

Single Quantum Eos SNSPD Closed-Cycle System

High detection efficiency
Best time resolution on the market

Single Quantum develops the fastest and most sensitive light sensors on the market, based on the breakthrough technology of Superconducting Nanowire Single Photon Detector (SNSPD).

Features:

- High detection efficiency
- Low timing jitter (high time resolution)
- Short dead time
- High photon detection rate
- Low dark count rate
- No afterpulsing
- No helium consumption
- Continuous operation > 10,000 hours
- A turn-key system

Standard Specifications:

System detection efficiency ¹		> 75% at 800 nm
		> 75% at 900 nm
		> 75% at 1310 nm
		> 70% at 1550 nm
Timing jitter	Standard	< 60 ps
	Low timing jitter solution	< 30 ps
Dead time		< 20 ns
Dark count rate ²		< 50 Hz at 800 nm and 900 nm
		typ. 300 Hz at 1310 nm and 1550 nm
Fiber		Single mode fiber
Fiber connector		FC/PC
Output pulse height		> 200 mV
Gating		Not necessary
Afterpulsing		None
Number of detection channels		1-8

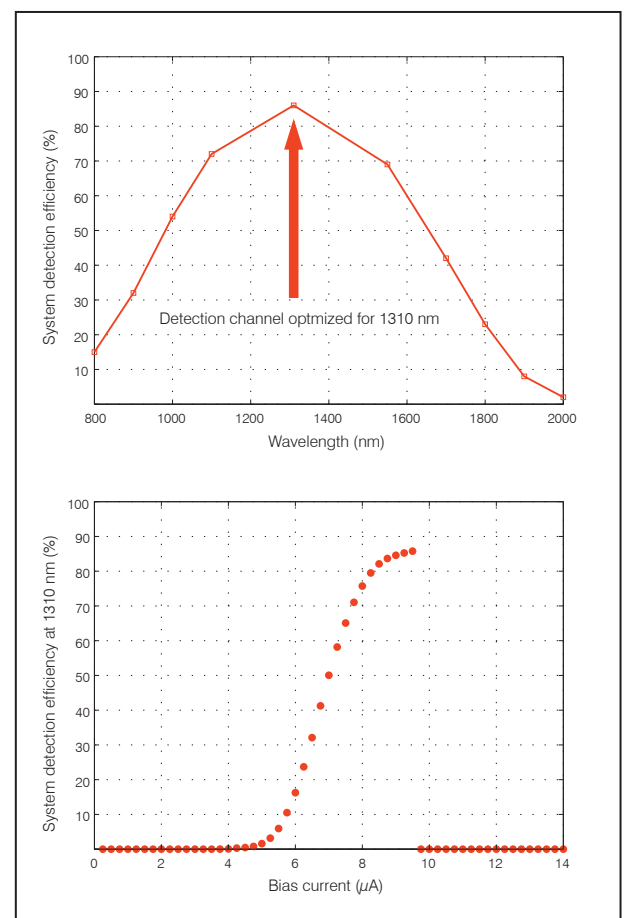
¹ System detection efficiency for optimized polarization with losses of the fiber and the fiber connector taken into account.

² Can be controlled by driver software and reduced to < 1 Hz at the expense of detection efficiency.

Please contact us for customized solutions such as ultra-low timing jitter, shorter dead time, low dark counts, dipstick systems, and customer-specified wavelength optimization.



System Detection Efficiency:

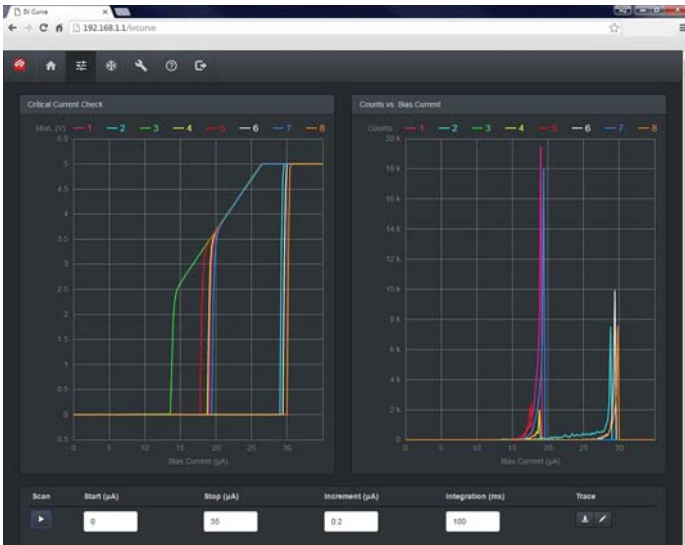


Applications:

- Photon correlation measurements
- Quantum cryptography
- Quantum computing
- Single photon source characterization
- Single molecule fluorescence spectroscopy
- CMOS defect analysis
- Laser remote sensing and space communication
- Singlet oxygen luminescence

Cryogenics and Electronics

Cryostat size	24x 35x 59 cm	
Length of flextubes	Up to 20 meters	
Compressor type	Air-cooled or water-cooled	
Compressor size	Air-cooled	72 x 45 x 49 cm
	Water-cooled	50 x 43 x 49 cm
Electronic driver digital interface	Ethernet or USB	
Output pulse interface	SMA	



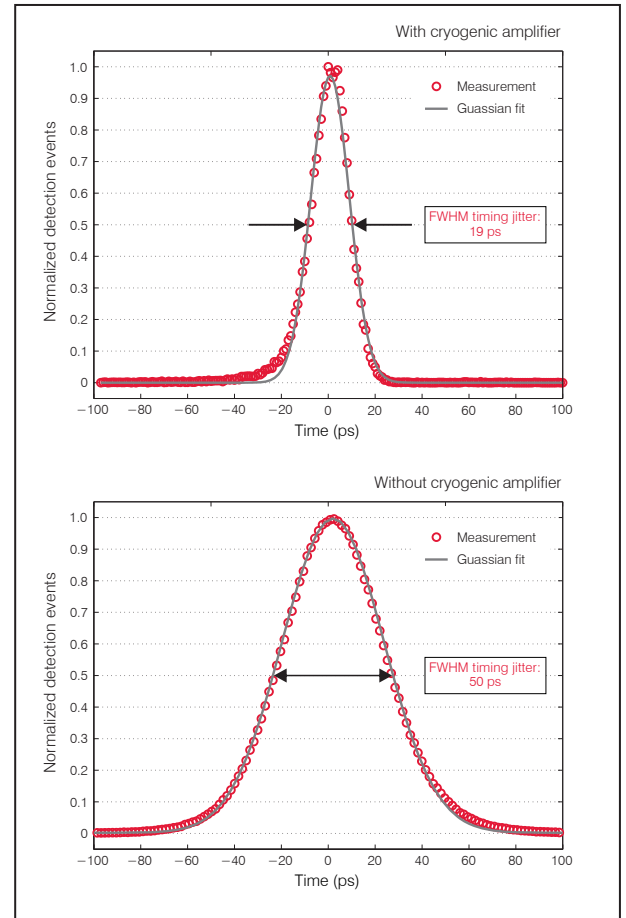
User-friendly software, web-browser based

Specifications subject to change.
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Low Timing Jitter



Fast Output Pulse and Short Dead Time

