



OIL INDIA LIMITED
(A Government of India Enterprises)
PO : Duliajan – 786602
Assam (India)

TELEPHONE NO: (91-374) 2808719

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FORWARDING LETTER

Tender No. : SDI2034P20 DT: 25.07.2019

Tender Fee : NIL

Bid Security : Applicable

Bidding Type : SINGLE STAGE COMPOSITE BID SYSTEM

Bid Closing on : 28.11.2019 (11.00 HRS IST)

Bid Opening on : 28.11.2019 (14.00 HRS IST)

Performance Security : Applicable

Integrity Pact : Not Applicable

The complete bid documents and details for purchasing bid documents, participation in e-tenders are available on OIL's e-procurement portal <https://etender.srm.oilindia.in/irj/portal> as well as OIL's website <https://www.oil-india.com/>

NOTE: All addenda, Corrigenda, time extension etc. to the tenders will be hosted on above website and e-portal only. Bidders should regularly visit above website and e-portal to keep themselves updated.

The items covered by this enquiry shall be used by Oil India Limited in the PEL/ML areas which are issued/renewed after 01/04/99 and hence concessional rate of GST @5% against Essentiality Certificate for invoice value 1 Lakh and above will be applicable as per Notification No. 3/2017- Integrated/ Central Tax (Rate) dated 28th June, 2017.

In the event of order, OIL will issue Essentiality Certificate (EC), where concessional rate of GST @5% will be applicable. Supplier shall affect dispatch only on receipt of this certificate from OIL, failing which all related liabilities shall be to Supplier's account.

OIL invites Bids for **SUPPLY OF WIRELESS TRANSMITTERS** through its e-Procurement site under **SINGLE STAGE COMPOSITE BID SYSTEM**. The bidding documents and other terms and conditions are available at Booklet No. MM/LOCAL/E-01/2005 for E-Procurement Indigenous Tenders. The prescribed Bid Forms for submission of bids are available in the Technical RFx -> External Area -> Tender Documents

The general details of tender can be viewed by opening the RFx [Tender] under RFx and Auctions. The details of items tendered can be found in the Item Data and details uploaded under Technical RFx.

This Tender has been floated for participation of Indigenous bidders only. Hence, only Indigenous bidders are eligible to participate against this tender.

Consortiums/Joint venture entities are not eligible to participate against this tender.

The tender will be governed by:

a) For technical support on various matters viz. Online registration of vendors, Resetting of Passwords, submission of online bids etc, vendors should contact OIL's ERP MM Deptt at following: Tel Nos = **0374-2807178** , 0374-2807171 , 0374-2807192 ,. Email id = erp_mm@oilindia.in; esupport@oilindia.in.

b) OIL's office timings are as below:

	Time (in IST)
Monday – Friday	07.00 AM to 11.00 AM; 12.30 PM to 03.30 PM
Saturday	07.00 AM to 11.00 AM
Sunday and Holidays	Closed

Vendors should contact OIL officials at above timings only.

c) OIL Bank Details :

	Bank Details of Beneficiary	
a	Bank Name	STAE BANK OF INDIA
b	Branch Name	Duliajan
c	Branch Address	Duliajan, Dist-Dibrugarh
d	Banker Account No.	10494832599
e	Type of Account	Current Account
f	IFSC Code	SBIN0002053
g	MICR Code	786002302
h	SWIFT Code	SBININBB479
i	Contact No.	9435554859
j	Contact Person Name	Mr. K.L.K.Banik, AGM
k	Fax No.	0374-2802729
l	Email Id	sbi.02053@sbi.co.in

d) “General Terms & Conditions” for e-Procurement as per Booklet No. MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders.

e) Technical specifications and Quantity as per **Annexure – 1A**.

f) The prescribed Bid Forms for submission of bids are available in the Technical RFx-> External Area - > Tender Documents.

- g) Amendments to the NIT after its issue will be published on OIL's website only. Revision, clarification, addendum, corrigendum, time extension etc. to the tender will be hosted on OIL website only. No separate notification shall be issued in the press. Prospective bidders are requested to visit website regularly to keep themselves updated.
- h) Any sum of money due and payable to the contractor (including Security Deposit refundable to them) under this or any other contract may be appropriated by Oil India Limited and set-off against any claim of Oil India Limited (or such other person or persons contracting through Oil India Limited) for payment of sum of money arising out of this contract or under any other contract made by the contractor with Oil India Limited (or such other person or persons contracting through Oil India Limited).
- i) Bidders are advised to fill up the Technical bid check list (**Annexure EEE**) and Response sheet (**Annexure FFF**) given in MS excel format in Technical RFx -> External Area -> Tender Documents. The above filled up document to be uploaded in the **Technical Attachment**. For details please refer "Vendor User Manual" / "NEW INSTRUCTIONS"

Special Notes:

1.0

- a) Bidders who do not have E-tender Login ID and Password should complete their online registration **at least seven (7) days prior to the scheduled bid closing date** and time of the tender. For online registration, Bidder may visit the OIL's E-tender site <https://etender.srm.oilindia.in/irj/portal>
- b) Necessary Login ID & Password will be issued by OIL only after submitting the complete online registration by the Bidder. In the event of late registration/incomplete registration by Bidder, OIL INDIA LIMITED shall not be responsible for late allotment of User ID & Password and request for bid closing date extension on that plea shall not be entertained by Company.
- c) **MSE Units** (Manufacturers/Service Providers only and not their dealers/distributors) who are already registered with District Industry Centers or Khadi & Village Industries Commission or Khadi & Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts & Handloom or any other body specified by Ministry of MSME are **exempted from payment of Bid Security (EMD)** irrespective of their monetary limit, product category and capacity mentioned in their registration, **subject to submission of valid MSE registration certificate issued by appropriate authority.**
- d) For availing benefits under Public Procurement Policy (**Purchase preference**), the interested MSE Bidders must ensure that they are the **manufacturers of the tendered item(s) and registered with the appropriate authority for the said item(s).** Bids without EMD shall be rejected, if the technical offer does not include a valid copy of relevant MSE Certificate issued by appropriate authority specifying the item as per tender. Therefore, it is in the interest of such MSE Vendors to furnish a copy of complete certificate to the concerned tender handling officer of **OIL at least seven (7) days prior to the scheduled Bid Closing Date of the tender**, seeking clarification/confirmation as to whether their MSE certificate is eligible for EMD exemption or not. **Late communication in this regard and request for bid closing date extension on that plea shall not be entertained by Company.**

NOTE:

In case of MSE/PSUs/ Govt. Bodies / eligible institutions etc., they must apply to concerned tender handling officer, Materials Department, Oil India Limited, P.O. Duliajan, Assam-786602 for waiver of EMD upto one week prior to the Bid closing date (or as amended in e-portal).

2.0 The tender is invited under SINGLE STAGE- COMPOSITE BID SYSTEM. The bidders are required to submit both the “TECHNO-COMMERCIAL UNPRICED BID” and “PRICED BID” through electronic format in the OIL’s e-Tender portal within the Bid Closing Date and Time stipulated in the e-Tender.

2.1 Please ensure that Technical Bid / all technical related documents related to the tender are uploaded in the Technical RFx Response-> Technical Attachment only. **For details please refer “NEW INSTRUCTIONS” . Please refer Annex-BB for price schedule.**

3.0 Please note that all tender forms and supporting documents are to be submitted through OIL’s e-Procurement site only except following documents which are to be submitted manually in sealed envelope super scribed with **Tender no.** and **Due date** to **DGM- Materials, Materials Department, Oil India Limited, Duliajan - 786602, Assam** on or before the Bid Closing Date and Time mentioned in the Tender.

a) **Original Bid Security**

b) **Detailed Catalogue (if any)**

c) **Any other document required to be submitted in original as per tender requirement**

All documents submitted in physical form should be signed on all pages by the authorised signatory of the bidder and to be submitted in Duplicate.

4.0 Benefits to Micro & Small Enterprises (MSEs) as per OIL’s Public Procurement Policy for Micro and Small Enterprises (MSEs) shall be given. Bidders are requested to go through ANNEXURE – I of MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders for more details.

