

# CS1507NIR-GB

Infrared series | Beam profiler

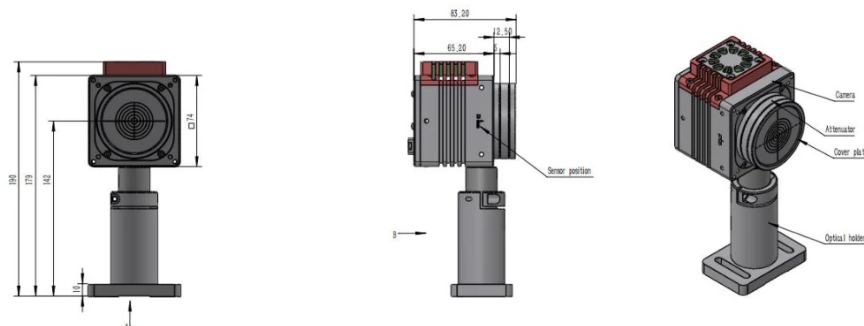
CS1507NIR-GB infrared series beam profiler. Spectral range: 900-1700 nm. Beam-spot range: 150  $\mu\text{m}$ -7.68 mm; TEM00 limit: 4.7 mm. Check power, attenuation and interface conditions for the selected configuration.



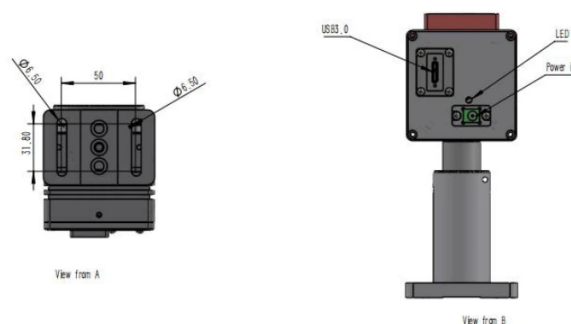
| Model specifications                      | Specification                                                                                                                                                                                                                                                 |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model                                     | CS1507NIR-GB                                                                                                                                                                                                                                                  |
| Camera type                               | InGaAs(Decoherence)                                                                                                                                                                                                                                           |
| Detection Wavelength Range                | 900-1700 nm                                                                                                                                                                                                                                                   |
| Sensor Size                               | 8.4*7.68 mm                                                                                                                                                                                                                                                   |
| Resolution                                | 640*512                                                                                                                                                                                                                                                       |
| Sensor Pixel Size                         | 15 $\mu\text{m}$                                                                                                                                                                                                                                              |
| Exposure Time                             | 0.05 ms-100 ms [1]                                                                                                                                                                                                                                            |
| Shutter                                   | Global                                                                                                                                                                                                                                                        |
| Beam Spot Detection Range                 | 150 $\mu\text{m}$ -7.68 mm [2]                                                                                                                                                                                                                                |
| Maximum Power Density (Damage Threshold)  | 10 W/cm <sup>2</sup> (with OD3.0 attenuation)                                                                                                                                                                                                                 |
| Maximum Energy Density (Damage Threshold) | 1J/cm <sup>2</sup> (with OD3.0 attenuation)                                                                                                                                                                                                                   |
| Maximum Power                             | 0.5 W                                                                                                                                                                                                                                                         |
| Attenuator                                | OD1/OD2/OD3(900-1700 nm)                                                                                                                                                                                                                                      |
| Interface                                 | Gige                                                                                                                                                                                                                                                          |
| Frame Rate (Processing)                   | $\geq 60$ Hz                                                                                                                                                                                                                                                  |
| External Trigger                          | supported                                                                                                                                                                                                                                                     |
| Structure Type                            | Rear interface, compatible with C-mount thread                                                                                                                                                                                                                |
| Dimensions                                | See structural drawing                                                                                                                                                                                                                                        |
| Operating Environment                     | Temperature<0-35°C [3] , relative humidity<60%                                                                                                                                                                                                                |
| Operational Conditions                    | Software environment: Windows 10/11, 64 bit, pre installed with MS Office or WPS, Hardware configuration: $\geq 8$ GB memory, CPU clock speed $\geq 2.5$ G, core $\geq 4$ , recommended i5 or above equivalent models, optimal display resolution 1920 * 1080 |
| Weight                                    | <500 g                                                                                                                                                                                                                                                        |

# CS1507NIR-GB

## Mechanical outline and measurement conditions

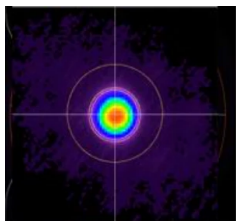


Mechanical outline / view 1 | Dimensions in mm

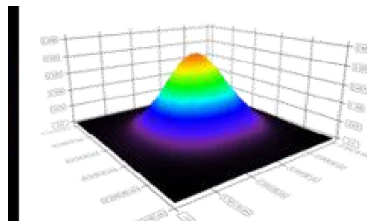


Mechanical outline / view 2 | Dimensions in mm

## Beam-analysis examples



Two-dimensional intensity map



Three-dimensional beam profile

*Illustrative software output, not a test result for this unit. Available functions depend on the selected hardware and software.*

## Measurement conditions and configuration notes

[1] This is the camera response at an exposure time of 100 ms. [2] The maximum beam diameter of the fundamental-mode Gaussian laser is 4.7 mm @  $1/e^2$ . [3] This refers to the operating temperature. For directivity testing, the temperature shall be controlled at 15-25 °C.

Read total power, power density and pulse-energy-density limits with the specified attenuation, wavelength, spot size, cooling and detection time. A maximum power figure does not apply to every beam configuration.

**Precisometer** | [info@precisometer.com](mailto:info@precisometer.com) | Product details and enquiry

*Specification review: 24 October 2026. Confirm the selected optical, attenuation and cooling configuration with your quotation. Include wavelength, spot size, pulse conditions, power, cooling and required analysis.*