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Date: 27/08/2013

Enquiry no.: PHY/MODERN PHYSICS LAB/2013-14/EQP/2

Enquiry date: 27.08.2013

Closing date: 10.09.2013

Sealed quotations should reach the undersigned latest by 4.00 pm on 10th September, 2013 for the following items:

1. **Signal Processor/Lock-in Amplifier - 01 Nos.**

Technical Specification:

- **Preamplifier:** Input impedance 1 MOhm, Noise @ 1kHz 10nV/Hz^½ or better, Common Mode Rejection 100 dB.
- **Filter:** Input Impedance 5 MOhm, Max Input Voltage ± 12.5 V, Frequency Range 3Hz - 3kHz, Q Values 0.6 to 50.
- **Detectors:** Input Impedance 100 kOhm, Max Input Voltage ± 12.5 V, Reference Switch Window ± 2 mV.
- **Low-Pass Filter / Amplifier (Output):** Input Impedance 1 MOhm, Max Input Voltage ± 12.5 V, Max Output Volatge ± 10 V, Max Output Current ± 3.5 mA, Time Constant .03 to 10 seconds, 6 db/oct and 12 db/oct roll-off, DC Offset ± 10 V.
- **Reference Oscillator**: Frequency 3 to 3.2 kHz or better, Harmonic Distortion .5% or better, Max Output Voltage 4Vpp. (sine), 8.8 Vpp. (Square), Max Output Current 35 mA, Frequency Stability 200 ppm/^{o}C, at HF, 800 ppm/^{o}C at LF end of range.
- **Phase Shifter:** Input Impedance 50 kW, Frequency 3 Hz thru 3kHz, Phase Shift 360^{o}, Quadrature Phase Accuracy ± 2^{o}, Max Input Voltage ± 12.5 V.

- **Noise / Attenuator:** Input Impedance 1.1 MW, Attenuation 10^5, Noise Voltage Output Max 1 V rms.

Terms and conditions:

- Quotations should have a validity of a minimum of 60 days.
- All the equipment should be provided with a replacement warranty of 1 year against manufacturing defects.
- Maximum possible educational discount should be specified on the quotation since all are for teaching purposes.
- Quotations are required in a sealed envelope with enquiry number mentioned on the envelope.
- The delivery period should be within 60 days of placing the purchase order.