5.0 Bidders are requested to examine all instructions, forms, terms and specifications in the bid. Failure to furnish all information required as per the NIT or submission of offers not substantially responsive to the bid in every respect will be at the bidders risk and may result in rejection of its offer without seeking any clarifications.

6.0 Bidders must ensure that their bid is uploaded in the system before the tender closing date and time. Also, they must ensure that above documents which are to be submitted in a sealed envelope are also submitted at the above mentioned address before the bid closing date and time failing which the offer shall be rejected.

7.0 Bid must be submitted electronically only through OIL’s e-procurement portal. Bid submitted in any other form will be rejected.

8.0 The tender shall be governed by the Bid Rejection & Bid Evaluation Criteria given in enclosed Annexure-CCC. However, if any of the Clauses of the Bid Rejection Criteria / Bid Evaluation Criteria (as per Annexure-CCC) contradict the Clauses of the tender and / or “General Terms & Conditions” as per Booklet No. MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders elsewhere, those in the BEC / BRC shall prevail.

9.0 To ascertain the substantial responsiveness of the bid OIL reserves the right to ask the bidder for clarification in respect of clauses covered under BRC also and such clarifications fulfilling the BRC clauses in toto must be received on or before the deadline given by the company, failing which the offer will be summarily rejected.

- 10.0 Please do refer the User Manual provided on the portal on the procedure How to create Response for submitting offer.
- 11.0 If Bank Guarantee is submitted towards 'Bid Security', then bidders have to ensure that the Bank Guarantee issuing bank indicate the name and detailed address (including e-mail) of their higher office from where confirmation towards genuineness of the Bank Guarantee can be obtained.
- 12.0 Bidders are requested to refer to the enclosed **Annexure – BBB** for the Taxes and Duties clauses under GST regime.

13.0 Delivery/collection Instructions in cases where transportation is in OIL's scope:

(i) the suppliers shall be required to deliver the Sundry consignments of weight less than 3 (Three) Tons at the godown/office/collection point of OIL's authorized transporter in various cities.

(ii) consignments weighing more than 3(Three) Tons shall be collected from the supplier's premises/loading points by OIL's authorized transporter.

(iii) the names of OIL's current authorized transporters are:

- a) M/s Western Carriers (India) Ltd.
- b) M/s DARCL Logistics Limited

Bidder's are requested to note the above delivery/collection instructions while submitting their offers.

14.0 While submitting the offers bidders are requested to refer to the enclosed **Annexure – BB (Price Bid Format and Evaluation Criteria).**

15.0 The applicable GST on the Liquidated Damage if any, shall have to be borne by the Seller. Accordingly, the Liquidated Damage shall be recovered from the seller along with applicable GST.

16.0 Bidders should fill-up and submit alongwith their bid an UNDERTAKING towards authenticity of information/documents furnished by them, as per enclosed ANNEXURE-K.

17.0: For convenience of the qualified Bidders and to improve transparency, the rates/costs quoted by bidders against OIL's e-tenders shall be available for online viewing by such Bidders whose price bids are opened by Company. A Bidder can view item-wise rates/ costs of all other such peer bidders against the tender immediately after price bid opening, if the e-tender is floated by Company with PRICE CONDITION. In case the Price-Bid is invited by Company through attachment form under "Notes & Attachment" (i.e., NO PRICE Condition), Bidders must upload their detailed Price-Bid as per the prescribed format under "Notes & Attachment", in addition to filling up the "Total Bid Value" Tab taking into account the cost of all individual line items and other applicable charges like freight, tax, duties, levies etc. Under NO PRICE Condition (i.e., Price Bid in attachment form), the "Total Bid Value" as calculated & quoted by the Bidder shall only be shared amongst the eligible bidders and Company will not assume any responsibility whatsoever towards calculation errors/ omissions therein, if any. Notwithstanding to sharing the "Total Bid Value" or the same is whether filled up by the Bidder or not, Company will evaluate the cost details to ascertain the inter-se-ranking of bidders strictly as per the uploaded attachment

and Bid Evaluation Criteria only. Online view of prices as above shall be available to the Bidders only upto seven days from the date of Price-Bid opening of the tender.

18.0 DISCLAIMER: Rates/Costs shown above are as calculated/quoted by the respective Bidder. Company does not assume any responsibility and shall not be liable for any calculation error or omissions. However, for placement of order/award of contract, Company shall evaluate the cost details to determine the inter-se-ranking of Bidders strictly as per their Price-Bids and Bid Evaluation Criteria of the Tender. OIL INDIA LTD accepts no liability of any nature resulting from mismatch of "Total Bid Value" & price submitted under "Notes & Attachment" by any bidder and no claim whatsoever shall be entertained thereof.

Please do refer “**NEW INSTRUCTION TO BIDDER FOR SUBMISSION**” for the above two points and also please refer “**New Vendor Manual (effective 01.03.2019)**” available in the login Page of the OIL’s E-tender Portal.



NOTE:

Bidders should submit their bids (preferably in tabular form) explicitly mentioning compliance / non compliance to all the NIT terms and conditions of NIT.

Yours Faithfully

Sd-

**(B BORAH)
SPO (IP)
FOR GM-MATERIALS**

Tender No & Date: SDI2034P20 DT: 25.07.2019**BID REJECTION CRITERIA (BRC) / BID EVALUATION CRITERIA (BEC)**

The following BRC/BEC will govern the evaluation of the bids received against this tender. Bids that do not comply with stipulated BRC/BEC in full will be treated as non responsive and such bids shall prima-facie be rejected. Bid evaluation will be done only for those bids that pass through the “Bid Rejection Criteria” as stipulated in this document.

Other terms and conditions of the enquiry shall be as per General Terms and Conditions vide MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders. However, if any of the Clauses of the Bid Rejection Criteria / Bid Evaluation Criteria (BRC / BEC) contradict the Clauses of the tender or MM/LOCAL/E-01/2005 elsewhere, those in the BRC / BEC shall prevail.

<u>Criteria</u>	Complied / Not Complied. (Remarks if any)
<p>1.0 BID REJECTION CRITERIA (BRC):</p> <p>The bid shall conform generally to the specifications, terms and conditions given in this document. Notwithstanding the general conformity of the bids to the stipulated specifications, the following requirements will have to be particularly met by the Bidders without which the same will be considered as non-responsive and rejected.</p> <p>A) TECHNICAL:</p> <p>1.0 Qualification: Bidder should have experience of supply and commissioning of minimum one number of similar system during last 5(Five) years as on original stipulated Bid Closing Date.</p> <p>Similar system implies Wireless Process monitoring system used for measurement & monitoring of industrial process parameters which may be a standalone or a part of other monitoring/control system.</p> <p>1.(i) (a) Documentary evidence to substantiate the above experience shall be submitted in the form of copy of relevant Purchase Order along with</p> <p>a) Installation and commissioning certificate in respect of satisfactory execution of the Purchase Order</p> <p>Or</p> <p>(b) Customer/user certifying that the system is operating satisfactorily.</p> <p>(ii) Satisfactory Inspection Report (OR)</p> <p>(iii) Satisfactory Supply Completion / Installation Report (OR)</p> <p>(iv) Consignee Receipted Delivery Challans (OR)</p> <p>(v) Central Excise Gate Pass / Tax Invoices issued under relevant rules of Central Excise/VAT/GST (OR)</p> <p>(vi) any other documentary evidence that can substantiate the satisfactory execution of each of the purchase orders cited above.</p>	

Note:

a) The Purchase Order date need not be within 5 (five) years preceding original bid closing date of this tender. However, the execution of supply should be within 5 (five) years preceding original bid closing date of this tender.

b) Satisfactory supply/completion/installation report (if submitted) should be issued on client's official letterhead with signature and stamp

B) FINANCIAL

a) Annual Financial Turnover of the bidder during any of preceding 03 (three) financial / accounting years from the original bid closing date should be at least **Rs 15.95 Lakhs.**

b) Net Worth of the firm should be Positive for preceding financial / Accounting year. (FY=2018-2019)

Note -For (a) & (b): Considering the time required for preparation of Financial Statements, if the last date of preceding financial / accounting year falls within the preceding six months reckoned from the original bid closing date and the Financial Statements of the preceding financial / accounting year are not available with the bidder, then the financial turnover of the previous three financial / accounting years excluding the preceding financial / accounting year will be considered. In such cases, the Net worth of the previous financial / accounting year excluding the preceding financial / accounting year will be considered. However, the bidder has to submit an affidavit/undertaking certifying that 'the balance sheet/Financial Statements for the financial year..... (As the case may be) has actually not been audited so far'.

