Format for WEB tender

BOSE INSTITUTE KOLKATA

Tender No.	CAPSS/15/91/P-VII(SKS)/14-15
Tender Date	10/03/2015
Tender Type	OPEN

Tender Title	**16 Channel Spectrocopy Amplifier**
Specification	Please see Annexure - 1
Quantity	ONE

Last Date & Time for submission	20/03/2015 upto 14.00 hrs
Date & Time for opening bids	20/03/2015 at 15.00 hrs
Submission of Tender (address)	CAPSS, Bose Institute, Block EN-80, Sector – V, Salt Lake, Kolkata 700 091
Venue of bid opening	CAPSS, Bose Institute, Block EN-80, Sector – V, Salt Lake, Kolkata 700 091
For any query the interested bidders may contact (Dept./Section/Div./Unit)	Prof. S Saha, 09830420035

General Terms & Conditions

Warranty	One year from the date of installation
Payment terms	After satisfactory installation
Delivery schedule	30 days from the date of receiving the PO
Bid security (earnest money deposit) if applicable	NA
Submission of Performance Bank Guarantee (PBG), if applicable	NA
Any other information (if applicable)	NA

Name of the instrument and tender no should be mentioned on the envelope positively

Director, Bose Institute reserves the right to accept or reject any or all tenders either in part or in full . The reasons for rejecting the tender of a prospective will be disclosed only when enquiries are made.

Sr. Professor and In-charge, Registrar's Office

Annexure - A

16 Channel Spectroscopy Amplifier (Shaping / Timing Filter) with CFDs and Multiplicity Trigger with following specifications

Parameter	Description / Specification
Housing	16 Channel single width NIM module
Input stage	Input Channels: 16 channels
	Input Signals: differential type , ±1V
	Input connector: FRC type
Polarity	Changeable
Shaper	Output amplitude: 0 to 10V
	Four- Shaping times: 0.5, 1, 2, 3 µs
	Output connector: 34 pin male connector
	Integral nonlinearity < 0.1 %
	Gain drift < 0.01% / °C
	Adjustment of Shaping time: via Front panel switch as well as through Remote control
	PZ adjustment : via front panel switch as well as through remote control Gain adjustment: via front panel switch as well as through remote control
Timing filter Amplifier	Rise time should be any value between (15 ns - 25 ns)
	Decay Time should be correlated with shaping times of the shaper
Discriminator	Constant Fraction Discriminator
	CFD delays, (any value between 55 ns to 65 ns)
	CFD 2 fractions: : 20% / 40%,
	CFD -Walk: typically max. 1ns for 30 ns (10% to 90%) input rise time
	Adjustable Threshold (0% to 75% of max range) Adjustment of Thresholds: via Front panel switch as well as through Remote Control
Gate generator	Should have Trigger output
Multiplicity trigger	Multiplicity trigger with adjustable lower at upper multiplicity threshold
	Multiplicity chaining Capability: multiplicity output from several modules can be connected, resulting in total multiplicity level of all connected modules. Multiplicity trigger windows of the connected modules should act independently on the total multiplicity
	Multiplicities selectable via remote control
Remote Control	Capability for remote control of 4 parameters as mentioned below:

	. Threshold of individual channels . PZ compensation of individual channels . Gain adjustment (either Individual channels or group wise) . Shaping time adjustment (either Individual channels or group
Connectors and accessories	Output connector: 34 pin, Flat Ribbon connector • Output Signal cable: 16 channel, Flat cable, 34 leads, length 1meter to connect the amplifier output to NIM Front Plate Header to Lemo Adapter. • **NIM Front Plate Flat Cable to Lemo Adapter to be quoted**