

CN0310VIS-W300

High-power series | Beam profiler

CN0310VIS-W300 high-power series beam profiler. Spectral range: 340-1080 nm. Beam-spot range: 50 μm to 9.8 mm; TEM00 limit: 6.5 mm. Check power, attenuation and interface conditions for the selected configuration.

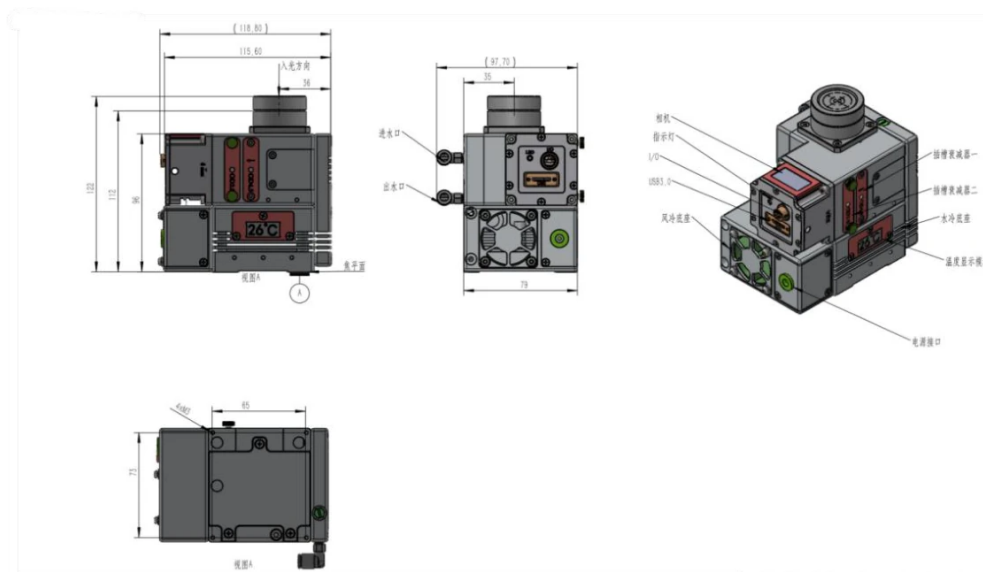


Model specifications	Specification
Model	CN0310VIS-W300
Spectral Range	340-1080 nm [1]
Sensor pixel size	3.2 μm
Maximum sensor area	13.1 mm*9.8 mm
Minimum spot size	50 μm
Maximum spot size	9.8 mm [2]
Maximum acceptance angle	$\pm 2.5^\circ$ @ central incidence ± 0.05 mm
Minimum power	0.1 W@50 μm
Maximum power	200 W, focused spot ≥ 50 μm , CW
Defocus measurement range	-10 mm - +5 mm (calculated from parfocal distance)
Parfocal tolerance	± 0.5 mm
Light entrance direction	Vertical
Built-in absorption attenuation	SWIR band: OD1 / OD2 / OD3 / OD4.5
Interface	USB3.0
External trigger	Supported
Cooling	Air-cooled; Water-cooled (flow rate 10 L/min, water temperature 20-25 $^\circ\text{C}$, cooling capacity 0.5-1 kW, head 10-25 m)
Operating environment	Temperature < 15-25 $^\circ\text{C}$, relative humidity < 60%
System requirements	Software: Windows 10/11 (64-bit), pre-installed MS Office or WPS Hardware: ≥ 8 GB RAM, CPU ≥ 2.5 GHz, ≥ 4 cores (i5 or equivalent recommended), optimal resolution 1920*1080
Weight	<1.5 Kg

General Module Parameters	Specification
PW-Y	Detection band: 1030-1080 nm; Max power: 300 W Detection time: ≤ 3 min @300 W, continuous operation at 200 W
PW-U	Detection band: 343-355 nm; Max power: 100 W Detection time: continuous operation
PW-PT	Detection band: 340-900 nm; Max power ≤ 2 min @200 W Detection time: continuous operation
PW-G	Detection band: 515-532 nm; Max power: 150 W Detection time: continuous operation
PW-N1	Detection band: 900-1100 nm; Max power: 100 W Detection time: continuous operation

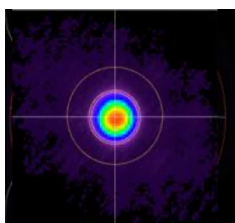
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Mechanical outline and measurement conditions

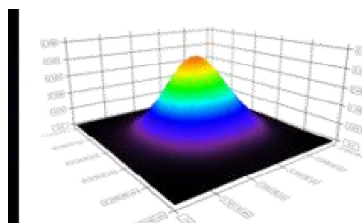


Mechanical outline | Dimensions in mm

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] Band can be extended by replacing the window module.

[2] For a TEM00 mode beam with central incidence, the spot size is 6.5 mm.

Power handling is conditional on the specified wavelength, incident spot size, cooling and detection time. A peak model number is not a continuous operating rating for every beam.

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 | 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.