Notes:

a) For proof of Annual Turnover & Net worth any one of the following document must be submitted along with the bid:-

i) A certificate issued by a practicing Chartered Cost Accountant (with Membership Number and Firm Registration Number), certifying the Annual turnover & Net worth as per format prescribed in ANNEXURE-J.

OR

ii) Audited Balance Sheet along with Profit & Loss account.

b) In case the bidder is a Central Govt. Organization/PSU/State Govt. Organization/Semi-State Govt. Organization or any other Central/State Govt. Undertaking, where the auditor is appointed only after the approval of Comptroller and Auditor General of India and the Central Government, their certificates may be accepted even though FRN is not available. However, bidder to provide documentary evidence for the same.

C) COMMERCIAL:

i) Validity of the bid shall be minimum 90 days from the Bid Closing Date.

ii) Bid security:

The bid must be accompanied by Bid Security of **Rs. 63,800.00** in OIL's prescribed format as Bank Guarantee in favour of OIL. The Bid Security may be submitted manually in sealed envelope superscribed with Tender no. and Bid Closing date to Head Materials, Materials Department, Oil India Limited, Duliajan- 786602, Assam on or before the Bid Closing Date and Time mentioned in the Tender. **The Bank Guarantee towards Bid Security shall be valid for 6 months from Bid closing date. (i.e. 31.05.2020)**

Bid Security may also be paid online on or before the Bid Closing Date and Time mentioned in the Tender.

If bid security in ORIGINAL of above mentioned Amount and Validity is not received or paid online within bid closing date and time, the bid submitted through electronic form will be rejected without any further consideration.

For exemption for submission of Bid Security, please refer Clause No. 8.16 of General Terms and Conditions vide MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders.

The format of Bank Guarantee towards Bid Security (Annexure – VII) has been amended to Annexure – VII (Revised) and bidders should submit Bank Guarantee towards Bid Security as per Annexure – VII (Revised) only.

iii) Bids are invited under “Single Stage Composite Bid System”. Bidders have to submit both the “Techno-commercial Unpriced Bids” and “Priced Bids” through electronic form in the OIL’s e-Tender portal within the bid Closing date and time stipulated in the e-tender. The Techno-commercial Unpriced bid is to be submitted as per scope of works and Technical specification of the tender and the priced bid as per the online Commercial bid format. For details of submission procedure, please refer relevant para of General Terms and Conditions vide MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders.

iv) Performance Security:

The successful bidder shall submit Performance Security @ 10% of PO value within 30 days of receipt of the formal purchase order failing which OIL reserves the right to cancel the order and forfeit the Bid Security. Bidders should undertake in their bids to submit Performance Security as stated above.

The Performance Security shall be in the following form :

A Bank Guarantee in the prescribed OIL’s format valid for 90 days beyond delivery period and applicable warranty/guarantee period (if any).

The validity requirement of Performance Security is assuming despatch within stipulated delivery period and confirmation to all terms and

conditions of order. In case of any delay in despatch or non-confirmation to all terms and conditions of order, validity of the Performance Security is to be extended suitably as advised by OIL.

v) The prices offered will have to be firm through delivery and not subject to variation on any account. A bid submitted with an adjustable price will be treated as non-responsive and rejected.

vi) Bids received after the bid closing date and time will be rejected. Similarly, modifications to bids received after the bid closing date & time will not be considered.

vii) All the Bids must be Digitally Signed using “Class 3” digital certificate with Organisation’s name (*e-commerce application*) as per Indian IT Act obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India. The bid signed using other than “Class 3 with Organisation’s Name” digital certificate, will be rejected.

viii) Price should be maintained in the “online price schedule” only. The price submitted other than the “online price schedule” shall not be considered.

ix) A bid shall be rejected straightway if it does not conform to any one of the following clauses:

(a) Validity of bid shorter than the validity indicated in the Tender.

(b) Original Bid Security not received within the stipulated date & time mentioned in the Tender.

(c) Bid Security with (i) Validity shorter than the validity indicated in Tender and/or (ii) Bid Security amount lesser than the amount indicated in the Tender.

(d) Annual Turnover of a bidder lower than the Annual turnover mentioned in the Tender.

x) DELIVERY :

DELIVERY PERIOD FOR THE ITEMS TO BE 28 WEEKS FROM THE DATE OF RECEIPT OF THE PURCHASE ORDER BY THE BIDDER.

NOTE: FOR CLAUSE NOS. C(ii) & C(iv) OF BID SECURITY/EMD AND PBG

The bidders/successful bidders are requested to advise the Bank Guarantee issuing bank to comply with the following and ensure to submit, the receipt of the copy of SFMS message as sent by the issuing bank branch, along with the original bank guarantee in Oil's tender issuing office:

**“The Bank Guarantee issuing Bank branch must ensure the following:
The Bank Guarantee issued by the Bank must be routed through SFMS platform as per following details:**

(i) MT 760 / MT 760 COV for issuance of Bank Guarantee

(ii) MT 760 / MT 767 COV for amendment of Bank Guarantee

The above message / intimation shall be sent through SFMS by the BG issuing Bank branch to HDFC Bank, Duliajan Branch, IFS Code – HDFC0002118; SWIFT Code - HDFCINBBCAL.

Branch Address: HDFC Bank Limited, Duliajan Branch, Utopia Complex, BOC Gate, Jayanagar, Duliajan, Dibrugarh, PIN – 786602.”

2.0 BID EVALUATION CRITERIA (BEC)

The bids conforming to the terms and conditions stipulated in the tender and considered to be responsive after subjecting to the Bid Rejection Criteria as well as verification of original of any or all documents/ documentary evidences pertaining to BRC, will be considered for further evaluation as per the Bid Evaluation Criteria given below. **The original Bid Closing Date shall be considered by OIL for evaluation of BRC criteria even in case of any extension of the original Bid Closing Date.**

A) TECHNICAL:

- i) The bid will be evaluated strictly as per NIT specification, terms & conditions.
- ii) The bidder should categorically confirm in the technical bid that the tendered items will be supplied within the delivery period as mentioned in the tender, without which the bid will be rejected.
- iii) Bidder will quote for all the items under this tender, so that bidder's design of the wireless system for the field devices to operate successfully remain intact

B) COMMERCIAL:

- i) To evaluate the inter-se-ranking of the offers, all Taxes / Levies will be considered as per prevailing Govt. guidelines as applicable on the bid opening date for entire tendered quantity. Bidders may check this with the appropriate authority before submitting their offer
- ii) A job executed by a bidder for its own organization / subsidiary cannot be considered as experience for the purpose of meeting BEC.
- iii) To ascertain the substantial responsiveness of the bid OIL reserves the right to ask the bidder for clarification in respect of clauses covered under BRC also and such clarifications fulfilling the BRC clauses in toto must be received on or before the deadline given by the company, failing which the offer will be summarily rejected.

NOTE:

Bidders should submit their bids (preferably in tabular form) explicitly mentioning compliance / non compliance to all the terms and conditions of NIT.

