

# PICUS Q

PICOSECOND LASER FOR QUANTUM DOT EXCITATION

The **PICUS Q** is housed in a standard 19" enclosure and is made for easy integration into your setup / device.

Fiber-coupled outputs allow flexible pulse delivery offside an optical table. The **PICUS Q** is based on Refined's proprietary fiber technology that has proven its hands-off performance and stability in biomedical research labs around the world.

## READY FOR INTEGRATION

- Standard 19" housing
- Comfortable fiber delivery

## EFFICIENT QUANTUM DOT PUMPING

- Repetition rate of 80 MHz
- Above 100 mW at your wavelength

## ULTRA STABLE

- Pulse to pulse coherence > 98 % visibility
- Wavelength stability < 6 pm



## Applications

Quantum dot pump laser

Single-photon sources

Material sciences

# Product Specifications

## Optical

Tuning range	770 – 980 nm
Pulse to pulse coherence	>98% visibility
Average power	>100 mW
Wavelength stability	<6 pm
Pulse duration	15 ps
Spectral bandwidth	<1nm
Repetition rate	< 40MHz / 80 MHz
RMS noise	< 1 %
Polarization	linear, 100:1

## Electrical

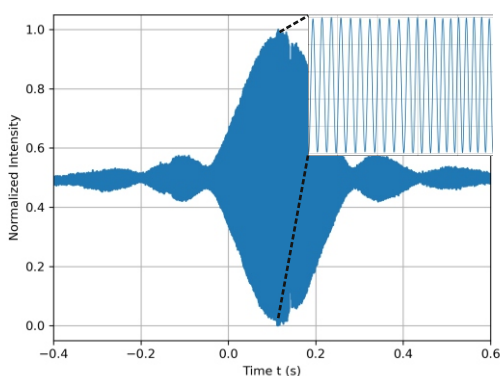
Interfaces	Communication through USB or RS232 Clock/Reprate out for external synchronisation
Software interfaces	GUI and custom serial API, e.g., via Python & Matlab

## Mechanical

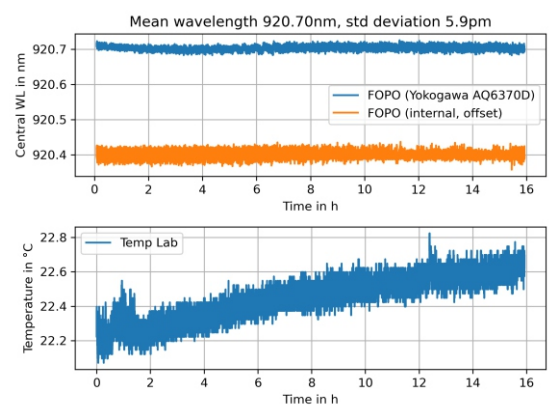
Laser head dimension	45x45x13 cm <sup>3</sup>
Laser controller dimension	43x31x13 cm <sup>3</sup>
Cooling	Air-cooled
Weight	25 kg
Standard umbilical length	2 m

# Performance

Pulse to pulse coherence



Wavelength stability



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AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION

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The product is constantly being improved, therefore the specifications are subject to change without notice. June 2021 | Rev. 1.0