

**GOVERNMENT OF INDIA
DEPARTMENT OF SPACE
INDIAN INSTITUTE OF REMOTE SENSING
IIRS
DEHRADUN
PURCHASE & STORES
INVITATION TO TENDER**

Ph No: 0135 - 2524317, 4318

Fax 0135 - 2748041

Email: pns@iirs.gov.in

Date : 09/08/2014

M/s

000000

Our Ref No : GIER 2014-000189-01

Tender Due: 15:00 Hrs IST on 28/08/2014

Dear Sirs,

Please submit your sealed quotation , in the Tender Form enclosed here along with the descriptive catalogues , pamphlets /literature ,superscribed with Our Ref.No. and Due Date for the supply of the following items as per the terms & conditions mentioned in Annexure(Form No:)

S.No.	Description of Items with Specifications	Unit	Quantity
1	Auto Titration System, Specification: Refer attached sheet.	NOS.	1

DELIVERY AT: IIRS

MODE OF DESPATCH DOOR DLVRY

DUTY EXEMPTIONS

SPECIAL INSTRUCTIONS NIL

SPECIFIC TERMS



V.V. NARAYANAN KUTTY
PURS. & STORES OFFICER
For and on behalf of the President of India
The Purchaser

GENERAL TERMS & CONDITIONS:

1. Material should be delivered & installed at IIRS.
2. Payment will be made within 30 days from date of receipt of supply and acceptance of the material for orders value upto Rs. 2.0 lakhs. For order value above 2.0 lakhs, 90% payment within 30 days and 10% against Bank Guarantee for the warranty period.
3. We cannot furnish Form C/D. Please indicate the applicable percentage of Trade tax / VAT in your quotation, if applicable. Otherwise the quoted rate will be considered as inclusive of all taxes.
4. Clearly mention the Make/Brand of the item in your quotation. Please enclosed the Authorization Certificate from the principal of the quoted Make/Model along with the quotation.
5. Also clearly mention the exact delivery period and validity of your offer shall be min. 60 days

Specification:

Desired Specification of Autotitrator/Auto titration system:

1. The Instrument should be standalone type.
2. The potentiometric titrator should have the capability and dedicated modes to perform all types of potentiometric titrations like, acid-base, non-aqueous, argentometric, redox, complexometric and KF titrations.
3. The instrument should have motor driven Piston burette.
4. The instrument should have a high burette resolution of 1/10,000 of burette volume.
5. The instrument should have Live Titration Curve Display.
6. The instrument should be operational either with magnetic stirrer or rod stirrer. The instrument should be capable of controlling stirrer speed. Stirrer should have capability of rotating in both clockwise & anti-clock wise direction.
7. A suitable Titration Stand not only for stirring, but also for manually exchanging the spent titration vessel contents. With the integrated membrane pump, solvent should be aspirated or added without the vessel having to be opened.
8. The instrument should have facility for Method & Result storage without connecting to PC. Should be able to store at least about 100 Methods and about 1000 results.
9. The instrument should have pH measurement capability with 5 point pH calibration.
10. The instrument should have Automatic Burette Recognition feature wherein once connected instrument knows burette volume. Burettes should be Intelligent Burettes which can store important titrant data like Titer details.
11. The instrument should have the possibility for direct connection of Balances, ~~is optional~~
12. The instrument should have the possibility for direct connection of USB Keyboard, Printer, USB Mouse & barcode reader for easy handling.
13. The instrument should have the feature for Limit control for the results.
14. The instrument should have the possibility of using unlimited number of Burettes of Volume 1, 5, 10, 20 and 50 ml allowing maximum flexibility if required.
15. The instrument should have the facility for automation, for the analysis of multiple samples, if required in future.
16. Live data entries like sample weight; stop criteria should be possible, even when the titration is in progress.
17. **The instrument should have the following technical specifications**

mV Range & Resolution:	± 1200 mV with ±0.1 mV or better
pH Range & Resolution:	-13 to +20 pH with 0.001 pH or better
Polarization current:	± 120 µA with ± 0.01 µA or better
18. Suitable electrodes and accessories required for the applications should be provided along with the instrument.