



**Tender No.** : DFD3981L20/09  
**Tender Date** : 28.02.2020  
Bid Closing On : 01.04.2020 at 13:00 hrs.(IST)  
Bid Opening On : 01.04.2020 at 13:00 hrs.(IST)  
Bid Security Amount : Not Applicable  
Performance : Not Applicable  
Guarantee : Not Applicable  
Integrity Pact : Not Applicable

This limited tender has been issued to the following bidders :

Sl no	Vendor Name	City/Country	Response
1	MSA (INDIA) LTD	KOLKATA	
2	JOST'S ENGINEERING COMPANY LTD	MUMBAI	
3	UNITEK PROJECT & SYSTEMS	GUWAHATI	
4	JOSEPH LESLIE DYNAMIKS MFG. PVT. LTD	KOLKATA	
5	JOST'S ENGG. CO.LTD.	KOLKATA	
6	MSA (INDIA) LTD.	KOLKATA	
7	DRAGER SAFETY (INDIA) PVT. LTD.	MUMBAI	
8	INDUSTRIAL SCIENTIFIC INDIA PVT. LTD	MUMBAI	
9	SAFETY EQUIPMENT CORPORATION	MUMBAI	
10	CROWCON DETECTION INSTRUMENTS LTD.	MUMBAI	
11	SMART SYSTEMS	DIBRUGARH	
12	HONEYWELL INTERNATIONAL PVT LTD	KOLKATA	
13	INDUSTRIAL SCIENTIFIC CORPORATION	PITTSBURGH	
14	INDUSTRIAL SCIENTIFIC FRANCE SAS	FRANCE	

A L BORA  
SR. MANAGER MATERIALS(FD)  
FOR CGM-MATERIALS(HOD)  
FOR RESIDENT CHIEF EXECUTIVE



**Tender No.** : DFD3981L20/09  
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**Bid Security Amount** : Not Applicable  
**Performance Guarantee** : Not Applicable  
**Integrity Pact** : Not Applicable

Sir/Madame,

We invite you to submit your firm quotation under International Competitive Bidding (ICB) for the materials as listed & specified in the enclosed Annexure-I. Your quotation must be written in English, complete in all respects without keeping any ambiguity and conforming to the "General Terms & Conditions for global tenders" (Document No. MM/GLOBAL/01/2005). For document no. MM/GLOBAL/01/2005, please visit OIL's website [www.oil-india.com](http://www.oil-india.com). It is also essential that your quotation must reach the office of GM-Materials, Duliajan (Assam) before the Bid Closing Date and Time as indicated above. Your special attention is drawn to the followings:

1. (a) Your offer must be compatible with the specification given in our tender. Deviation, if any, should be highlighted for proper evaluation of the offer.  
(b) Offer should be mailed as far as possible by Registered Post using double envelope as explained in "General Terms & Conditions"  
(c) Your quotation must include:
    - i) Tender No.
    - ii) Full Description of the materials offered.
    - iii) Best possible delivery for each item.
    - iv) Unit and Total ex-works price
    - v) Total FOB / FCA cost (for foreign bidder) and FOR Despatching station cost(for indian bidder)
    - vi) Duties and taxes if applicable
    - vii) Gr. Wt. & Net Wt. of the consignment
    - viii) Estimated ocean freight / air freight charges to Kolkata (for foreign Bidder) and firm road freight for door delivery on FOR Destination basis (for indian bidder)
    - ix) Insurance charges
    - x) Validity of minimum 90 days from Bid closing Date unless otherwise specified in the tender
  - (d) Though the cheapest mode of despatch is normally by sea, certain items of low weight are likely to be cheaper by air freight / post parcel. In such cases foreign bidders are to please quote CIF Kolkata price.
2. We have also enclosed a checklist as annexure-IV with "General Terms & Conditions for global tenders" to ensure that your quotation covers all the necessary details. Kindly, complete the checklist and return with your quotation.
  3. In the event of your inability to quote for the materials, please send your 'regret advice' for our record.

The sealed quotation should be sent to the following address as explained in "General Terms & Conditions for global tenders": CGM-Materials, Materials Department, Oil India Limited, P.O. Duliajan-786602, ASSAM(INDIA).

Thanking you and awaiting your early response.

