

Dear Representative,

Kindly send your best quotation for the following item with various accessories on C.I.P. Bangalore basis to the undersigned. Your quotations should clearly indicate the terms of delivery, delivery schedule, entry tax, payment terms etc. The tender should be submitted in two separate sealed envelopes: one containing the technical bid and the other containing the commercial bid, both of which should reach the undersigned, duly signed on or before 1700 hours, February 11, 2019. The technical bid must include details of technical specifications of the equipment along with commercial terms and conditions; however the price components should NOT be shown.

The commercial bid must include the price of the item indicating the break-up of the following:

- (i) The price of the goods quoted on D. A. P. (Bangalore)
- (ii) The charges for any insurance and transportation upto Bangalore customs warehouse.
- (iii) The agency commission charges if any
- (iv) The installation, training and commission charges, if any.

Please enclose a compliance certificate along with the technical bid.

Terms and conditions:

1. The vendor should have qualified technical service personnel for the equipment based in India, else the equipment should be diagnosable online by the off-site manufacturer.
2. At least 1 year warranty from the date of delivery.

Both documents should be addressed to:

The Chairman,
Solid State and Structural Chemistry Unit,
Indian Institute of Science
Bangalore 560012.

Please deliver or mail both sealed quotations to:

Vivek Tiwari,
Solid State and Structural Chemistry Unit,
Indian Institute of Science

Bangalore – 560012.

Instrument Name and description: Lock-In Amplifier with Multi-Frequency Detection Capability

Specifications of the system

- 2 or more measurement units with single-ended and differential support
- 2 or more external reference inputs
- Simultaneous measurement of 3 or more harmonics for each unit
- Total 6 or more demodulators with arbitrary frequency, slope, time constant settings for each demodulator
- Filter time constant 1 microsecond – greater than 100 seconds
- 6 to 48 dB/oct filter slope (1st to 8th order)
- Four auxiliary analog outputs with 1 MSample/s, 16 bit, ± 10 V
- Two auxiliary analog inputs with 400 kSample/s, 16 bit, ± 10 V
- Included oscilloscope, zoomFFT, spectroscope and parameter sweeper
- Included graphical user interface, API programing interfaces and data server
- Field-upgradeable options available, to enhance instrument's features
- Less than 1 μ Hz - 50 MHz operation
- A/D and D/A resolution 14-bit or better,
- 210 MSa/s sampling rate or faster
- Input impedance options - 50 Ohms and 1 MegaOhms
- Input voltage range with AC coupling ± 2 V or larger
- Dynamic reserve 120 dB or larger
- Operations in Internal, External or Auto reference modes
- Reference phase angle resolution 1 microdegree or better
- Internal oscillator - accuracy $\leq \pm 1.5$ ppm, 10 MHz ± 1 V output
- USB 2.0 high-speed
- No further accessories must be required for instrument functioning.