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TECHNICAL SPECIFICATIONS WITH QUANTITY

Tender No & Date: SDI2034P20 DT: 25.07.2019

	Complied / Not Complied. (Remarks if any)
<p><u>ITEM NO. 10</u></p> <p><u>"WIRELESS TEMPERATURE TRANSMITTER (0-100 DEG C) : QTY = 02 NOS</u></p> <p>"1. TYPE: TEMPERATURE TRANSMITTER 2. MODEL: BIDDER TO SPECIFY 3. RANGE: 0-100 DEG C 4. INPUT TYPE: 3 WIRE RTD PT 100, SINGLE INPUT 5. ACCURACY: ± 0.5 % 6. AMBIENT TEMPERATURE & HUMIDITY: 0 TO 50 DEG C & 50 TO 99% RH 7. ELECTRICAL AREA CLASSIFICATION: IEC ZONE-1 GR. IIA/IIB/IIC T3 8. INGRESS PROTECTION: IP65 MINIMUM 9. INTRINSICALLY SAFE: YES 10. ELECTRONIC HOUSING: HOUSING MATERIAL SHALL BE SUITABLE FOR AREA CLASSIFICATION AND IP CLASS. 11. CABLE ENTRY: $\frac{1}{2}$ IN NPT(F) 12. MOUNTING BRACKET : (304 SS) WITH PLATE AND NUTS FOR 2 INCH NB PIPE MOUNTING 13. TRANSMITTER POWER: TRANSMITTER TO BE SUPPLIED WITH EASY TO REPLACE BATTERY. VENDOR TO SPECIFY BATTERY LIFE WHICH SHOULD BE MINIMUM 2 YRS WITH UPDATE TIME 16 SECONDS 14. TRANSMITTER OUT PUT: WIRELESS 15. TRANSMITTER UPDATE RATE: SELECTABLE BETWEEN 10 SECONDS TO 60 SECONDS 16. ANTENA TYPE: OMNI DIRECTIONAL, INTERNAL 17. SIGNAL RANGE: NOMINAL 100 M WITHOUT ANY REPEATER AND NOT LIMITED TO LINE OF SIGHT 18. FREQUENCY: 2.4 G HZ LICENCE FREE ISM BAND 19. WIRELESS PROTOCOL: WIRELESS HART/ ISA 100.11A 20. LOCAL DISPLAY: REQUIRED 21. NETWORK: WIRELESS NETWORK MUST BE FIELD CONFIGURABLE IN STAR/MESH/COMBINATION OF BOTH TOPOLOGIES BASED ON SITE REQUIREMENT. 22. TRANSMITTER CONFIGURATION: LOCAL/VIA GATEWAY OVER THE NETWORK 23. SELF-DIAGNOSTIC: REQUIRED 24. STABILITY: ± 0.5% OF URL FOR 2 YEARS 25. SECURITY: BIDDER TO SPECIFY. SHOULD COMPLY INDUSTRIAL STANDARDS. 26. DEVICE PROGRAMMING: TX TO HAVE CAPABILITY TO WORK BOTH AS INPUT DEVICE AND REPEATER</p>	
<p><u>ITEM NO. 20</u></p> <p><u>"WIRELESS PRESSURE TRANSMITTER (0-5 KG/CM2) - QTY = 03 NOS</u></p> <p>1. TYPE: GAUGE PRESSURE TRANSMITTER 2. .PRESSURE TRANSMITTER MODEL: BIDDER TO SPECIFY 3. RANGE :0-5 KG/CM2 4. AMBIENT TEMPERATURE & HUMIDITY: 0 TO 50 DEG C & 50 TO 99% RH</p>	

<p>5. OVER RANGE PROTECTION: 130% OF FULL RANGE</p> <p>6. TX. DIAPHRAGM & OTHER WETTED PARTS: SS316 OR BETTER</p> <p>7. FILL FLUID: SILICONE</p> <p>8. PROCESS TEMPERATURE: 0-100 DEG C</p> <p>9. ELECTRICAL AREA CLASSIFICATION: IEC ZONE-1 GR. IIA/IIB/IIC T3</p> <p>10. ENCLOSURE: IP65 MINIMUM</p> <p>11. INTRINSICALLY SAFE: YES</p> <p>12. ELECTRONIC HOUSING: HOUSING MATERIAL SHALL BE SUITABLE FOR AREA CLASSIFICATION AND IP CLASS.</p> <p>13. MANIFOLD: 2 VALVE SS 316 RATED FOR 4000 PSI, ½ IN NPT (F) CONNECTION FOR PROCESS END.</p> <p>14. PROCESS CONNECTION: ½ IN NPT (F)</p> <p>15. MOUNTING BRACKET: (304 SS) WITH PLATE AND NUTS FOR 2 INCH NB PIPE MOUNTING</p> <p>16. TRANSMITTER POWER : TRANSMITTER TO BE SUPPLIED WITH EASY TO REPLACE BATTERY. VENDOR TO SPECIFY BATTERY LIFE WHICH SHOULD BE MINIMUM 2 YRS WITH UPDATE RATE 16 SECONDS</p> <p>17. TRANSMITTER OUT PUT: WIRELESS</p> <p>18. TRANSMITTER UPDATE RATE: SELECTABLE BETWEEN 10 SECONDS TO 60 SECONDS</p> <p>19. ANTENA TYPE: OMNI DIRECTIONAL, INTEGRAL</p> <p>20. SIGNAL RANGE: NOMINAL 100 M WITHOUT ANY REPEATER AND NOT LIMITED TO LINE OF SIGHT</p> <p>21. FREQUENCY: 2.4 G HZ LICENCE FREE ISM BAND</p> <p>22. WIRELESS PROTOCOL: WIRELESS HART/ ISA 100.11A</p> <p>23. LOCAL DISPLAY: REQUIRED</p> <p>24. NETWORK: WIRELESS NETWORK, MUST BE FIELD CONFIGURABLE IN STAR/MESH/ COMBINATION OF BOTH TOPOLOGIES BASED ON SITE REQUIREMENT</p> <p>25. TRANSMITTER CONFIGURATION: LOCAL/VIA GATEWAY OVER THE NETWORK</p> <p>26. DEVICE PROGRAMMING: TX TO HAVE CAPABILITY TO WORK BOTH AS INPUT DEVICE AND REPEATER</p> <p>27. ACCURACY: +/- 0.5 % OF CALIBRATED SPAN OR BETTER</p> <p>28. STABILITY: +/- 0.5% OF URL FOR 2 YEARS</p> <p>29. RANGEABILITY: 50:1 OR BETTER</p> <p>30. SECURITY: SHOULD COMPLY BASIC INDUSTRIAL STANDARDS</p> <p>31. SELF-DIAGNOSTIC: REQUIRED</p>	
<p><u>ITEM NO. 30</u></p> <p><u>"WIRELESS PRESSURE TRANSMITTER(0-10 KG/CM2) – QTY = 07 NOS</u></p> <p>"1. TYPE: GAUGE PRESSURE TRANSMITTER</p> <p>2. .PRESSURE TRANSMITTER MODEL: BIDDER TO SPECIFY</p> <p>3. RANGE :0-10 KG/CM2</p> <p>4. AMBIENT TEMPERATURE & HUMIDITY: 0 TO 50 DEG C & 50 TO 99% RH</p> <p>5. OVER RANGE PROTECTION: 130% OF FULL RANGE</p> <p>6. TX. DIAPHRAGM & OTHER WETTED PARTS: SS316 OR BETTER</p>	