Yours Faithfully,  
OIL INDIA LIMITED

A L BORA  
SR. MANAGER MATERIALS(FD)  
FOR CGM-MATERIALS(HOD)  
FOR RESIDENT CHIEF EXECUTIVE

**OIL INDIA LIMITED**

(A Govt. of India Enterprise)

P.O. Duliajan-786602, Assam.

Fax No. 91-374-2800533, E-mail:material@oilindia.in

**ANNEXURE-I****Tender No. : DFD3981L20/09****Tender Date : 28.02.2020**

Item No./ Mat. Code	Material Description	Quantity	UOM
<b>10</b> 0C000176	<p>Portable Combustible (LEL) Gas, Hydrogen Sulphide(H<sub>2</sub>S) Gas, Sulphur Dioxide(SO<sub>2</sub>) Gas, Carbon Monoxide (CO) Gas, Oxygen (O<sub>2</sub>) Gas Detector (Multigas) with digital indications and alarms and in-built suction pump for sampling.</p> <p>1. Make: Bidder to specify 2. Model: Bidder to specify 3. Type: Instrument must be Portable, Hand-held. 4. Size &amp; Weight: Weight should not be more than 450 gm including battery and inbuilt suction pump and suitable for one hand operation 5. Case Material: Should be rugged, impact resistant, non-corrosive composite material that will prevent spark generation. 6. Instrument Pump: Unit must have integrated pump with pump filters. The pump must be capable to take sample up to 25 feet, with line size 0.25 inch (6.35 mm) (approx.) in dia 7. Type of Sensors:     (a) Electrochemical sensors &amp; Plug-in type for H<sub>2</sub>S, SO<sub>2</sub>, CO, O<sub>2</sub> gases.     (b) Catalytic Sensor &amp; Plug-in type for Combustible gases. 8. Display of Gases: On a single screen of the gas detector, continuous monitoring for Hydrogen Sulphide (H<sub>2</sub>S), Sulphur Dioxide (SO<sub>2</sub>) , Carbon Monoxide (CO), Oxygen (O<sub>2</sub>) and Combustible Gases (LEL). 9. Measuring Specifications:     a) Hydrogen Sulphide -H<sub>2</sub>S: Range 0 - 100 ppm (Min), Resolution 1 ppm     b) Sulphur Dioxide-SO<sub>2</sub>: Range 0-100 ppm (Min), Resolution 1 ppm     c) Combustible Gases -LEL: 0 - 100% LEL, Resolution 1% LEL;         0 - 5% V/V, Resolution 0.1%     d) Carbon Monoxide- CO (H<sub>2</sub> Resistance): 0 # 500 ppm (Min), Resolution 1 ppm     e) Oxygen- O<sub>2</sub>: 0 # 25 % by Vol. (Min), Resolution 0.1%     f) Typical Response Time &lt;= 30 Seconds     e) Accuracy: +/- 2% measured value     f) Measuring range shall be adjustable.</p> <p>10. User Interfaces:     a) Display Type: Liquid Crystal (LCD) type display with simultaneous readouts for each gas monitored in ppm, %LEL and %V/V values as applicable.     b) The system should equipped with backlight facility     c) Keypad / Switches: One-button operation to activate the detector     d) Instrument Alarm Type: Visual alarms, audible alarms, vibrator alarms     Alarms: Two levels of alarms, TWA, STEL for each gas sensed.     e) Alarm Set Point: Adjustable over the measuring range     (f) Other Alarm/ Status: Low battery status, instrument status and sensor status.     (g) Over Limit Exposure Protection: For exposures above the instrument's measuring range for any sensor, the instrument will provide an over limit latching alarm that must be acknowledged.</p> <p>11. Instrument Power:     a) Lithium - ion / Lithium - Polymer Rechargeable Battery Pack     b) Run Time &gt;= 12 Hours in normal operation     c) Charging Time &lt;= 8 Hours.</p>	4	NO

