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Dated: 01/05/2018

Enquiry no:-NaMPET/EE/DSO/2018-2019

**"Sealed Tenders are invited for procurement of 500 MHz 4 Channel DSO"**

The NaMPET Laboratory requires 500MHz/4 channel having following specifications –

**Technical Specification of 500MHz for 4 Channels Digital Storage Oscilloscope**

Sno	Specifications	Descriptions
1	Bandwidth	DC to 500MHz
2	Number of Channels	<b>4(four) Channels</b>
3	Memory Depth/ Record Length	10Mpts per channels or Higher during continuous real time measurement
4	Sampling Rate	5GSa/Sec or better with minimum 1.25 Gs/S with all four channels in simultaneous operation.
5	Vertical Input Sensitivity	2mV/div to 100V/div or better
6	Time base Range	1ns/div to 500sec/div or better
7	Time Base Accuracy	±0.002 % or better
8	Automatic measurements	21Nos. or Higher measurements include: V DC, V AC <sub>RMS</sub> , V AC+DC, V <sub>Peak</sub> Max, V <sub>Peak</sub> Min, Peak to Peak, A DC, A AC, A AC+DC, Frequency, Rise time (using cursors), Fall time (using cursors), Phase (between any 2 inputs), Positive pulse width, Negative pulse width, Positive duty cycle, Negative duty cycle, dBV, dBm into 50 Ω and 600 Ω terminations respectively.
9	Math function	Add, subtract, and multiply waveforms, Integration, Spectral magnitude. Set FFT vertical scale to Linear or Logarithmic, and FFT window options must include: Automatic, Hamming, Hanning, None
10	Real Time Filters	Desirable up to 14 filters (with selectable bandwidth)
11	Zoom factor	× 2-2.5 points/10 Div or more in zoom region. Magnification on both the horizontal and vertical axes, and the ability to split, reduce, or hide the main display.
12	Connectivity	1. USB Interface with data & waveform down load in PC & flash drive both. 2. Ethernet
13	A/D resolution	8 bit or more
14	Input impedance	1 MΩ ± 1% (14 pF) and 50 Ω selectivity
15	Display Size	8-inch or More
16	Operating Voltage	240 VAC, 50Hz
17	Software	Free ,for scope waveform and data download
18	Warranty	At Least Three Years
19	Accessories	1) Standard Accessories with carrying case & User Manual,
20	Technical Demonstration	A Technical demonstration of <b>only quoted model</b> at our setup (Switch mode power converters) will be essential. It includes demonstration of specifications for tendered & quoted models at laboratory environment (IIT Kanpur). No noise should pick up from surrounding by the probe & DSO/MSO. There should not be any cross talk between the channels. The date of demonstration will be informed after opening of the tender. The firms unable to demonstrate on the said date will be disqualified in further process.
21	Authentic certificate	Dealer/Distributor must enclose authorization certificate from the manufacturer.
	<b>QTY</b>	02 or above (depends upon Price & available fund).

Sealed Tender are invited for DSO with aforesaid specifications on or before **June 18<sup>th</sup>, 2018** with marking the tender number at top of envelope, which should be in favour of **"Dr. P. Sensarma, Department of Electrical Engineering IIT Kanpur 208016"**. The Indenter has right to accept or reject the tender without assigning any reason thereof. Also the indenter reserves the right to reject or accept all or any of the offers made above.

*akbasu*

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In-charge

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