<p>7. FILL FLUID: SILICONE</p> <p>8. PROCESS TEMPERATURE: 0-100 DEG C</p> <p>9. ELECTRICAL AREA CLASSIFICATION: IEC ZONE-1 GR. IIA/IIB/IIC T3</p> <p>10. ENCLOSURE: IP65 MINIMUM</p> <p>11. INTRINSICALLY SAFE: YES</p> <p>12. ELECTRONIC HOUSING: HOUSING MATERIAL SHALL BE SUITABLE FOR AREA CLASSIFICATION AND IP CLASS.</p> <p>13. MANIFOLD: 2 VALVE SS 316 RATED FOR 4000 PSI, ½ IN NPT (F) CONNECTION FOR PROCESS END.</p> <p>14. PROCESS CONNECTION: ½ IN NPT (F)</p> <p>15. MOUNTING BRACKET: (304 SS) WITH PLATE AND NUTS FOR 2 INCH NB PIPE MOUNTING</p> <p>16. TRANSMITTER POWER : TRANSMITTER TO BE SUPPLIED WITH EASY TO REPLACE BATTERY. VENDOR TO SPECIFY BATTERY LIFE WHICH SHOULD BE MINIMUM 2 YRS WITH UPDATE RATE 16 SECONDS</p> <p>17. TRANSMITTER OUT PUT: WIRELESS</p> <p>18. TRANSMITTER UPDATE RATE: SELECTABLE BETWEEN 10 SECONDS TO 60 SECONDS</p> <p>19. ANTENA TYPE: OMNI DIRECTIONAL, INTEGRAL</p> <p>20. SIGNAL RANGE: NOMINAL 100 M WITHOUT ANY REPEATER AND NOT LIMITED TO LINE OF SIGHT</p> <p>21. FREQUENCY: 2.4 G HZ LICENCE FREE ISM BAND</p> <p>22. WIRELESS PROTOCOL: WIRELESS HART/ ISA 100.11A</p> <p>23. LOCAL DISPLAY: REQUIRED</p> <p>24. NETWORK: WIRELESS NETWORK, MUST BE FIELD CONFIGURABLE IN STAR/MESH/ COMBINATION OF BOTH TOPOLOGIES BASED ON SITE REQUIREMENT</p> <p>25. TRANSMITTER CONFIGURATION: LOCAL/VIA GATEWAY OVER THE NETWORK</p> <p>26. DEVICE PROGRAMMING: TX TO HAVE CAPABILITY TO WORK BOTH AS INPUT DEVICE AND REPEATER</p> <p>27. ACCURACY: +/- 0.5 % OF CALIBRATED SPAN OR BETTER</p> <p>28. STABILITY: +/- 0.5% OF URL FOR 2 YEARS</p> <p>29. RANGEABILITY: 50:1 OR BETTER</p> <p>30. SECURITY: SHOULD COMPLY BASIC INDUSTRIAL STANDARDS</p> <p>31. SELF-DIAGNOSTIC: REQUIRED</p>	
<p><u>ITEM NO. 40</u></p> <p><u>"WIRELESS PRESSURE TRANSMITTER(0-50 KG/CM2) – QTY = 02 NOS</u></p> <p>"1. TYPE: GAUGE PRESSURE TRANSMITTER</p> <p>2. .PRESSURE TRANSMITTER MODEL: BIDDER TO SPECIFY</p> <p>3. RANGE :0-50 KG/CM2</p> <p>4. AMBIENT TEMPERATURE & HUMIDITY: 0 TO 50 DEG C & 50 TO 99% RH</p> <p>5. OVER RANGE PROTECTION: 130% OF FULL RANGE</p> <p>6. TX. DIAPHRAGM & OTHER WETTED PARTS: SS316 OR BETTER</p> <p>7. FILL FLUID: SILICONE</p> <p>8. PROCESS TEMPERATURE: 0-100 DEG C</p>	

<p>9. ELECTRICAL AREA CLASSIFICATION: IEC ZONE-1 GR. IIA/IIB/IIC T3</p> <p>10. ENCLOSURE: IP65 MINIMUM</p> <p>11. INTRINSICALLY SAFE: YES</p> <p>12. ELECTRONIC HOUSING: HOUSING MATERIAL SHALL BE SUITABLE FOR AREA CLASSIFICATION AND IP CLASS.</p> <p>13. MANIFOLD: 2 VALVE SS 316 RATED FOR 4000 PSI, ½ IN NPT (F) CONNECTION FOR PROCESS END.</p> <p>14. PROCESS CONNECTION: ½ IN NPT (F)</p> <p>15. MOUNTING BRACKET: (304 SS) WITH PLATE AND NUTS FOR 2 INCH NB PIPE MOUNTING</p> <p>16. TRANSMITTER POWER : TRANSMITTER TO BE SUPPLIED WITH EASY TO REPLACE BATTERY. VENDOR TO SPECIFY BATTERY LIFE WHICH SHOULD BE MINIMUM 2 YRS WITH UPDATE RATE 16 SECONDS</p> <p>17. TRANSMITTER OUT PUT: WIRELESS</p> <p>18. TRANSMITTER UPDATE RATE: SELECTABLE BETWEEN 10 SECONDS TO 60 SECONDS</p> <p>19. ANTENA TYPE: OMNI DIRECTIONAL, INTEGRAL</p> <p>20. SIGNAL RANGE: NOMINAL 100 M WITHOUT ANY REPEATER AND NOT LIMITED TO LINE OF SIGHT</p> <p>21. FREQUENCY: 2.4 G HZ LICENCE FREE ISM BAND</p> <p>22. WIRELESS PROTOCOL: WIRELESS HART/ ISA 100.11A</p> <p>23. LOCAL DISPLAY: REQUIRED</p> <p>24. NETWORK: WIRELESS NETWORK, MUST BE FIELD CONFIGURABLE IN STAR/MESH/ COMBINATION OF BOTH TOPOLOGIES BASED ON SITE REQUIREMENT</p> <p>25. TRANSMITTER CONFIGURATION: LOCAL/VIA GATEWAY OVER THE NETWORK</p> <p>26. DEVICE PROGRAMMING: TX TO HAVE CAPABILITY TO WORK BOTH AS INPUT DEVICE AND REPEATER</p> <p>27. ACCURACY: +/- 0.5 % OF CALIBRATED SPAN OR BETTER</p> <p>28. STABILITY: +/- 0.5% OF URL FOR 2 YEARS</p> <p>29. RANGEABILITY: 50:1 OR BETTER</p> <p>30. SECURITY: SHOULD COMPLY BASIC INDUSTRIAL STANDARDS</p> <p>31. SELF-DIAGNOSTIC: REQUIRED</p>	
<p><u>ITEM NO. 50</u></p> <p><u>"WIRELESS PRESSURE TRANSMITTER (0-80 KG/CM2) – 03 NOS</u></p> <p>"1. TYPE: GAUGE PRESSURE TRANSMITTER</p> <p>2. .PRESSURE TRANSMITTER MODEL: BIDDER TO SPECIFY</p> <p>3. RANGE :0-80 KG/CM2</p> <p>4. AMBIENT TEMPERATURE & HUMIDITY: 0 TO 50 DEG C & 50 TO 99% RH</p> <p>5. OVER RANGE PROTECTION: 130% OF FULL RANGE</p> <p>6. TX. DIAPHRAGM & OTHER WETTED PARTS: SS316 OR BETTER</p> <p>7. FILL FLUID: SILICONE</p> <p>8. PROCESS TEMPERATURE: 0-100 DEG C</p> <p>9. ELECTRICAL AREA CLASSIFICATION: IEC ZONE-1 GR. IIA/IIB/IIC T3</p> <p>10. ENCLOSURE: IP65 MINIMUM</p>	