**ANNEXURE-I****Tender No. : DFD3981L20/09****Tender Date : 28.02.2020**

Item No./ Mat. Code	Material Description	Quantity	UOM
	12. Chargeable Option: 110 - 240 VAC, 50 Hz 13. Data Logging: (a) Instrument should have all events & occurrences recoding Facility. (b) Should have inbuilt data storage facility. (c) Data must be compatible for download to PC. 14. Hazardous area application: Intrinsically Safe (Ex ia) suitable for use in Class - I, Division - I, Groups - A, B, C, D/ Zone 1, Gas Group IIA, IIB, IIC, T3 15. Operating Temperature: - 20 Deg. C to + 50 Deg. C 16. Ingress Protection: IP 66/67 17. Humidity: 20 to 95% R.H. (non-condensing) continuous. 18. Calibration: (a) The Gas Detector shall have inbuilt calibration facility through keypad button with auto-zero capability. (b) The equipment shall have zero and span adjustment facility for calibration with standard gases. (c) No additional software shall require for calibration. 19. Attachment & Accessories: (a) Carrying case with shoulder strap with each instrument. (b) Rechargeable battery along with battery charger with each instrument. (c) One spare filter shall be supplied with each instrument. (d) Calibration cup/ adapter (If required) and calibration tubing (5 feet long) to enable calibration locally. (e) One number of necessary software with accessories for data transfer to PC through connecting port compatible for Windows 8/10 shall be provided with the lot.		
<b>20</b> 0C000176	Same as item 10	1	NO

**Special Notes :** 1.0 All the tendered items shall be procured from a single source. Bidder must quote for all items and evaluation will out accordingly on total value basis.

2.0 The bidder should be either Original Equipment manufacturer (OEM) of the items or authorized distributor / dealer / supply house of the Original Equipment manufacturer (OEM).

2.1 In case the bidder is an authorized distributor / dealer / supply house of the Original Equipment manufacturer (OEM), then bidder must furnish Authorization certificate cum warranty backup letter (sealed and signed) from the manufacturer in original on manufacturer's letter head along with the offer. Format of Authorization certificate has to be as per Annexure-IA. This certificate must be valid at the time of bidding and should remain valid during the entire execution period of the order. The concerned manufacturer should also guarantee of supplying the items to the bidder in the event of an order on the bidder.

3.0 FURNISHING FRAUDULENT INFORMATION/ DOCUMENT: If it is found that a Bidder has furnished fraudulent document/information, the Bid Security/Performance Security shall be forfeited and the party will be debarred for a period of 3(three) years from date of detection of such fraudulent act, besides the legal action. In case of major and serious fraud, period of debarment may be enhanced. In this regard, bidders are requested to submit an Undertaking as per Appendix-IB along with their offer failing which their offer shall be liable for rejection.

**ANNEXURE-I**

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4.0 The items supplied shall be brand new, unused & of recent manufacture. Supplier shall warrant that the product supplied will be free from all defects & fault in material, workmanship & manufacture. This clause shall be valid for 18 months from date of despatch or 12 months from the date of receipt at site, whichever is earlier. Defective goods / materials or parts notified by OIL to the Seller shall be replaced immediately by the Seller on FOR destination basis including payment of all taxes and duties at Seller's expense. Suppliers must confirm the same in their quotations.

5.0 The items covered in this Tender shall be used by Oil India Limited in the PEL/ML areas and hence Nil rate of Customs Duty towards import (for foreign bidders) and concessional GST @5% (for foreign & indigenous bidder) will be applicable as per Govt. Policy in vogue.

Overseas Bidders are not required to include Customs Duty and IGST components in their quoted cost, since all applicable taxes & Duties in India shall be to the account of Oil India Limited.

In the event of an order on indigenous bidder, OIL will issue Project Authority Certificate (PAC) under Deemed Export Benefit Scheme, where import content is declared by the bidder for availing Custom Duty benefit on the import content.

Supplier shall arrange to provide all necessary documents (invoice etc.) to OIL for applying Essentiality Certificate on receipt of request from OIL, if any. Further, Suppliers shall affect dispatch only on receipt of relevant certificates/shipment clearance from OIL, failing which all related liabilities shall be to Supplier's account.

6.0 Payment terms: Refer to "General Terms & Conditions" for e- Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders)

7.0 Liquidated Damage: Refer to "General Terms & Conditions" for e- Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders). The applicable GST on the Liquidated Damage shall have to be borne by the seller. Accordingly, the Liquidated Damage shall be recovered from the seller along with applicable GST.

8.0 Please mention clearly in your quotation the Net. Weight, Gross Weight & Volume, Indian Agent's Name and its Commission, Payment Terms, Ocean Freight/Air Freight Charges, Port of Loading, Delivery period, Country of origin with manufacturer's name, etc.

9.0 Any deviation(s) from the tender specification should be clearly highlighted specifying justification in support of deviation.

