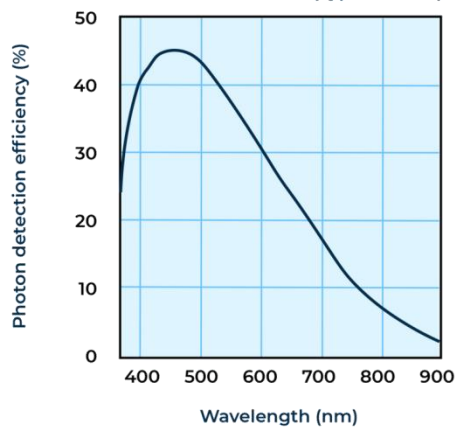# Configuring a SPAD detector

a - Double check the characteristics of your setup to determine whether our SPAD is a suitable choice for your requirements regarding photon detection efficiency and linearity.

Photon detection efficiency vs. wavelength
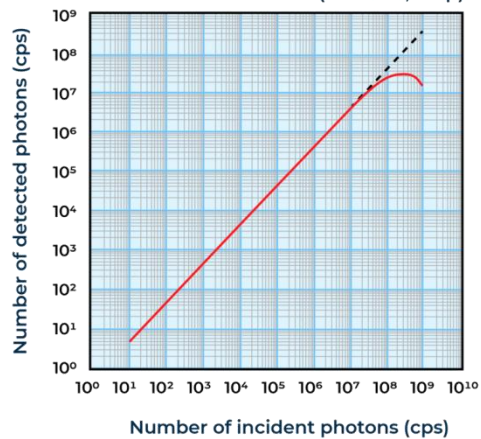
(Typ. Ta=25 °C)

Spectral Response

The sensitivity of our SPAD detector peaks at 450nm, while its spectral response range spans from 370nm to 900 nm.

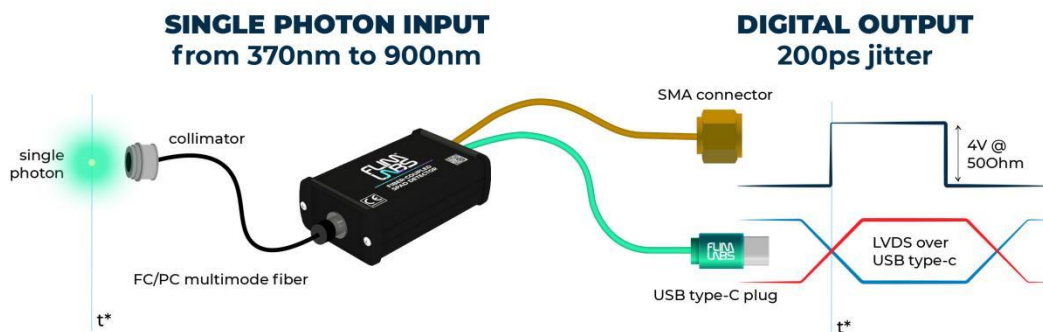**Linearity**

(Ta=25 °C, λ=λp)

Key tech specs

Our fiber-coupled USB-powered SPAD detector yields a <200 ps timing jitter coupled with 7cps of dark count rate. The throughput linearity is maintained up to 3.5Mcounts/s of incident photons.

b - Connect a FC/PC multimode fiber to the input signal port **(1)**.

c - Connect one of the LVDS output ports **(5 or 6)** specifically to the FLIM Data Acquisition Card using an USB type-C cable or use the 4 V LVTTL 50 Ohm single ended output **(4)** to connect the SPAD to any brand of data acquisition card through a SMA coaxial cable.

d - Power the SPAD detector via standard USB type-c port **(5 or 6)** or via a 2.1/5.5 mm coaxial connector **(2)** using a wall-mount DC converter (recommended values are 9 V DC – 1 A max). Ensure that the status LED **(3)** displays a green light while in operation.

Connection example