable of showing the 2D and 3D views of the beam distribution.



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