10.0 In case of placement of order, OIL reserves the right to convert the order from FOB/FCA Port of export to C&F Kolkata term considering the ocean/air freight quoted by the party in their offer.

11.0 Quantity of Individual item may be increased or decrease at the time of final placement of order. The minimum FOB/FCA charges in case of partial order for reduced quantity/enhanced quantity shall have to be indicated by the bidder. In case, this is not indicated specifically, the charges quoted would be pro-rata calculated and the same will be binding on the bidder.

12.0 Validity of the bid shall be minimum 90 days from the date of actual Bid Closing Date. Bids with lesser validity shall be straightway rejected.

13.0 The prices/rates offered against the tender must remain firm through delivery and not subject to variation on any account.

**ANNEXURE-I**

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14.0 If there is any discrepancy between the unit price and the total price, the unit price will prevail and the total price shall be corrected. Similarly, if there is any discrepancy between words and figure, the amounts in words shall prevail and will be adopted for evaluation.

15.0 Bidders are required to mention the weight of each item individually. QUOTATION must be submitted in TRIPLICATE with original company catalogues as well as necessary certificates.

16.0 Bidders are to quote the Material Value, FOB/FCA Charges upto Port of shipment, Total FOB/FCA value, Ocean Freight/Air Freight Charges upto Kolkata, Indian Agent's Name and its Commission, if any, Payment Terms, Port of Loading, Delivery period, Net. Weight, Gross Weight & Volume, Country of origin with manufacturer's name, etc.

17.0 Bidders are advised to submit HSN code of the material while submitted their offer.

18.0 Bidders to take note of clause no.10.1.3 which has been added in Section-C, special terms & conditions for Indian bidders of General Terms and Conditions for Global Tender (MM/GLOBAL/01/2005-July2012) regarding transportation of materials.

19.0 Bidders to note that Govt. of India under Micro, Small and Medium Enterprises Development (MSMED) Act 2006, has proclaimed the Public Procurement Policy, 2012 with effect from 1st April, 2012 in respect of procurement of goods and services, produced and provided by micro and small enterprises, by its Ministries, Departments and Public Sector Undertakings for promotion and development of Micro and Small Enterprises. A new Clause on applicability of Public Procurement Policy for procurement of goods from Micro and Small Enterprises (MSE) in the tender is furnished vide Amendment to General Terms and Conditions for Global Tender (MM/GLOBAL/ 01/2005). Bidders are requested to take note of the same and to submit their offers accordingly wherever applicable.

20.0 All foreign bidder(s) should note that a new clause on shipment of the goods by sea from port of export to the Indian port (i.e. Kolkata port unless otherwise specified) has been included in the tender through an addendum to "General Terms and Conditions for Global Tender" (MM/GLOBAL/01/2005). The addendum is also available in OIL's Website ([www.oil-india.com](http://www.oil-india.com)). Bidder(s) is/are requested to take note of the same and to submit their offer(s) accordingly.

21.0 The General Terms & Conditions for Global Tenders (MM/GLOBAL/01/2005)" has been amended and the Amendment dated 06.08.2018 has been issued in this regard which is uploaded in OIL Website. Bidders to note the changes made to "The General Terms & Conditions for Global Tenders (MM/GLOBAL/01/2005)" and to submit their offers complying with the same.

22.0 In view of implementation of GST w.e.f. 01.07.2017, The General Terms & Conditions for Global Tenders (MM/GLOBAL/01/2005)" has been amended and the Addendum dated 21.08.2017 has been issued in this regard which is uploaded in OIL Website. Bidders to note the changes made to "The General Terms & Conditions for Global Tenders (MM/GLOBAL/01/2005)" and to submit their offers complying with the same.

23.0 Bidder should categorically confirm in the technical bid a delivery schedule within Seven(07)months, FOB Port of dispatch, after establishment of letter of credit (in case of foreign bidder) or for dispatch of the equipment within Seven (07) months after receipt of formal order (in case of indigenous bidder).

