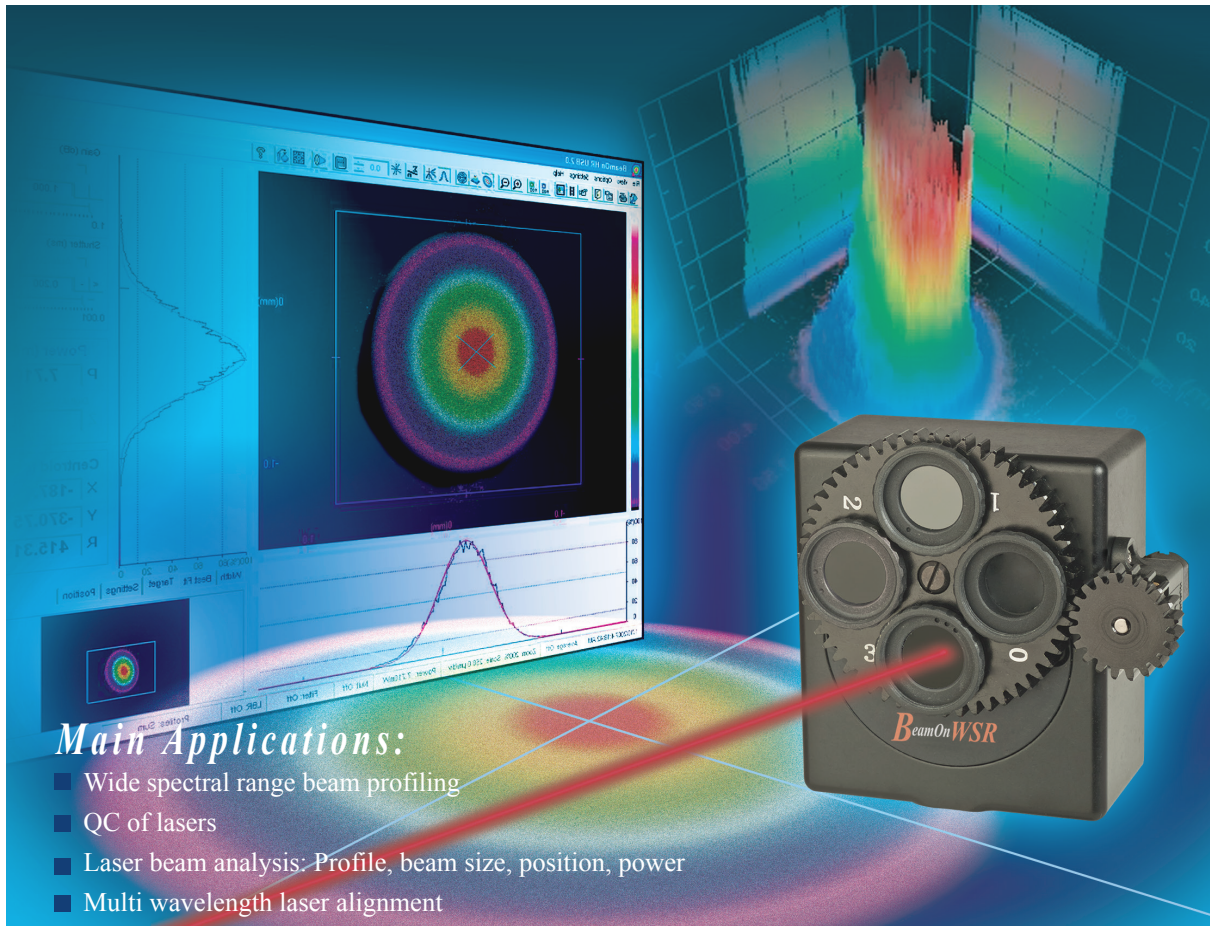


# BeamOn WSR

Wide Spectral range 190nm to 1600nm CCD Beam Profiler



## Main Applications:

- Wide spectral range beam profiling
- QC of lasers
- Laser beam analysis: Profile, beam size, position, power
- Multi wavelength laser alignment

