EASTERN REFINERY LIMITED

NORTH PATENGA, CHATTOGRAM

Safety Department

Technical Specification for "Portable Multi-gas Detector"

1. Detector type : Intrinsically safe

2. Use : To detect combustible/explosive & Toxic gases.

3. Use area : Hazardous area zone 0, 1

4. Ingress protection : IP 66/67

5. Instrument type : Portable hand hold

6. Gas Type & sensor

Specification

Sl.	Gas Name	Measuring Range	Resolution
a.	Combustible/Explosive	0-100 % LEL	1 % LEL
b.	CO (ppm)	0-1000 ppm	1 ppm
c.	O ₂ (in % vol)	0-30% vol	0.1% vol
d.	H ₂ S	0-200 ppm	1 ppm

7. Operating Temperature : -20° C to $+50^{\circ}$ C

8. Humidity : 10% to 100% RH (non-condensing)

9. Response time : <10 ms

10. Alarms and Type : Visual, vibration, audible (95 db); Low, High, TWA, STEL, OL

(Over Limit), Battery Low

11. Self test : Activated detector automatically performs one internal

diagnostic test & set to zero for off.

12. Calibration : Simple auto calibration procedure.

13. Display : LCD display.

14. Sampling pump System : In-built sampling pump with all ancillaries & sampling

accessories for up to 75 feet (minimum)

15. Battery type : Intrinsically safe explosion proof Lithium ion rechargeable

battery.

16. Power Supply : In position Battery charger with single phase adopter (220±20

Volt, 50 HZ).

17. Accessories : Standard consumable parts or special tools for maintenance (if

necessary)

18. Warranty : Minimum 1 (one) year.

19. Country of Origin : USA, Mexico, Canada, Japan, EU, UK, Singapore.

20. Certification : UL, IECEx, ATEX or equivalent

Terms and Conditions:

- a. Supplier must have servicing, training, trouble shooting & calibration facilities in Chattogram /Dhaka and should be attended as per our requirement (address should be provided with offer)
- b. Initial commissioning & calibration (if required) must be done by the supplier.
- c. Country of origin to be mentioned.
- d. Manufacturer authorization should be provided.
- e. Apparatus should be brand new (not before 2023).
- f. UL, IECEx, ATEX or equivalent Certification should be provided with offer.
- g. Catalogue/brochure (in English) and Price list of spare parts to be submitted with the offer.
- h. Calibration rate of each Gas detector to be submitted for next 5 years.
- i. Pre-delivery check should be done by Safety Department of ERL.
- j. Delivery Period: 60 (sixty) days after receiving Purchase Order.
- k. Total price should be inclusive of Tax, Vat as applicable.