



University of Calcutta

Dept. of Applied Physics
UCSTA
92 APC Road, Kolkata 700009

Tender Notice

Enq No.: AP/ENQ/DST/SC/16-17/002
Date:10/03/2017

To
The All Interested Parties

Dear M/s.

Please submit the quotation within **17/03/2017 (4 PM)** at the Office of the Department of Applied Physics for the following item according to the specification mentioned.

Please enclose the copy of the following papers along with the quotation.

1. Trade License, 2. PAN Card, 3. VAT & Service Tax Registration wherever necessary

Digital Storage Oscilloscope
(Isolated Channel)
Technical Specification

The Digital Storage Oscilloscope should have following features:

- *4 fully isolated and floating channels and Isolated External Trigger.**
- *8 hours of continuous battery operation with two batteries**
- *Power Application software for Power analysis
- *Color LCD TFT display
- *Automatic Measurements
- *FFT measurements
- *Auto set facility
- *Waveform and Setup Memory
- *Documentation and measurement results with Software

SIGNAL ACQUISITION:

Bandwidth : 200 MHz
Sample Rate : 2 GS/s on each Channel

Isolated Channels : 4
Sensitivity : 2mV to 5V/div
DC Vertical Accuracy : $\pm 3\%$
Vertical Zoom : vertically expand or compress a live or stopped waveform
Isolated External Trigger Input : should be available
Max Input Voltage (1 Mohm) : 300V RMS CAT II at BNC Signal to BNC Shell
Float Voltage : 600V RMS CAT II or 300V RMS CAT III BNC shell to earth ground

TIME BASE SYSTEM:

Time/Division Range : 2.5nS to 50s/div
Horizontal Zoom : Horizontally expand or compress a live or stopped waveform

TRIGGERING SYSTEM:

Trigger Type : Edge, Video, Pulse Width (or Glitch)
Trigger Source : CH1, CH2, CH3, CH4, Ext, Ext/5 and Ext/10

WAVEFORM PROCESSING:

Arithmetic Operators : Add, Subtract, Multiply, FFT
Sources : CH1 – CH2, CH2 – CH1, CH3 – CH4, CH4 – CH3, CH1 + CH2,
CH3 + CH4, CH1 X CH2, CH3 x CH4

DISPLAY SYSTEM:

Color : 1/4 VGA, Active Color TFT LCD
Format : YT and XY

I/O interface

Printer Port : standard
RS-232 port : standard
Mass Storage Compact Flash memory : to accept any Type 1 Compact Flash card upto 1 GB

Power Measurement:

Power Measurement should be available which can offer instantaneous power waveform analysis, waveform analysis, harmonics analysis, switching loss, phase angles, dv/dt and di/dt cursors.

GENERAL:

The instrument should confirm to International EMC and Safety standards, and to be provided with 4 Nos. Voltage Probes, Operational Manual and Power Cord

Optional

100A AC/DC Current Probes should be supplied with the instrument.
Power analysis software

A. Terms and Condition:

Warranty: Warranty from manufacturer for thirty six months from the date of installation should be offered.

Customs Clearance and Delivery: up to Calcutta University, Rajabazar campus from Kolkata Airport must be taken care by supplier. All necessary expenses for the same will be to supplier's account.

**For
Dr. Sumana Chowdhuri
CO-PI
Project-In-Charge, CU
DST-GOI Project
Associate Professor
Dept of Applied Physics
University of Calcutta**