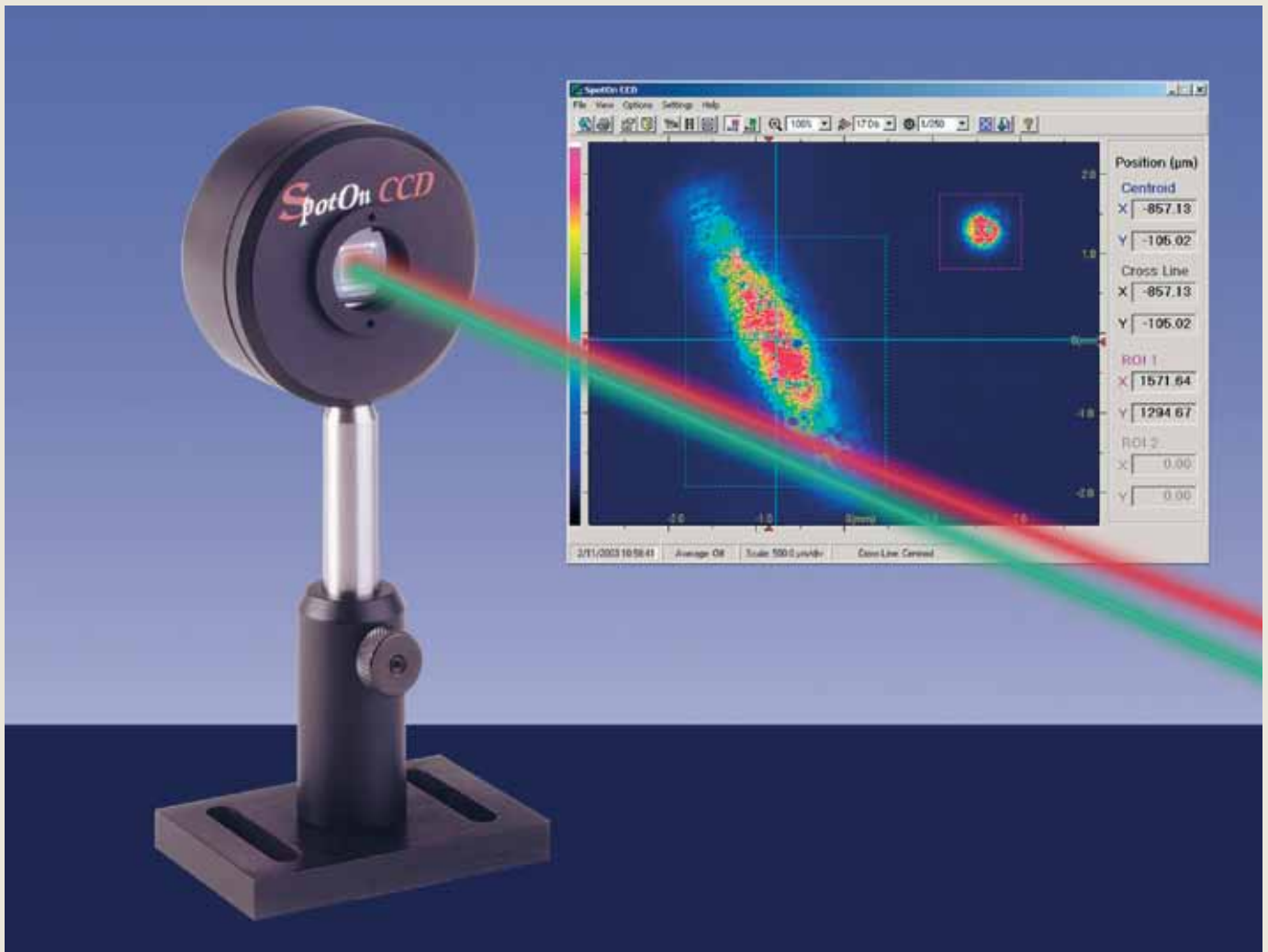


SpotOn CCD

Optical Beam Position Measurement System



Expanding your positioning capabilities

- **Versatile:** Measures beam position (up to 3 beams simultaneously) over a wide dynamic range. Measures both CW and pulsed beams.
- **Precise:** High accuracy measurement less than 5 μm deviation edge-to-edge and sub-micron resolution for minute movements.
- **Flexible:** A wide spectral response, from deep UV (190 nm), VIS range and up to 1550 nm.
- **Portable:** Based on USB 2.0 attachment for notebooks, no external power supply required.
- **Easy to use:** User-friendly software using mouse/keyboard control, complete on-line help routine.

