

# Photon-Counting Radiometers

## Model QS

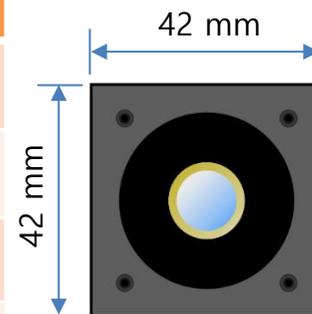
- QS-SP (Si SPAD with passive quenching)
- QS-IGA (InGaAs SPAD with active quenching) – in preparation

# Si SPAD with passive quenching

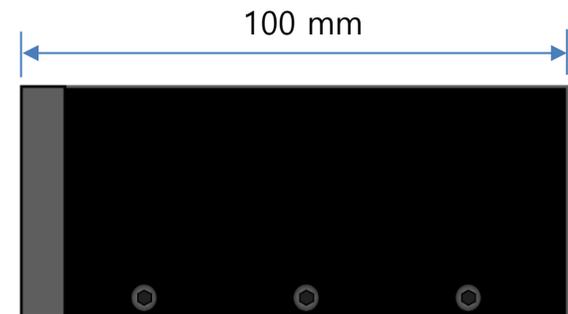
- Compact design with temperature-controlled Si APD sensor
  - Free-space input (fiber-coupled version on request)
  - Large-area sensor for high collection efficiency
- Delivery with KRISS test certificates on key performances



	QS-SP (free-space)	QS-SP-F (fiber-coupled)
Sensor active area	Ø500 µm (nominal)	Ø500 µm (nominal)
Wavelength range	300 nm – 1000 nm	400 nm – 1100 nm
Dark count rate	< 500 cps	< 5000 cps
Max. detection efficiency	➤ 70% @ 500 – 600 nm	➤ 20% @ 600 - 800 nm
Max. count rate	2x10 <sup>7</sup> cps	
Dead time	< 50 ns	
After-pulsing probability	< 1%	
Pulse output	TTL via a SMA connector	
Electrical power supply	5 V DC	



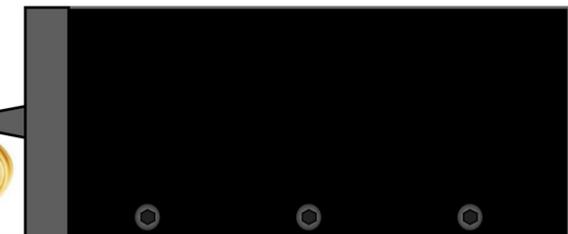
4 x threads on front for standard 30 mm cage system



M4 & M6 mounting threads on bottom



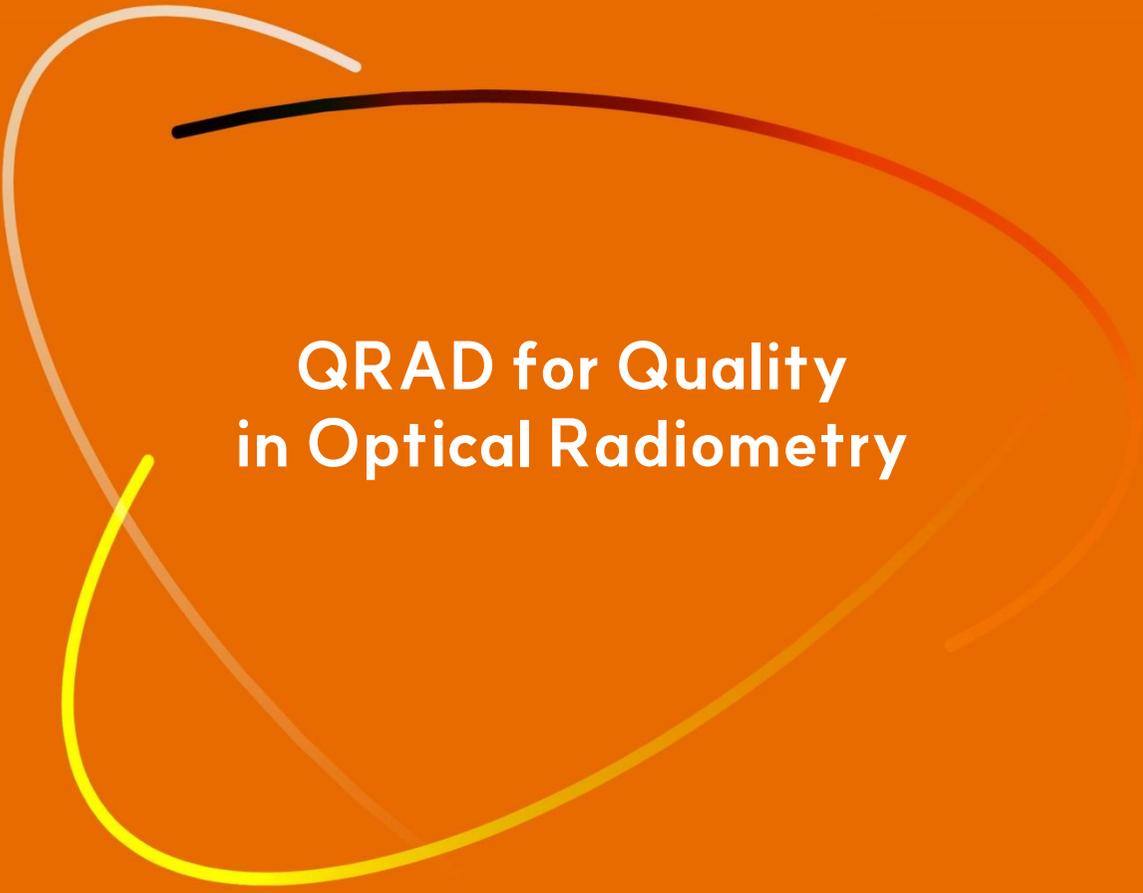
φ 9 µm core fiber, 1 m length, FC-PC connector



\*Fiber-coupling option

• QS-SP

• QS-IGA



# QRAD for Quality in Optical Radiometry



© 2025. QRAD. All Rights Reserved