

**Indian Institute of Technology, Kanpur**  
**Department of Physics**

**Enquiry no.: IITK/PHY/171**

**Enquiry date: 18-Apr-2017**

**Closing date: 02-May-2017**

Sealed Quotations are invited for: Single Photon Counting Module (Qty. 01) and the necessary accessories

**Required Specifications:**

Photon detection efficiency (Pd) at:	400nm	>5 %
	650nm	>65 %
	830nm	>45 %
	1060nm	>2 %
Dark Count (Counts/s)		100
Average dark count variation at constant case temperature (For at least 6 hrs at 25 °C)		< 2%
Pd variation at constant case temperature		< 5%
Pd variation from 5 °C to 40 °C		< 10%
Average dark count variation at 5 °C to 40 °C case temperature		<2%
Single photon timing resolution		<0.3 ns
Dead time (count rate below 5M/c)		< 60 ns
Output Count Rate before saturation		>10 Mc/s
After pulsing probability		1.0%
Setting time following power up (1% stability) at 1 Mc/s and 25 °C		< 20 s
Output pulse width		15 ns
Supply Voltage		< 5.25 V
Start /trigger delay		<11 ns
Active area (diameter) at minimum Pd		180 μm
With fc connector		yes
<b><u>Accessory # 1:</u></b> Counter/Timer Board & NI-DAQ for Win 2000 / NT /Me / 9x / MAC Model: NI PCI-6602 (NI Part No.: 777531-01) Make: National Instruments, USA		yes
<b><u>Accessory # 2:</u></b> Connector block and test accessory for NI 660X counter/timer devices Model: BNC-2121 (NI Part No.: 778289-01) Make: National Instruments, USA		yes
<b><u>Accessory # 3:</u></b> Shielded Cable, 68-pins, 2 m Model: SH68-68-D1 (NI Part No.: 183432-02) Make: National Instruments, USA		yes

## Terms and conditions:

1. Quotations should be made in two parts: Technical bid and financial bid, separately in sealed envelopes.
2. Financial bid for the product whose technical bid is not acceptable will not be opened. Any quote with the financial bid included in the technical bid will be immediately rejected.
3. The sealed envelopes with the quotes should be superscribed with the inquiry number and whether it is a technical or a financial bid.
4. Technical specifications along with the extent of compliance should be mentioned.
5. Maximum educational discounts should be applied – this equipment will be used in a laboratory that will support research as well as teach and train students.
6. Quotations must have a validity of a minimum of 60 days.
7. Along with the technical comparison, the manufacturer's specification sheets for the product **must be** enclosed
8. All the products **must be** in metric unit unless otherwise mentioned.
9. If needed, the supplier/bidder should be able to give a demonstration of the product at IIT Kanpur.
10. The accessories **must be** of the same model and make as mentioned in the "Required Specification" table above. This is required for the compatibility purposes.

### (For delivery to IIT Kanpur)

11. The delivery period should be specifically mentioned and **must be** adhered to.
12. The shipping cost **must be** for CIP New Delhi and the cost should be mentioned on the quote.
13. The quote **must** mention the final total price including everything (shipping, handling, insurance, taxes or any other charges)
14. IIT Kanpur is exempted from payment of Excise Duty under notification no.10/97.
15. IIT Kanpur is entitled to avail concession rate of sales tax as admissible under Sub-sec 5 of Sec 8 C.S.T Act 1956 applicable to Educational/Research institution in inter-state purchase, if supplied from within India.

### Address the quotations to:

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