

**Department of Physics, Indian Institute of Technology
IIT.P.O. Madras-600 036**

Ref. No.

Date: 04 / 03 / 2018

PHY	2018	STORES	SSRK	002
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To,

Dear Sir,

Due date: 25 / 03 / 2018

Please find below the specifications for the equipment we require for purchase. Kindly send us a quotation by the due date mentioned above in a two bid format, a) technical bid and b) commercial bid.

TIME TO DIGITAL CONVERTER (TDC) ELECTRONICS

Minimum specification for (please quote unit for procure)

S. No	Parameter	Value
1	Basic parameter	Time to digital converter compatible with PCIe or USB interface
2	Time resolution	15ps or lower
3	Max range	10 ms or longer
4	Multiple stops	16 stops or more
5	Dead-time	5ns or lower for first 16 buffered channels
6	Start rate	4 MHz or higher (single hit rate) and 8 MHz per channel or higher for multiple stops
7	Input signal	NIM signals
8	Software	Suitable compatible software (such as CoboldPC or similar) compatible with Win 10 32/64 bit. Additional Linux compatibility is preferred but not necessary.
9	Chassis / interface module	If a suitable chassis or interface module for connection with a PC the same may be clearly mentioned and quoted for.
Accessories		
	3 channel amplifier	3-channel fast timing amplifier unit with adjustable gain and reconfigurable bandwidth/input impedance, inverting and noninverting outputs, 3HU case with external mains adapter (100-250V AC) Quantity: 2 nos.
9	Constant fraction discriminator with amplifier	2-channel standard front-end electronics amplifier and constant fraction discriminator) in a 3HU case with external mains adapter (100-250V AC) for RoentDek delay-line detectors in combination with FT4/12/16-TP -type connectors. Readout of a DLD anode requires two units (one per layer) and a FAMP1+CFD1c (or x) set for the MCP signal.
10	Single channel pre-amplifier	Single channel fast timing amplifier unit for amplification of fast detector signals (similar to FAMP8). Single box unit incl. external mains adapter (100-250V AC).
11	Warranty	2 years or more

Accessories

The vendor may quote accessories list above and any other suitable which may be required with the instrument mentioned for purchase together but will not be used for price comparison.

Please provide a clear warranty statement.

Quotation should be valid for at least 90 days.

Please send the quotations in a two-bid format – separate technical and financial bids. On or before the due date.

Please mark reference number on top of the quotation.

Yours Sincerely,

Sivarama Krishnan

Co-ordinator

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