



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

MATERIALS MANAGEMENT DIVISION

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**Technical Specifications for Single Photon Detection System**

**RFx No. 610000804 (Reference No. 100020752)**

Photon counting electronics, Optical fibre and soft wares should be included

Detection wavelength range: 400 – 800 nm

Photon Detection Efficiency (PDE) :>70% at 550 nm.

Active area (diameter) at minimum PDE:200-500  $\mu\text{m}$

>10Mcps dynamic range before saturation

Both gated and free running output modes should be allowed

Time jitter: <350 ps

Case operating temperature: 5 – 70<sup>0</sup>C

FC fiber adapter, C mount bracket

Suitable power supply.

Dark count:  $\leq 250$  counts/sec

Dead-time: <250 ns

Instrument should be supplied with 1 year standard warranty