24.0 Item wise firm prices are to be submitted as per the following price bid format:

FOR FOREIGN BIDDER:

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- (A) Basic Material Value (to indicate HSN code):
- (B) Packing & FCA/FOB charges, if any :
- (C) FCA/FOB Value, A+B:
- (D) Air/Sea freight charges upto Kolkata:
- (E) Transit Insurance, if any:
- (F) CIF Kolkata Value, C+D+E :
- (G) Gross Weight:
- (H) Gross Volume :

**FOR INDIAN BIDDER:**

- (A) Basic Material Value (to indicate HSN code):
- (B) Packing & Forwarding charges, if any :
- (C) Ex-Works Value, A+B:
- (D) GST @5% on C (against essentiality certificate):
- (E) FOR Despatching Station Value, C+D:
- (F) Freight charges (including taxes) upto Duliajan:
- (G) Insurance charges (including taxes) upto Duliajan:
- (H) FOR Duliajan value, E+F+G:
- (I) Gross Weight:
- (J) Gross Volume :

**25.0 Special terms and conditions:**

Bidder to comply with/ confirm in writing against each of the following Special Terms & Conditions along with the bid as per requirement of the respective term and condition . Moreover, bidder also must provide the necessary documents along with the bid or along with the materials as mentioned in these Special Terms & Conditions. Accordingly provide the filledup checklist enclosed as Annexure-IC.

a) Hazardous area application: Item shall be of a type and specification conforming to the relevant standards as specified in the Regulation 107(2) of Oil Mines Regulation-2017 and complying the provisions therein. Bidder to confirm.

b) In reference to Point No. (a) above, Bidder shall supply documents specifying the type, details of specification, reference of the particular standard, test criteria as per the standards and status of testing, place of testing, copies of test reports from Indian Government Laboratory or NABL accredited laboratory or IECEx accredited laboratory or ATEX notified body which is not a part of manufacture's facilities along with the materials. Bidder to confirm the same.

However, Bidder must supply copy of such certificate along with the bid.

(Bidder may refer OMR-2017, Notification dated 18th October 2017, published in the Gazette of India, under Ministry of Labour and Employment, Directorate General of Mines Safety, published on 2nd November 2017 or any subsequent notification.)

c) The offer should be submitted in a tabular form specifying the specification against NIT specifications for each point. Offer in any other form will not be acceptable.

d) Product catalogue / Literature of the offered model to be provided along with the bid, failing which offer may be rejected.

e) Bidder must indicate the Year of launch of the offered models. Obsolete products/models will not be considered for evaluation. A declaration in this regard to be provided along with the bid.

f) The bidder should state the address of their service centre in India for the offered items along

**ANNEXURE-I****Tender No. : DFD3981L20/09****Tender Date : 28.02.2020**

with the bid. Bids from bidders having their service centre for the offered items in India will only be considered for evaluation. The bidder must submit proof in this regard along with the bid.

g) Guarantee / Warranty Certificate (for each instrument) valid at least for a period of 18 months from the date of dispatch or 12 months from the date of receipt at destination, whichever is earlier should be provided along with the materials. Bidder has to confirm the same in writing during submission of bid.

h) Calibration Certificate, Instruction Manual complete in all respect containing the calibration procedure for each instrument should be provided along with the materials. Bidder has to confirm the same in writing during submission of bid.

i) Materials will not be accepted if any manufacturing defects / transit damages observed after receipt of the materials. Bidder to replace/rectify the same within a short period of time for acceptance. Bidder to confirm the acceptance of the same.

26.0 Bidder(s) must submit duly filled technical checklist Annexure-IC along with their offer.

**Annexure-IA**

Format of Authorization & Backup Warranty by Manufacturers to Sole Selling Agent/Dealer/Distributor/Supply House  
(To be typed on the letter head of the Manufacturers)

Ref. No. \_\_\_\_\_ Date \_\_\_\_\_

Sub: Authorization & Backup Warranty

Ref: Your tender No. \_\_\_\_\_ Dated \_\_\_\_\_

To,  
The HOD-Materials  
Materials Deptt,  
OIL, Duliajan

Sir,

We, M/s. \_\_\_\_\_ (Name & address of the Manufacturer) hereby authorize M/s. \_\_\_\_\_ (Name & address of the Bidder) to submit their Bid against Tender No. \_\_\_\_\_ floated by OIL INDIA LIMITED (OIL) for supply tendered goods, which will be manufactured by us. As we do not participate directly against such tendering process, we authorize M/s. \_\_\_\_\_ (name of the Bidder) to participate as our only Sole Selling Agent/Dealer/Distributor/Supply House (strike out whichever is not applicable) against the tender.

We hereby guarantee the supply through M/s. \_\_\_\_\_ (name of the Bidder) in the event of placement of purchase order by OIL and shall provide all back-up supports as may be necessary including for the quality & workmanship of supplied materials.