<p>11. INTRINSICALLY SAFE: YES</p> <p>12. ELECTRONIC HOUSING: HOUSING MATERIAL SHALL BE SUITABLE FOR AREA CLASSIFICATION AND IP CLASS.</p> <p>13. MANIFOLD: 2 VALVE SS 316 RATED FOR 4000 PSI, ½ IN NPT (F) CONNECTION FOR PROCESS END.</p> <p>14. PROCESS CONNECTION: ½ IN NPT (F)</p> <p>15. MOUNTING BRACKET: (304 SS) WITH PLATE AND NUTS FOR 2 INCH NB PIPE MOUNTING</p> <p>16. TRANSMITTER POWER : TRANSMITTER TO BE SUPPLIED WITH EASY TO REPLACE BATTERY. VENDOR TO SPECIFY BATTERY LIFE WHICH SHOULD BE MINIMUM 2 YRS WITH UPDATE RATE 16 SECONDS</p> <p>17. TRANSMITTER OUT PUT: WIRELESS</p> <p>18. TRANSMITTER UPDATE RATE: SELECTABLE BETWEEN 10 SECONDS TO 60 SECONDS</p> <p>19. ANTENA TYPE: OMNI DIRECTIONAL, INTEGRAL</p> <p>20. SIGNAL RANGE: NOMINAL 100 M WITHOUT ANY REPEATER AND NOT LIMITED TO LINE OF SIGHT</p> <p>21. FREQUENCY: 2.4 G HZ LICENCE FREE ISM BAND</p> <p>22. WIRELESS PROTOCOL: WIRELESS HART/ ISA 100.11A</p> <p>23. LOCAL DISPLAY: REQUIRED</p> <p>24. NETWORK: WIRELESS NETWORK, MUST BE FIELD CONFIGURABLE IN STAR/MESH/ COMBINATION OF BOTH TOPOLOGIES BASED ON SITE REQUIREMENT</p> <p>25. TRANSMITTER CONFIGURATION: LOCAL/VIA GATEWAY OVER THE NETWORK</p> <p>26. DEVICE PROGRAMMING: TX TO HAVE CAPABILITY TO WORK BOTH AS INPUT DEVICE AND REPEATER</p> <p>27. ACCURACY: +/- 0.5 % OF CALIBRATED SPAN OR BETTER</p> <p>28. STABILITY: +/- 0.5% OF URL FOR 2 YEARS</p> <p>29. RANGEABILITY: 50:1 OR BETTER</p> <p>30. SECURITY: SHOULD COMPLY BASIC INDUSTRIAL STANDARDS</p> <p>31. SELF-DIAGNOSTIC: REQUIRED</p>	
<p><u>ITEM NO. 60</u></p> <p><u>"WIRELESS PRESSURE TRANSMITTER (0-150 KG/CM2) – QTY = 01 NO</u></p> <p>"1. TYPE: GAUGE PRESSURE TRANSMITTER</p> <p>2. .PRESSURE TRANSMITTER MODEL: BIDDER TO SPECIFY</p> <p>3. RANGE :0-150 KG/CM2</p> <p>4. AMBIENT TEMPERATURE & HUMIDITY: 0 TO 50 DEG C & 50 TO 99% RH</p> <p>5. OVER RANGE PROTECTION: 130% OF FULL RANGE</p> <p>6. TX. DIAPHRAGM & OTHER WETTED PARTS: SS316 OR BETTER</p> <p>7. FILL FLUID: SILICONE</p> <p>8. PROCESS TEMPERATURE: 0-100 DEG C</p> <p>9. ELECTRICAL AREA CLASSIFICATION: IEC ZONE-1 GR. IIA/IIB/IIC T3</p> <p>10. ENCLOSURE: IP65 MINIMUM</p> <p>11. INTRINSICALLY SAFE: YES</p> <p>12. ELECTRONIC HOUSING: HOUSING MATERIAL SHALL BE SUITABLE FOR AREA</p>	

<p>CLASSIFICATION AND IP CLASS.</p> <p>13. MANIFOLD: 2 VALVE SS 316 RATED FOR 4000 PSI, ½ IN NPT (F) CONNECTION FOR PROCESS END.</p> <p>14. PROCESS CONNECTION: ½ IN NPT (F)</p> <p>15. MOUNTING BRACKET: (304 SS) WITH PLATE AND NUTS FOR 2 INCH NB PIPE MOUNTING</p> <p>16. TRANSMITTER POWER : TRANSMITTER TO BE SUPPLIED WITH EASY TO REPLACE BATTERY. VENDOR TO SPECIFY BATTERY LIFE WHICH SHOULD BE MINIMUM 2 YRS WITH UPDATE RATE 16 SECONDS</p> <p>17. TRANSMITTER OUT PUT: WIRELESS</p> <p>18. TRANSMITTER UPDATE RATE: SELECTABLE BETWEEN 10 SECONDS TO 60 SECONDS</p> <p>19. ANTENA TYPE: OMNI DIRECTIONAL, INTEGRAL</p> <p>20. SIGNAL RANGE: NOMINAL 100 M WITHOUT ANY REPEATER AND NOT LIMITED TO LINE OF SIGHT</p> <p>21. FREQUENCY: 2.4 G HZ LICENCE FREE ISM BAND</p> <p>22. WIRELESS PROTOCOL: WIRELESS HART/ ISA 100.11A</p> <p>23. LOCAL DISPLAY: REQUIRED</p> <p>24. NETWORK: WIRELESS NETWORK, MUST BE FIELD CONFIGURABLE IN STAR/MESH/ COMBINATION OF BOTH TOPOLOGIES BASED ON SITE REQUIREMENT</p> <p>25. TRANSMITTER CONFIGURATION: LOCAL/VIA GATEWAY OVER THE NETWORK</p> <p>26. DEVICE PROGRAMMING: TX TO HAVE CAPABILITY TO WORK BOTH AS INPUT DEVICE AND REPEATER</p> <p>27. ACCURACY: +/- 0.5 % OF CALIBRATED SPAN OR BETTER</p> <p>28. STABILITY: +/- 0.5% OF URL FOR 2 YEARS</p> <p>29. RANGEABILITY: 50:1 OR BETTER</p> <p>30. SECURITY: SHOULD COMPLY BASIC INDUSTRIAL STANDARDS</p> <p>31. SELF-DIAGNOSTIC: REQUIRED</p>	
<p><u>ITEM NO. 70</u></p> <p><u>"Wireless Adapter:- QTY = 02 NOS</u></p> <p>1. TYPE: WIRELESS ADAPTER/CONVERTER</p> <p>2. MODEL: BIDDER TO SPECIFY</p> <p>3. INPUT TYPE: CONVERT RADAR LEVEL TRANSMITTER, MAKE ROSEMOUNT, MODEL 5600 OUTPUT TO WIRELESS SIGNAL IN ORDER TO COMMUNICATE WITH THE WIRELESS GATEWAY, AND ULTIMATELY THE HOST SYSTEM. THE ADAPTER/CONVERTER MUST BE CONFIGURED TO COMMUNICATE OVER THE WIRELESS NETWORK</p> <p>4. AMBIENT TEMPERATURE & HUMIDITY: 0 TO 50 DEG C & 50 TO 99% RH</p> <p>5. ELECTRICAL AREA CLASSIFICATION: IEC ZONE-1 GR. IIA/IIB/IIC T3</p> <p>6. ENCLOSURE: IP65 MINIMUM</p> <p>7. INTRINSICALLY SAFE: YES</p> <p>9. MOUNTING : REQUIRED ACCESSORIES LIKE CONDUIT ETC. TO MOUNT THE</p>	

<p>ADAPTER/CONVERTER TO THE WIRED HART TRANSMITTER (RADAR LEVEL TRANSMITTER, MAKE ROSEMOUNT, MODEL 5600) TO BE SUPPLIED WITH THE ADAPTER</p> <p>10. POWER: LOOP POWERED (NO ADDITIONAL POWER SUPPLY REQUIRED, POWERED WHEN CONNECTED TO A POWERED LOOP OF RADAR LEVEL TRANSMITTER, MAKE ROSEMOUNT, MODEL 5600) OR BATTERY POWERED(BATTERY SHOULD BE EASY TO REPLACE, HOUSED IN THE ADAPTER HOUSING. VENDOR TO SPECIFY BATTERY LIFE WHICH SHOULD BE MINIMUM 2 YRS WITH UPDATE TIME 16 SECONDS)</p> <p>11. OUT PUT: WIRELESS</p> <p>12. UPDATE RATE: SELECTABLE BETWEEN 10 SECOND TO 60 SECOND</p> <p>13. ANTENA TYPE: OMNI DIRECTIONAL, INTEGRAL</p> <p>14. SIGNAL RANGE: NOMINAL 100 M WITHOUT ANY REPEATER AND NOT LIMITED TO LINE OF SIGHT</p> <p>15. WIRELESS RANGE: 2.4 G HZ LICENCE FREE ISM BAND</p> <p>16. WIRELESS PROTOCOL: WIRELESS HART/ ISA 100.11A</p> <p>17. NETWORK: WIRELESS NETWORK MUST BE FIELD CONFIGURABLE IN STAR/MESH/COMBINATION OF BOTH TOPOLOGIES BASED ON SITE REQUIREMENT.</p> <p>18. ADAPTER CONFIGURATION: LOCAL/VIA GATEWAY OVER THE NETWORK</p> <p>19. SECURITY: SHOULD COMPLY BASIC INDUSTRIAL STANDARDS</p>	
<p><u>ITEM NO. 80</u></p> <p><u>"Wireless Monitoring system: Gateway – 01 SET</u></p> <p><u>"WIRELESS MONITORING SYSTEM SPECIFICATION</u></p> <p><u>GATEWAY:--</u></p> <p>1. TYPE: GATEWAY SHALL BE WITH REMOTE ANTENNA MOUNTING. FOR SEAMLESS COMMUNICATION,. GATEWAY SHALL BE REDUNDANT WITH MAX. CHANGE OVER TIME OF 16 SEC. GATEWAY SHALL BE PROVIDED WITH DETACHABLE REMOTE ANTENNA ALONG WITH CABLE BETWEEN GATEWAY AND ANTENNA AND ALL ACCESSORIES. THE BIDDER MUST MENTION THE MAXIMUM DISTANCE UPTO WHICH THE ANTENNA MAY BE EXTENDED WHICH SHOULD NOT BE LESS THAN 60 METER AND MUST SUPPLY THE EXTENSION CABLE OF MAXIMUM LENGTH ONLY.</p> <p>2. UPDATE RATE: MINIMUM 10 TRANSMITTER SIGNALS WITH 1 SEC UPDATE RATE OR BETTER & EXPANDABLE UP TO MINIMUM 50 TRANSMITTER SIGNALS (BY INCREASING UPDATE RATE SUITABLY BUT NOT MORE THAN 16SEC) WITH STAR/MESH OR COMBINATION OF BOTH NETWORK TOPOLOGIES.</p>	

