



Superconducting Nanowire Single Photon Detection System

We make the world's fastest and most sensitive light sensors limited only by the laws of physics.

Single Quantum was established as the first European company manufacturing and commercializing

superconducting single photon detectors. By sharing this groundbreaking technology, we aim to create a better future!

Our multi-channel detection system has already been chosen by more than 200 academic and industrial labs all over

the world to perform complex optical measurements.

The unique combination of unparalleled detection efficiency and time resolution is what makes our superconducting detectors the ideal choice for quantum communication, photonic quantum computing, infrared fluorescence spectroscopy, imaging, LIDAR and many other applications.

high

efficiency



low jitter

continuous operation ED IN





200+ happy users worldwide



installation service and global support

Specifications

Optimization wavelength	800 nm	900 nm	1064 nm	1310 nm	1550 nm
System detection efficiency	≥ 90%	≥ 90%	≥ 85%	≥ 85%	≥ 90%
Timing jitter	≤ 15 ps	≤ 15 ps	≤ 15 ps	≤ 20 ps	≤ 20 ps
Dark count rate	≤1 Hz	≤1 Hz	≤ 10 Hz	≤ 10 Hz	≤1 Hz
Max. count rate	≥ 80 MHz	≥ 80 MHz	≥ 50 MHz	≥ 50 MHz	≥ 50 MHz
Ultra-high count rate detectors	≥ 800 MHz	≥ 800 MHz	≥ 600 MHz	≥ 600 MHz	≥ 600 MHz

Disclaimer: There are trade-offs between certain specifications and it may not be possible to reach a combination of them. Please contact us for more information.



Timing jitter at 900 nm



Single Quantum Eos

Single Quantum Eos is a complete photon detection system that consists of a closed-cycle cryostat, helium compressor, electronic driver and up to 24 high performance fiber-coupled superconducting nanowire single photon detectors.

Our user-friendly electronic driver and software are unique in the market and enable fully computercontrolled operation and makes it effortless to interface with any programming language.

Contact

Interested? Please get in touch! Together we'll find the best customized solution for your experiment!

Electrical detector output pulse at 1550 nm



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