This authorization and back-up warranty/guaranty shall remain valid throughout the execution by M/s. \_\_\_\_\_ (Name of the Bidder) including the defect liability period, in the event of an order by OIL on them.

We also certify/confirm that prices quoted by M/s. \_\_\_\_\_ (name of the Bidder) against the tender are reasonable.



**ANNEXURE-I**

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**Tender Date : 28.02.2020**

Yours faithfully,  
For ( Name of the manufacture)  
Name & Signature of Authorized signatory:  
Designation :  
Phone No.  
Place :  
Date :  
Seal of the Manufactuer:

**Annexure-IB**

Format of undertaking by Bidders towards submission of authentic information/documents  
(To be typed on the letter head of the bidder)

Ref. No \_\_\_\_\_ Date \_\_\_\_\_

Sub: Undertaking of authenticity of information/documents submitted  
Ref: Your tender No. \_\_\_\_\_ Dated \_\_\_\_\_

To,  
The HOD-Materials  
Materials Deptt,  
OIL, Duliajan

Sir,

With reference to our quotation against your above-referred tender, we hereby undertake that no fraudulent information/documents have been submitted by us.

We take full responsibility for the submission of authentic information/documents against the above cited bid.

We also agree that, during any stage of the tender/contract agreement, in case any of the information/documents submitted by us are found to be false/forged/fraudulent, OIL has right to reject our bid at any stage including forfeiture of our EMD and/or PBG and/or cancel the award of contract and/or carry out any other penal action on us, as deemed fit.

Yours faithfully,  
For (type name of the firm here)

Signature of Authorised Signatory  
Name :  
Designation :  
Phone No.  
Place :  
Date :  
(Affix Seal of the Organization here, if applicable)

## Checklist against Specification &amp; Special Terms &amp; conditions:

Special Terms & conditions	Complied/ Confirmed (Yes/No)	Document no./ Doc. Ref. no/ Annexure no. of the doc. etc. vide which it is compiled /confirmed (for easy identification of the relevant document)
Item No. 10 & 20		
Portable Combustible (LEL) Gas, Hydrogen Sulphide(H <sub>2</sub> S) Gas, Sulphur Dioxide(SO <sub>2</sub> ) Gas, Carbon Monoxide (CO) Gas, Oxygen (O <sub>2</sub> ) Gas Detector (Multigas) with digital indications and alarms and in-built suction pump for sampling.		
1. Make: Bidder to specify		
2. Model: Bidder to specify		
3. Type: Instrument must be Portable, Hand-held.		
4. Size & Weight: Weight should not be more than 450 gm including battery and inbuilt suction pump and suitable for one hand operation		
5. Case Material: Should be rugged, impact resistant, non-corrosive composite material that will prevent spark generation.		
6. Instrument Pump: Unit must have integrated pump with pump filters. The pump must be capable to take sample up to 25 feet, with line size 0.25 inch (6.35 mm) (approx.) in dia		
7. Type of Sensors:		
(a) Electrochemical sensors & Plug-in type for H <sub>2</sub> S, SO <sub>2</sub> , CO, O <sub>2</sub> gases		
(b) Catalytic Sensor & Plug-in type for Combustible gases.		
8. Display of Gases: On a single screen of the gas detector, continuous monitoring for Hydrogen Sulphide (H <sub>2</sub> S), Sulphur Dioxide (SO <sub>2</sub> ) , Carbon Monoxide (CO), Oxygen (O <sub>2</sub> ) and Combustible Gases (LEL).		
9. Measuring Specifications:		
a) Hydrogen Sulphide -H <sub>2</sub> S: Range 0 - 100 ppm (Min), Resolution 1 ppm		
b) Sulphur Dioxide-SO <sub>2</sub> : Range 0-100 ppm (Min), Resolution 1 ppm		
c) Combustible Gases -LEL: 0 - 100% LEL, Resolution 1% LEL; 0 - 5% V/V, Resolution 0.1%		
d) Carbon Monoxide- CO (H <sub>2</sub> Resistance): 0 – 500 ppm (Min), Resolution 1 ppm		
e) Oxygen- O <sub>2</sub> : 0 – 25 % by Vol. (Min), Resolution 0.1%		
f) Typical Response Time <= 30 Seconds		
e) Accuracy: +/- 2% measured value		
f) Measuring range shall be adjustable.		
10. User Interfaces:		
a) Display Type: Liquid Crystal (LCD) type display with simultaneous readouts for each gas monitored in ppm, %LEL and %V/V values as applicable.		
b) The system should equipped with backlight facility		
c) Keypad / Switches: One-button operation to activate the detector		
d) Instrument Alarm Type: Visual alarms, audible alarms, vibrator alarms Alarms: Two levels of alarms, TWA, STEL for each gas sensed.		