3. SERIAL COMMUNICATION: AS PER SYSTEM REQUIREMENT AND TO FULFIL THE OTHER TECHNICAL REQUIREMENT.

4. NETWORK: WIRELESS NETWORK COMMUNICATION SHALL BE FIELD CONFIGURABLE TO ESTABLISH STAR/MESH/ COMBINATION OF BOTH TOPOLOGIES TO OPTIMIZE THE NETWORK USAGE.

5. PROTOCOL: WIRELESS HART/ ISA 100.11A

6. FREQUENCY: 2.4 GHZ RANGE (LICENSE FREE ISM BAND)

7. SECURITY: SHOULD COMPLY BASIC INDUSTRIAL STANDARDS, NECESSARY DOCUMENTS SHOULD BE PROVIDED.

8. NUMBER OF DEVICE: THE SYSTEM SHALL BE SCALABLE UPTO MINIMUM 50 NOS.

OF INPUT DEVICE WITHOUT ANY ADDITION OF GATEWAY WITH UPDATE RATES OF MAX. 16 SECONDS

9. INPUT POWER SUPPLY: 24 V DC

10. ELECTRO-MAGNETIC INTERFACE EFFECT: CE MARK/ RADIO APPROVALS / COMPLIES WITH EN61326-1:2006

11. ELECTRONIC HOUSING / PROTECTION: SUITABLE FOR SAFE AREA, CONTROL ROOM INSTALLATION, IP 54 MINIMUM

12. ACCESSORIES:

- ONE NO. OF PC/HMI WITH REQUIRED ACCESSORIES LIKE MINIMUM 17 INCH MONITOR, KEY BOARD, MOUSE, TO BE HOOK UP WITH THE GATEWAY. PC/HMI TO BE LOADED WITH REQUIRED SOFTWARE FOR STORAGE OF THE DATA, MONITORING THE PARAMETERS, TREND, AUDIO AND VISUAL ALARM AS REQUIRED, REPORT, DIAGNOSIS, TROUBLESHOOTING, BATTERY LIFE DISPLAY, LOW BATTERY INDICATION ETC. PC/HMI SHOULD HAVE MINIMUM BELOW CONFIGURATION/ EQUIVALENT: WINDOWS 10 WITH 4 GB RAM, 100GB MEMORY, INTEL CORE I5, 3.0 GHZ PROCESSOR

THE SYSTEM SHOULD HAVE CAPABILITY FOR MAINTENANCE AND CONFIGURATION OF WIRELESS NETWORK; CONFIGURATION, CARRY OUT VARIOUS MANAGEMENT TASK LIKE SCHEDULING COMMUNICATIONS, MANAGEMENT OF ROUTING AND CHECK THE OPERATING CONDITIONS OF THE NETWORK AND CALIBRATION OF WIRELESS TRANSMITTERS AND OTHER WIRELESS DEVICES IN THE WIRELESS NETWORK. FOR THE PURPOSE THE PC/HMI MAY BE USED AND TO BE LOADED WITH REQUIRED LICENCED SOFTWARE ETC.

IF ANY ADDITIONAL HARDWARE/ TOOLS REQUIRED FOR THE ABOVE PURPOSES ,THEY

ARE TO BE SUPPLIED ALONG WITH THE SYSTEM AS ACCESSORIES. ANY SUCH DEVICES IF REQUIRED TO BE USED IN HAZARDOUS AREA SHOULD BE SAFE FOR OPERATION IN ZONE-2, GROUP-IIA/IIB T3 OR BETTER.

<p>• THERE WILL BE ONE MINIMUM 42 INCH LCD/LED WALL MOUNTED MONITOR TO BE HOOKED UP WITH THE SYSTEM FOR DISPLAY OF THE DATA, ALARM, TREND ETC.</p>	
<p><u>ITEM NO. 90</u></p> <p><u>" Repeater Unit – - QTY = 01 SET</u></p> <p>REPEATER UNIT FOR SEAMLESS WIRELESS COMMUNICATION ACROSS ALL ITS TRANSMITTERS.</p> <p>TECHNICAL SPECIFICATION:</p> <ol style="list-style-type: none"> 1. TYPE: WIRELESS REPEATER 2. BATTERY & BATTERY LIFE: FIELD REPLACEABLE BATTER OF MINIMUM 2 YEARS OF LIFE WITH 16 SEC UPDATE RATE. REPEATER WITH EXTERNAL POWER SUPPLY WILL NOT BE ACCEPTABLE. 3. NETWORK: WIRELESS NETWORK COMMUNICATION SHALL BE FIELD CONFIGURABLE TO ESTABLISH STAR/MESH/ COMBINATION OF BOTH TOPOLOGIES TO OPTIMIZE THE NETWORK USAGE. 4. FREQUENCY: 2.4 GHZ RANGE (LICENSE FREE ISM BAND) 5. WIRELESS PROTOCOL: WIRELESS HART/ ISA 100.11A 6. SECURITY: SHOULD COMPLY BASIC INDUSTRIAL STANDARDS, NECESSARY DOCUMENTS SHOULD BE PROVIDED. 7. ELECTRICAL AREA CLASSIFICATION: IEC ZONE-1 GR. IIA/IIB/IIC T3 8. ENCLOSURE: IP65 MINIMUM 9. OPERATING TEMPERATURE & HUMIDITY: 0 TO 50 DEG C & 50 TO 99% RH 10. INTRINSICALLY SAFE: YES 11. ELECTRO-MAGNETIC INTERFACE EFFECT: CE MARK/ RADIO APPROVALS / COMPLIES WITH EN61326-1:2006 12. MOUNTING BRACKET: (304 SS) WITH PLATE AND NUTS FOR 2 INCH NB PIPE MOUNTING 13. ANTENNA TYPE: OMNI DIRECTIONAL, INTEGRAL 14. CONFIGURATION: LOCAL/VIA GATEWAY OVER THE NETWORK 	
<p><u>ITEM NO. 100</u></p> <p><u>Supervisory Support – QTY = 01 AU</u></p>	

SPECIAL TERMS AND CONDITIONS: (FOR ALL THE ITEMS):

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.

1.The wireless field devices must be microprocessor based with the capability to perform basic sensor diagnostics. Wireless transmitters should include an LCD that displays the process variable, device tag, battery

life/voltage, network identifier and status etc. Transmitter transmit rate shall be user selectable and configurable between 1 sec to 60 sec or more. Every field device can have interval time different from other device.

2. Vendor to offer the instrument meeting the functional requirements detailed under specification of the materials and shall provide necessary technical catalogues/specification sheets for the quoted items along with the bid.

3. Wireless network shall be a two-way communication link among intelligent measurement and control devices operating in the 2.4 GHz Industrial, Scientific and Medical (ISM) radio band conforming to IEEE 802.15.4. Network shall be purely wireless and no cable work will be allowed at field to complete the network and proper functioning of field devices.

4. Wireless gateways will enable communication between host applications and wireless field devices in the wireless network. The system shall be scalable up to minimum 50 numbers of measuring device without adding Gateway at later stage and shall be expendable to accommodate future smart wireless field instrument.