## New Technology, one sensor without distorting coatings

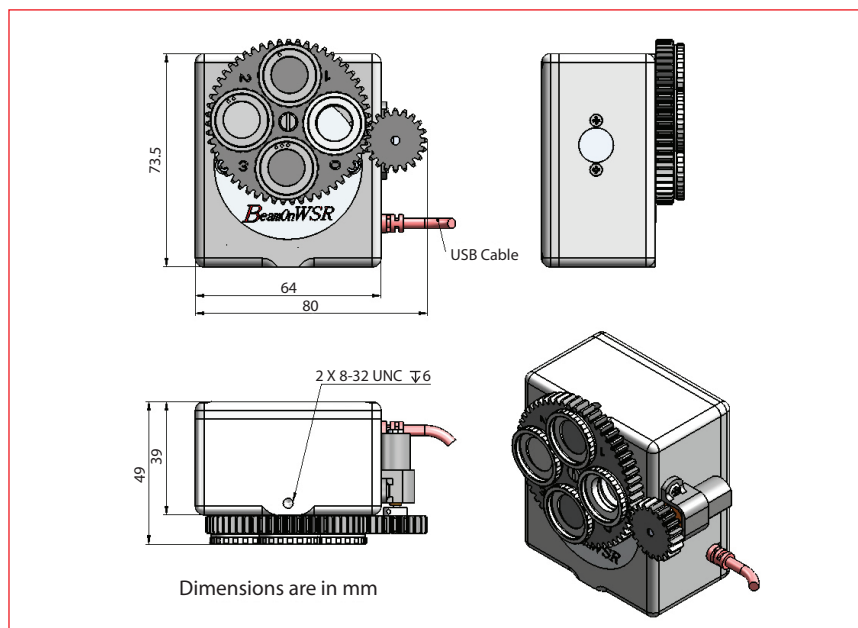
- **Unique:** Wide spectral range 190nm to 1600nm
- **Versatile:** A complete test station measuring Beam Profile, Beam centroid and Position, both for CW and pulsed beams
- **Portable:** Based on a USB 2.0 interface for notebooks (or desktops)
- **Easy to use:** user-friendly software, on-line help routine
- **Accessories:** Complete set for larger beams and high power attenuation

## Main Software Features

- Real time beam size and gaussian fit (or top hat)
- 2D/3D plots of beam in real time
- Adjustable trigger laser
- Software controlled electronic shutter & gain
- Video with playback, snapshot files
- Data exporting to another computer via RS232 or TCP/IP
- Data logging with detailed statistics
- DLL package to control software from your application
- Automatic Pass/Fail analysis report
- Motorized filter wheel for wider dynamic range
- zooming
- Average

# Specifications

## Head Drawing:



## CCD Head Specifications

<b>Camera type:</b>	WSR Wide Spectral Range CCD, 1/2" format
<b>Pixel size:</b>	8.6µm(H)X8.3µm(V)
<b>Sensor active area:</b>	6.47mmX4.83mm
<b>weight:</b>	400 gr. with cable
<b>Power consumption:</b>	5V/0.6A through USB2.0 port
<b>Accessories included:</b>	Equipped with a built-in filter wheel, with 4xND 2mm thick filters, mounting post, one IR-Edge filter
<b>Dimensions</b>	80 mm x 78.5mm x 49 mm

## General Specifications

<b>PC interface:</b>	USB2.0 Attachment, 1.8m long
<b>RS232 / TCP-IP:</b>	Data out
<b>Operating temp:</b>	-10°C to 50°C (without condensation)
<b>Storage temp:</b>	-40°C - 60°C
<b>CE compliance</b>	

## Ordering Information

The system comes with a camera, a post, a built-in filter wheel with a set of 4xND filters (ND8, ND64, ND200, and ND1000), in housing one built-in (removable) IR-edge filter, software and user manual on CD disk / DiskOnKey, carrying case.

<b>BeamOn WSR VIS-NIR:</b>	350-1600nm
<b>BeamOn WSR UV-NIR:</b>	190-1600nm
<b>ND Filter:</b>	2mm thick ND filter in mount, select type:8/64/200/1000
<b>IR Edge Filter:</b>	2.5 thick, passing over 1100nm
<b>SAM3-A</b>	Attachment for high power lasers attenuation (up to 20W)
<b>SAM3-A-HP</b>	Attachment for high power lasers attenuation (up to 1kW)
<b>RDC</b>	Attachment for beam reducer (ratio 2x1)

## Host Computer Requirements

Pentium IV, Dual-Core, 2GHz, 512MB RAM, 64 MB 16 bit color VGA card, resolution 1024x768, CD ROM any type, High Speed USB2.0 port, OS Win / 2000 / XP / Vista / 7 32bit / 7 64 bit / 8/10.

## System Performance with Software

### System Response

VIS - NIR	350-1600nm
UV - NIR	190-1600nm(*)

(\*) Windowless CCD

<b>Max frame rate:</b>	25Hz, excluding slow shutter operation
<b>Image resolution:</b>	720X576
<b>Shutter speed:</b>	1/50x256sec to 1/100,000sec, 17 steps manual or automatic
<b>Gain control:</b>	6dB to 41dB, 2dB steps manually or automatic
<b>Null:</b>	Null function is available to automatically subtract background
<b>Optical dynamic range:</b>	up to 1X10 <sup>15</sup> using all filters and software controlled electronic shutter and gain
<b>Damage threshold:</b>	50W/cm <sup>2</sup> or 1J/cm <sup>2</sup> with filters
<b>Sensitivity:</b>	160µW/cm <sup>2</sup> at 1500nm shutter x 256
<b>Saturation:</b>	1mW/cm <sup>2</sup> at 633nm with no filters installed 2W/mm <sup>2</sup> at 1550nm
<b>Operation with pulsed lasers:</b>	Ability to capture and replay images from slowly pulsing lasers (1-100Hz) while filtering out frames with no laser pulse. Gain control and external filter make it easy to obtain optimal intensity
<b>Triggering:</b>	In pulsed mode set threshold by slide bar to display frames with captured pulses