

PORTABLE FLUE GAS ANALYZER

1 PORTABLE FLUE GAS ANALYZER, Microprocessor based complete with following specification:

2 Specifications :

2.01	Display	: LCD alphanumeric display.
2.02	Sampling	: Automatic cycle by inbuilt pump.
2.03	Gas Probe	: Detachable with filter & 2 m hose.
2.04	Temp. probe	: K Type Thermocouple 1 meter long S.S. Tube.
2.05	Working Temp.	: 5 to 50 °C.
2.06	Calibration	: Self-calibration for Oxygen.
2.07	Power	: Inbuilt maintenance free rechargeable battery Lead-Acid type recharged on 220 V mains supply. Indication Provided. For low battery.
2.08	Key Controls	: Fully Menu Driven: Sample, View, Download, Print, Day & Time Change & User-fuel.
2.09	User Fuel Programmable	: By users for non-conventional fuels under certain conditions.
2.1	Types of Fuel	: Natural Gas, Light Oil, Heavy Oil, Anthracite, Coke, Butane, LPH, Coal & User Fuel.
2.11	Sensor Response	: Less than 60 seconds.
2.12	Computer Interface	: RS 232 port/ Equivalent for downloading to a computer
2.13	Printer Output	: Port for use with external printer.
2.14	Carrying Case	: Suitable for outdoor Use

3 Measured Parameters			Microprocessor Calculated values of	
Parameter	Range	Resolution	Accuracy	
3.01	Oxygen 0 – 25 %	0.10%	± 2 %	% Combustion efficiency, net & gross
3.02	Temperature 0 – 500 °C	1 °C	± 2 %	± 2 % Carbon dioxide
3.03	CO 0 – 2 %	10 ppm	± 5 %	% Excess air
3.04	SO2 0 – 2000 ppm	1 ppm	± 5 %	
3.05	NO 0 – 2000 ppm	1 ppm	± 5 %	
3.06	NO2 0 – 2000 ppm	1 ppm	± 5 %	
3.07	Extra long High Temperature probe of 1100 °C			
4	Equipment should be supplied with instruction manual (including maintenance).			
5	General Terms & Conditions :			
5.1	Document	: One hard copy of O&M Manual in English language giving complete technical information for operation and maintenance of the equipment including circuit diagram shall be supplied.		
5.2	Installation and Commissioning	: The supplier shall install & commission the equipment at site. Supplier should demonstrate the performance of the Equipment and all its accessories to ensure compliance with complete specifications & parameters quoted by them to the satisfaction of BHEL/end user.		
5.3	Guarantee/ Warranty	Failing to comply to the Installation and Commissioning clause, the offer will be rejected straightaway. : The equipments shall be guaranteed / warranted for satisfactory performance for a period of 36 months from the date of dispatch or 24 months from the date of commissioning, whichever is earlier.		
5.4	Packing & Dispatch	Failing to comply to the Guarantee clause, the offer will be rejected straightaway. The equipment / accessories shall be packed in a suitable water proof vibration packing box capable of bearing air and road transit hazards.		
5.5	Packing box shall be properly identified and marked with BHEL's (India) Purchase Order Number. Also, "PCRI HWR" and Name of the Item/Items should be written in bold letters on all four sides of Packing box.	:		

6 Special Instructions:

- 6.1** Apart from customer specified vendor for each individual item, additional vendors offering items of “**Reputed Make**” are also acceptable subject to customer approval. The vendor should fulfill any one of the following condition;
- (a)** “Vendor have supplied the item for at least one Thermal Power Plant of 500 MW or above capacity”. **OR**
 - (b)** “Offered item has completed one year of commercial operation and the equipment supplied should have completed the contractual guarantee period”. **OR**
 - (c)** Vendor have supplied the same equipment as required against our enquiry to any power plant.
- 6.2** Vendor to provide documentary evidence like PO copy, end user certificate / commissioning report etc. in support of fulfilling either of the above criteria for customer review.



Annexure-2

Pre-Qualification Requirements (PQR)

1. The Bidder should have Annual Turnover (T.O.) of minimum Rs. 3.70 Lac/year (Rs. Three Lacs Seventy Thousands per year) in last 03 (Three) years i.e (2018-19, 2019-20 & 2020-21). The self-attested copies of supporting document should be submitted as proof.
2. The Bidder should have supplied the item Portable Flue Gas Analyser in last 03 years from the Bid Opening date. The self-attested copies of Purchase Orders, placed on them & proof of supply should be attached.
3. In case of Agent/Reseller/Traders, offering equipment from OEM, Tender specific authorization letter required from the manufacturer, clearly indicating contact details like Name, E-mail & address of manufacturer.
4. Detailed printed Catalogue/Technical Data Sheet must be provided along with the offer submitted.