5. Wireless network shall be a secure and robust and password protected. The wireless devices shall be located and installed in such a way that continuous communication with gateway is established. Vendor shall ensure Redundant path of communication from each device to Gateway. The communication must have self-healing capability and after failure of some established communication, system must automatically re-establish communication via the redundant paths and vice versa and there should not be any requirement of human interference for the same.

6. Wireless gateway shall be provided with the network manager for configuration of the network, scheduling communication between wireless devices, device communication routing and network diagnostics to monitor and report the health of the wireless network.

7. Bidder shall provide necessary network architecture and interface details of the wireless system.

8. The system shall have the security to communicate only with the device configured and avoid interference from other wireless devices around which are not configured.

9. Documents:

a) Bidder shall provide minimum 01 set of necessary documentation for installation, maintenance and troubleshooting of all the devices along with the materials. Documentation shall be in English only with both softcopy and hardcopy.

b) Calibration Certificate, IP protection certificate of transmitters/devices to be provided along with the materials.

c) Security of the network should comply basic industrial standards, necessary documents to be provided along with the bid.

10. Items to be used in Hazardous area:

a) 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.

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.

c) 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.)

11. Existing SCADA connectivity:

There should be a provision of serial MODBUS communication from the system (from the PC/HMI/ Gateway) at the control room). Vendor to provide the MODBUS address of the parameters measured (for onward configuration of the same in SCADA by OIL)

12. One set any special Tools/Tackles/Hardware/Software/Cable required for configurations and calibration of field devices shall be supplied by vendor.

13. Warranty: For the supplied items, vendor should provide minimum warranty of 12 months from the date of commissioning or 18 months from the date of supply - whichever is earlier.

14. License for all the 'Licensed Software' to be provided along with the materials. All the equipment, accessories, software supplied should be compatible to each other and work as a system.

15. Successful commissioning of the wireless transmitters along with gateway, repeater and other accessories is in bidder's scope. Bidder will design the wireless network for the transmitters, gateway & adopter etc. and must quote for all the items under this tender, so that bidder's design of the system to operate successfully remain intact.

16. Supervision for installation and commissioning:

Bidder shall provide supervisory services during installation and commissioning of the transmitters, gateways, repeaters etc as a wireless system including configuring & connecting the gateway, PC/HMI, LCD display unit with transmitters and to ensure the successful commissioning of the whole system. OIL will arrange the required tubing and fittings for process connection for the transmitters; carry out the physical installation of the transmitters (including the process connection of the transmitter) and other accessories under the supervision/ as per instruction of the bidder. Bidder to quote for the job separately.

17. Since successful commissioning of the system is in bidder's scope, bidder should visit the site to verify the site of installation of the wireless transmitters, gateway etc. and to explore the requirement of all necessary accessories to make the system functional. OIL will provide necessary assistance to obtain the permission for such visit and depute concerned engineer for such visit at site. However, cost of such visit (to & fro fare, lodging etc. for the visiting personnel) will be on Bidder's account.

18. The offer should be submitted in a tabular form against NIT specifications and indicating deviation if any. Offer in any other form will not be acceptable.

19. All the items will be procured from the same source and evaluation will be done accordingly.

NOTE:

Bidders should submit their bids (preferably in tabular form) explicitly mentioning compliance / non compliance to all the terms and conditions of the NIT.

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Technical Bid Checklist**Annexure-EEE**

Tender No.			
Bidder's Name :			
BEC / TENDER REQUIREMENTS		Compliance by Bidder	
SL. NO.		Indicate 'Confirmed' / 'Not Confirmed' / Not applicable	Indicate Corresponding page ref. of unpriced bid or Comments
1	Confirm that validity has been offered as per NIT.		
2	Confirm that Bid Security / Earnest Money has been submitted as per NIT (Wherever Applicable) ?		
3	Confirm that you shall submit Performance security (in the event of placement of order) (Wherever Applicable) ?		
4	Confirm that duly signed Integrity Pact has been submitted as per NIT (Wherever Applicable) ?		
5	Confirm that you have submitted documentary evidence of successfully executing one Purchase order as stipulated in NIT in any of the preceding 5 financial years (*)		
6	Confirm that you have submitted Balance Sheet and Profit and Loss Account of any of the preceding 3 financial years certified by a chartered accountant.		
7	Confirm that the bid has been signed using Class 3 digital certificate with Organisation's Name as per NIT.		
8	Confirm that you have not taken any exception/deviations to the NIT .		

NOTE: Please fill up the greyed cells only.

(*) Purchase Orders along with copies of any of the documents in respect of satisfactory execution of the Purchase Orders should be submitted – (i) Satisfactory Inspection Report (OR) (ii) Satisfactory Supply Completion / Installation Report (OR) (iii) Consignee Receipted Delivery Challans (OR) (iv) Central Excise Gate Pass / Tax , Invoices issued under relevant rules of Central Excise / VAT (OR) (v) any other documentary evidence that can substantiate the satisfactory execution of the purchase order cited above.

Response Sheet**Annexure-FFF**

Tender No.
Bidders Name

Bidders Response Sheet

SI No.	Description	Remarks
1	Place of Despatch	
2	Whether Freight charges have been included in your quoted prices	
3	Whether Insurance charges have been included in your quoted prices	
4	Make of quoted Product	
5	Offered Validity of Bid as per NIT	
6	Bid Security Submitted (if applicable)	
6	Details of Bid Security Submitted to OIL (if applicable)	
	a) Bid Security Amount (In Rs):	
	b) Bid Security Valid upto:	
7	Whether you shall submit Performance Security in the event of placement of order on you (if applicable)	
8	Integrity Pact Submitted (if applicable)	
9	Whether you have submitted documentary evidence of successfully executing one Purchase order as stipulated in NIT in any of the preceding 5 financial years (*)	
10	Whether you have submitted Balance Sheet and Profit and Loss Account of any of the preceding 3 financial years certified by a chartered accountant.	
11	Delivery Period in weeks from placement of order	
12	Complied to Payment terms of NIT (if applicable) otherwise to Standard Payment Terms of OIL or not.	
13	If bidder is MSE whether you have quoted your own product	
14	If Bid security submitted as Bank Guarantee, Name and Full Address of Issuing Bank including Telephone, Fax Nos and Email id of branch manager	

NOTE: Please fill up the greyed cells only.

(*) Purchase Orders along with copies of any of the documents in respect of satisfactory execution of the Purchase Orders should be submitted – (i) Satisfactory Inspection Report (OR) (ii) Satisfactory Supply Completion / Installation Report (OR) (iii) Consignee Receipted Delivery Challans (OR) (iv) Central Excise Gate Pass / Tax , Invoices issued under relevant rules of Central Excise / VAT (OR) (v) any other documentary evidence that can substantiate the satisfactory

**(TO BE FILLED UP BY ALL THE VENDOR IN THEIR OWN LETTER HEAD)
(ALL FIELDS ARE MANDATORY)**

Tender No. :.....
Name of Beneficiary :M/s.....
Vendor Code :.....
Address :.....
.....
Phone No. (Land Line) :.....
Mobile No. :.....
E-mail address :.....
Bank Account No. (Minimum
Eleven Digit No.) :.....
Bank Name :.....
Branch :.....
Complete Address of your
Bank :.....
IFSC Code of your Bank
a) RTGS :.....
b) NEFT :.....
PAN :.....
VAT Registration No. :.....
CST Registration No. :.....
Service Tax Registration No. :.....
Provident Fund Registration :.....

I/We confirm and agree that all payments due to me/us from Oil India Limited can be remitted to our above mentioned account directly and we shall not hold Oil India Limited responsible if the amount due from Oil India Limited is remitted to wrong account due to incorrect details furnished by us.

Office Seal

.....
Signature of Vendor

Counter Signed by Banker:
Seal of Bank:

Enclosure: Self attested photocopies of the following documents-

- 1) PAN Card
- 2) VAT Registration Certificate
- 3) Service Tax Registration
- 4) CST Registration
- 5) Provident Registration Certificate
- 6) Cancelled cheque of the bank account mentioned above (in original).
- 7) Bank Statement not older than 15 days on the date of submission.