Main Software Features

- 3 Regions of interest for simultaneous measurements of up to 3 beams.
- Centroid calculation and display.
- 2D contour map of beam in real time.
- Data exporting to another computer via RS232/TCP-IP.
- Data logging and detailed statistics.
- Software controlled electronic shutter & gain.
- ActiveX control for customer application.
- Multiple devices operation possible.



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Applications

- Measure laser centration or displacement.
- Align laser beams and QC of fiber optics.
- Calibrate surface flatness and machine tool alignment.
- Monitor vibration, deflection and motion.



System Specifications

Camera type CCD 1/2" format, 6.47x4.83mm sensitive area.
 Spectral response VIS: 350-1100nm , UV:190-1100nm, IR:350-1310nm; 1550nm ± 50nm (*)
 Position resolution sub - micron range.
 Position accuracy 5 µm deviation edge-to-edge.

(*) Based on a standard CCD for VIS, coated with phosphor coating, enabling capture of signals at the 1550 ± 50nm range.

CW Lasers

Dynamic Range The filter combinations together with the built-in shutter control allow a range of beam attenuations of about 1x10⁸:1
 Shutter speed 1/50s to 1/100,000s
 Max frame rate 25 Hz
 Gain 6-60 dB, 210 Steps
 Auto Automatic shutter and gain settings

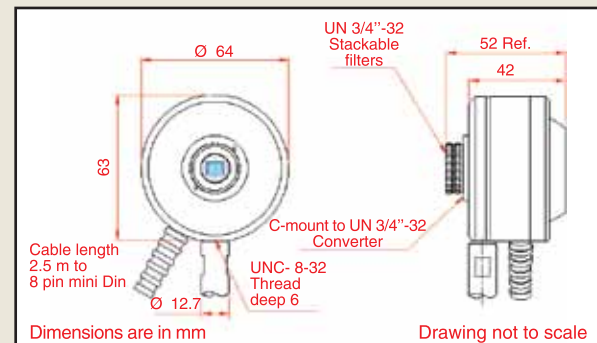
Pulsed Lasers

Handling of pulses Ability to capture pictures from slowly pulsing lasers. (1-100 Hz) while filtering out frames with no laser pulse.
 Trigger Automatically set by system.
 Threshold Null function to automatically subtract background and set trigger level.

Max frequency for single pulse display:10 KHz

Dimensions

Camera ø 64mm dia. x 52mm deep with filters.
 2 -1mm thick ND filters in housing about 240:1(wavelength dependent).
 8-32 threaded mounting post.
 Female RCA connector-Sync out
 Cable 2.5m cable to 8 pin mini DIN type, attached to camera.
 Interface USB2.0 attachment.



Hardware Requirements

The recommended host computer requirements are:
 Pentium IV, 2 GHz, 512MB RAM, 64 MB 16 bit color
 VGA Card, resolution 1024x768, CD ROM any type,
 1 free High Speed USB 2.0 Port,
 OS: Windows XP/7, 32 or 64 bit



Ordering Information

The system comes with a camera, a set of 2 x NG10 filters in housing, a mounting post, USB 2.0 attachment. software on CD disk, carrying case.

SPOTCCD-VIS camera for VIS range 350-1100 nm
 SPOTCCD-UV camera for UV range 190-1100 nm
 SPOTCCD-IR 1310 camera for VIS and IR range 350-1310 nm
 SPOTCCD-IR 1550 camera for IR range 1550 nm ± 50 nm