Indian Institute of Technology-Kanpur

(Department of Mechanical Engineering)

Name of Indenter: Professor N.S.Vyas

NSV/12-13/ADA100/Jan/1 **Enquiry Number:**

11th February 2013 Closing Date of tender:

Sealed Tenders are invited for "Portable Color Dual Channel Vibration Data Collector cum FFT Analyzer" along with related accessories to collect Vibration Data's and FFT Signal Analysis. The instrument should be capable to collect and analyze data on site with at least Four hours battery backup. The required specifications are as follows.

Voltage Input: AC/DC up to+/- 20 Volts. **Current Input:** AC/DC up to +/- 20 mA.

Signal: Capable to take measurements from ICP & Current line Drive

Accelerometer.

Line of Resolution: Should have over 1, 00,000 FFT line resolution.

Weight should be less than 1.5 Kg. Weight: Frequency Range: Frequency range – 0.5Hz to 40 KHz. Sampling Rate: Sampling rate ≤ 131 KHz per channel. Display/ Screen: **LCD** color type display, with large view area

Simultaneous 2 Channel: Should have minimum True Two simultaneous measurement channels (. Capable of Temp. & RPM Measurement (Provision of Stroboscope Temp & RPM: -

Connection)

Should work both as data collector (Overall Vibration in displacement, Data collection:

velocity and acceleration in rms. 0 to peak, peak to peak along with crest factor) and analyzer (FFT, time signal analysis, phase measurement,

visual inspection and orbit analysis)

Should have 1 and 2 plane in-situ dynamic balancing feature with **Dynamic Balancing:**

corrective & trial mass facility.

Orbit Analysis: Should have Filtered & Unfiltered Orbit Analysis features. **Bump Test:**

Should have Bump Test with Negative Averaging.

Advance Features: Should have Cross channel phase analysis, coast up & coast down

analysis (Resonance test) with Shaft Rest Position facilities.

Enveloping and Cestrum: Should have Envelope analysis, Cestrum Analysis for early detection of

faults in rolling element bearings and gearboxes.

Should have Alarm display as per latest ISO 10816-3 standards, with in-Alarm:

built LEDs for alarm status indication on field.

Should have the Memory of at least 2GB and should be extended up to **Memory Storage:**

Software Features: Evaluate and display result. Printing: Should be direct printing via USB.

Terms & Conditions:-

- 1. Supply, installation and commissioning of Data Collector and other accessories are within the scope of supplier only.
- 2. Tender shall be submitted along with Original & Color Brochure.
- 3. All the optional components/equipments/software/ up gradation of software if any should be mentioned very clearly.
- 4. Please send best techno-commercial offer in a sealed envelope in the office of the undersigned
- 5. The indenter reserves the right to withhold placement of final order.
- 6. The rates offered should be inclusive of all taxes, packaging, forwarding freight etc.
- 7. The delivery period should be specifically stated. Earlier delivery may be pref
- 8. Validity of quotation should not less than 90 days
- 9. The right to reject all or any of the quotations and to split up the requirements or relax any or all of the above conditions without assigning any reason is reserved.
- 11. Institute is exempted for payment of Excise Duty under notification No. 10/97.
- 12. Please clearly mention enquiry number on the top of envelop.
- 13. Apart from above terms Standard IITK terms are also applicable.

Name of Inventor:

Prof. N.S.Vyas Department of Mechanical Engineering Indian Institute of Technology Kanpur-208016

Send your best offer (Technical & Commercial) along with the drawing so as to reach us on or before January 10th, 2013 3.00PM to the following address:

Dr. S.S.K. Iyer

Room No.305, Samtel Centre for Display Technologies, I.I.T Kanpur-208016 U.P., India.