

Government of India  
Bhabha Atomic Research Centre  
Advanced Technology Systems Section (E&I Group)

Ref: ATSS/E&IG/2018/113901

Date: 08/06/2018

Sub: Cleaning, maintenance and calibration of fixed deuterium gas detector of TC 100N-4Nos. and supply of personal deuterium gas detectors with rechargeable batteries as per annexure1.

Dear Sir/Madam,

Quotations are invited for the "Cleaning, maintenance and calibration of fixed deuterium gas detector of TC 100N-4Nos. and supply of personal deuterium gas detectors with rechargeable batteries as per annexure1."

1. Bidder shall quote for fabrication and supply of parts along with material.
2. Taxes and Excise Duties shall be quoted separately. Form AF / H whichever is applicable shall be provided, if required.
3. The quotation must reach by Speed post to The Head, Advanced Technology Systems Section by 20th June, 2018 and must be sent in a sealed envelope super scribed with the reference number & the due date given above.

The address on the envelop should read: Head, ATSS, E&I Group,  
ESC Bldg., North Site  
BARC, Trombay,  
Mumbai - 400 085.

(Attn: Mr. R K Sharma, Ph.: 022 25591811)

4. The testing shall be witnessed by our engineer. The tested components shall not be dispatched prior to approval by our engineer at bidder's premises. Necessary inspection facilities shall be provided to our engineer during fabrication at bidder's premises.
5. The bidder shall deliver the finished components after approval by our engineer within 6 months from the date of firm work order issued to the bidder. The finished components shall be delivered by the bidder at ATSS, E&I Group BARC, Trombay, Mumbai - 400 085.
6. Head, ATSS, E&I Group reserves the rights to accept / reject any or all quotations without assigning any reason.
7. Delivery charges if any must be clearly mentioned in the offer. Quotation must also indicate the validity of offer. Quotation must also indicate the GST no and PAN no of the party.
8. Drawings / Sketches must be returned along with the offer.
9. The quotation has to be signed by authorized person with company seal.
10. Payment will be made by cheque only after satisfactory completion of work on production of bill, delivery challan and advance stamped receipt. It may be noted that IT @ 2% and surcharge on tax at 15% shall be deducted from your bills.
11. Part supply is not acceptable.
12. Job should be guaranteed against material and manufacturing defects for 1year from the date of supply.

Encl.: Annexure - 1.

(R. K. Sadhu )  
Head, ATSS, E & I Group)

## Scope of work

(Annexure 1.)

Maintenance and calibration of fixed deuterium gas detector of TC 100N-4Nos. and supply of personal deuterium gas detectors with rechargeable batteries as below:

- a) Cleaning, maintenance and calibration of fixed deuterium gas detector of TC 100N-4Nos. This Job is to be carried out at ATSS lab, RCnD Building, BARC, Trombay, Mumbai-400085.
- b) Supply of Personal Deuterium Gas Detector with Rechargeable batteries, Complete with Rechargeable batteries, Battery Charger, Calibration Certificate, and Instruction Manual & Warranty Certificate-2Nos. as below:

### Specifications:

Gas detected: Deuterium gas (D<sub>2</sub>)

Detection principle: Catalytic combustion

Detection range : 0~100%LEL

Increments : 1%LEL

Preset alarm : 1st : 10%LEL, 2nd : 50%LEL, OVER : 100%LEL

Types of alarm : Gas alarms: 2 preset alarms, Over scale alarm, STEL, TWA

Trouble alarms: Sensor disconnection, Low battery, Calibration error, Clock error, System error

Alarm method : Latching

Display of alarm: Gas alarms: Flashing LEDs, Intensity change buzzer, Flashing gas value, Vibration

Trouble alarms: Flashing LEDs, continuous buzzer, display of error message

Operating temp. & humidity: -20~+50°C , 90%RH (Non-condensing)

Power source: AAA size Alkaline dry battery (Optional AAA size Ni - MH battery)

Continuous operation: Alkaline battery: Approx.35 h Ni - MH battery: Approx.30 h

Response time: 90% response within 30 sec

Ingress proof : IP 67Explosionproof

Alkaline dry battery version:ExiaIICT4Ni-MHbattery

version:ExiaIICT3ApprovalsIECEX,ATEX

Dimension& weightApprox.:60(W)x70(H)x30(D) mm with rubber protection cover,100g

Function: Manual LCD backlight (Automatically ON when alarming), Peak value, Data logging, Time, CAL alarm,

Comfortable wearable design: Well-balanced weight and shape ensure comfortable wearing. Alligator clip prevents the unit from dropping.