





WinCamD-QD SWIR/eSWIR Quantum Dot Beam Profiler

High resolution beam profiling at 1550 nm

The WinCamD-QD series uses colloidal quantum dot sensors to provide high quality beam profiling for visible, SWIR, and eSWIR sources. With 15 µm pixels, a wavelength range as wide as 350-2000 nm, and a global shutter, the WinCamD-QD series offers unparalleled beam profiling capabilities. With a signal-to-noise ratio that exceeds 2100:1, the WinCamD-QD series is capable of ISO 11146 compliant beam measurements. The state-of-the-art colloidal quantum dot sensor features very high sensitivity with a global shutter for pulsed beam profiling.



The WinCamD-QD series is supported by DataRay's full-featured, highly customizable, user-centric software which has no license fees, unlimited installations, and free software updates. The DataRay software allows you to interface with external programs, log data, conduct fully automated M² measurements using our M2DU translation stages, and much more, all included without any additional charges. For higher power lasers, DataRay offers a range of sampling, absorbing, and reflecting attenuation options to assure your beam is adequately attenuated before profiling.

System Features

- Colloidal quantum dot sensor, optimized for SWIR and eSWIR
- SWIR (400-1700 nm) and eSWIR (350-2000 nm) sensors available
- Multiple resolution options, up to 1920 x 1080. See table on next page for more information.
- 15 µm pixels
- 14-bit ADC
- Global shutter supports pulsed and CW beams
- >2100:1 dynamic range (33dB opt./66dB elec.)
- In-firmware NUC
- Parallel capture on multiple cameras
- M² measurements
- GigE or USB 3.0 with 3m screw locking cable
- GigE Vision/USB3 Vision support



WinCamD-QD 2.4 x 2.4 x 3.9 in 66 x 66 x 99 mm





Applications

- 1550 nm laser profiling
- Field service of 1550 nm laser and laser-based systems
- Optical assembly and instrument alignment
- Telecommunications fiber characterization
- Beam wander and logging
- High divergence diode characterization
- M² measurement with available M2DU stage



WinCamD-QD Model	Wavelength	Pixel Size	Resolution	Measurement Area	Included Filters
S-WCD-QD-1550	400-1700 nm	15 µm	640 x 512	9.6 x 7.7 mm	Includes NDL to C-mount adapter with ND-1, ND-2, and ND-4 filters.
S-WCD-QD-1550-L	400-1700nm	15 µm	1280 x 1024	19.2 x 15.4 mm	Includes NDL mount NDL-1, NDL-2, and NDL-4 filters.
S-WCD-QD-1550-XL	400-1700 nm	15 µm	1920 x 1080	28.8 x 16.2 mm	Includes NDL mount NDL-1, NDL-2, and NDL-4 filters.
S-WCD-QD-2000	350-2000 nm	15 µm	640 x 512	9.6 x 7.7 mm	Includes NDL to C-mount adapter with ND-1, ND-2, and ND-4
S-WCD-QD-2000-L	350-2000 nm	15 µm	1280 x 1024	19.2 x 15.4 mm	Includes NDL mount NDL-1, NDL-2, and NDL-4 filters.
S-WCD-QD-2000-XL	350-2000 nm	15 µm	1920 x 1080	28.8 x 16.2 mm	Includes NDL mount NDL-1, NDL-2, and NDL-4 filters.