e) Alarm Set Point: Adjustable over the measuring range		
(f) Other Alarm/ Status: Low battery status, instrument status and sensor status.		
(g) Over Limit Exposure Protection: For exposures above the instrument's measuring range for any sensor, the instrument will provide an over limit latching alarm that must be acknowledged.		
11. Instrument Power:		
a) Lithium - ion / Lithium - Polymer Rechargeable Battery Pack		
b) Run Time >= 12 Hours in normal operation		
c) Charging Time <= 8 Hours.		
12. Chargeable Option: 110 - 240 VAC, 50 Hz		
13. Data Logging:		
(a) Instrument should have all events & occurrences recoding Facility.		
(b) Should have inbuilt data storage facility.		
(c) Data must be compatible for download to PC.		
14. Hazardous area application: Intrinsically Safe (Ex ia) suitable for use in Class - I, Division - I, Groups - A, B, C, D/ Zone 1, Gas Group IIA, IIB, IIC, T3		
15. Operating Temperature: - 20 Deg. C to + 50 Deg. C		
16. Ingress Protection: IP 66/67		
17. Humidity: 20 to 95% R.H. (non-condensing) continuous.		
18. Calibration:		
(a) The Gas Detector shall have inbuilt calibration facility through keypad button with auto-zero capability.		
(b) The equipment shall have zero and span adjustment facility for calibration with standard gases.		
(c) No additional software shall require for calibration.		
19. Attachment & Accessories:		
(a) Carrying case with shoulder strap with each instrument.		
(b) Rechargeable battery along with battery		
(c) One spare filter shall be supplied with each instrument.		
(d) Calibration cup/ adapter (If required) and calibration tubing (5 feet long) to enable calibration locally.		
(e) One number of necessary software with accessories for data transfer to PC through connecting port compatible for Windows 8/10 shall be provided with the lot.		

Sl no.	Special Terms & conditions	Complied/ Confirmed (Yes/No)	document no./ Doc. Ref. no/ Annexure no. of the doc. etc. vide which it is compiled /confirmed (for easy identification of the relevant document)
a	Hazardous area application: Item shall be of a type and specification conforming to the relevant standards as specified in the Regulation 107(2) of Oil Mines Regulation-2017 and complying the provisions therein. Bidder has to confirm the same in writing during submission of bid.		
b	In relation to point no. (a)above, Bidder should supply documents specifying the type, details of specification, reference of the particular standard, test criteria as per the standards and status of testing, place of testing, copies of test reports from Indian Government Laboratory or NABL accredited laboratory or IECEx accredited laboratory or ATEX notified body which is not a part of manufacture's facilities along with the materials. Bidder to confirm the same in writing during submission of bid.		
	However, Bidder must supply copy of such certificate along with the bid.		
c	The offer should be submitted in a tabular form specifying the specification against NIT specifications for each point and indicating deviation if any. Offer in any other form will not be acceptable.		
d	Product catalogue / Literature of the offered model must be provided along with the offer.		
e	Bidder must indicate the Year of launch of the offered models. Obsolete products/models will not be considered for evaluation. A declaration in this regard to be provided along with the bid.		
f	The bidder should state the address of their service centre in India for the offered items along with the bid. Bids from bidders having their service centre for the offered items in India will only be considered for evaluation. The bidder must submit proof in this regard along with the bid.		
g	Guarantee / Warranty Certificate (for each instrument) valid at least for a period of 18 months from the date of dispatch or 12 months from the date of receipt at destination, whichever is earlier should be provided along with the materials. Bidder has to confirm the same in writing during submission of bid.		
h	Calibration Certificate, Instruction Manual complete in all respect containing the calibration procedure for each instrument should be provided along with the materials. Bidder has to confirm the same in writing during submission of bid.		
i	Materials will not be accepted if any manufacturing defects / transit damages observed after receipt of the materials. Bidder to replace/rectify the same within a short period of time for acceptance.		