

Technical Specification with Trial Directives of Multi Gas Detector FPD

SN	Specification	Trial Directives
1.	Chemical Agent detector based on Flame spectrometry detection principle with minimum interferences.	Firm to submit OEM certificate on GeM along with Bid documents
2.	Type: Handheld	BOO to physically check this parameter
3.	Principle firm manufactures must have IPR on complete instrument.	Firm to submit OEM certificate on GeM along with Bid documents
4.	Instrument should be capable of sensing: - a. All nerve agents including G and V agents. b. Blister agents including Lewisites, HD, HL. c. Blood and vomiting agents. d. Capability to detect all CW agents listed in Schedule 1,2,3 of the OPCW list, including more than 96% of the 54 precursors agents listed on the Precursors list, as determined by OPCW. (Schedule 1, 2 & 3 of OPCW are attached as Appendix 'A', 'B' & 'C' respectively) e. Capability to detect NTA's and impure/imperfect formulations of the above- mentioned agents, while in a state of vapor or aerosolized solid/liquid. f. In addition, it should also detect (60%) of the common Toxic Industrial Chemicals (TICs), Toxic Industrial Materials (TIMs) as in the NATO International Task Force ITF-40 standard. g. Capable of Simultaneous detection of CW agents.	1. For Pt. 4a, 4b, 4c: Firm to submit Lab test Report from International Lab/Govt/NABL accredited lab/OEM Factory Acceptance Test Report. 2. For pt. 4d,.4e, 4f, 4g: Firm to submit OEM certificate Above documents to be submitted by the firm on GeM along with Bid documents
5.	Detection Sensitivities a) Nerve Agents & VX: 0.05 mg/m³ (GA-Tabun, GB-Sarin, GD-Soman, VX) b) Blister Agents: 0.5 mg/m³ (HD) & and 1.5 mg/m³ (Lewisite) c) Blood Agents: 0.5 mg/m³ (H, HD, HLJ) d) Chocking Agents: - 10mg/m³	Firm to submit Lab test Report from International Lab/Govt/NABL accredited lab/OEM Factory Acceptance Test Report (Firm to submit above documents on GeM along bid documents)
6.	Response time must be < 60 seconds at the above stated concentration.	Firm to submit Lab test Report from International Lab/Govt/NABL accredited lab/OEM Factory Acceptance Test Report (Firm to submit above documents on GeM along bid documents)

7.	Recovery time must be < 03 Minutes at the above stated concentration.	Firm to submit Lab test Report from International Lab/Govt/NABL accredited lab/OEM Factory Acceptance Test Report (Firm to submit above documents on GeM along bid documents)
8.	It should be capable of detecting vapour samples from agents present in the atmosphere in the form of solid, liquid, vapors or aerosol(with scraper accessory for solid sample collection)	BOO to physically verify the accessory in the kit.
9.	Time to be ready : < 05 minutes after switch on.	BOO to physically verify the parameter.
10.	Must be capable of providing visual alarms for agent class (Nerve, Blister, Blood agents).	BOO to physically verify visual alarms with simulants.
11.	Must be capable to provide audio and visual alarm with LCD/LED indications for increasing concentrations with lowest LED indication at the concentration level defined in Point 05.	BOO to physically verify the parameter.
12.	The chemical detector shall be capable of having workable memory/data logging and has provision for data transfer/networking with communication links such as RS-232 / RS-422.	Firm to submit OEM certificate on GeM along with Bid documents
13.	The chemical agent detector must be compatible to store the data equivalent to minimum 07 days.	Firm to submit OEM certificate on GeM along with Bid documents
14.	Instrument not to give false alarm in continuous operation in normal Indian environment.	Firm to submit OEM certificate on GeM along with Bid documents
15.	Interferons: - Instrument should be able to detect CW agents in the presence of common interferons like screening smokes, smoke of wood, paper plastic, PVC, Incendiary gases, from explosives, engine exhaust and fuel.	Firm to submit OEM certificate on GeM along with Bid documents
16.	Storage Temperature -30 to +70 degree C	Firm to submit OEM certificate on GeM along with Bid documents
17.	Operating Temperature -20 to +50 degree C	Firm to submit OEM certificate on GeM along with Bid documents
18.	IP Rating: IP54 or better.	Firm to submit OEM certificate on GeM along with Bid documents
19.	Temperature and environmental test must meet JSS55555/ MIL-46IE/810F or other equivalent standards for the instrument in semi protected conditions.	Firm to submit OEM certificate on GeM along with Bid documents
20.	Input power must be 6 to 12 V DC battery rechargeable.	Firm to submit OEM certificate on GeM along with Bid documents
21.	Instrument must able to run for minimum 06 hrs continuously with a single battery unit.	Firm to submit OEM certificate on GeM along with Bid documents
22.	The weight of instrument must< 2.5 Kgs (with H2 Storage Device & Battery)	BOO to physically verify the parameter.

23.	Maintenance must be modular, with fitment of consumable from outside, without opening complete instrument enclosure.	BOO to physically verify the parameter.
24.	Working life minimum 10 years.	Firm to submit OEM certificate on GeM along with Bid documents
25.	Maintenance must be minimum in specified storage conditions (As mentioned in storage temperature)	Firm to submit OEM certificate on GeM along with Bid documents
26.	Spare part list, Instructions for user and any other relevant documents must be provided.	BOO to physically check the requirements
27.	Must provide warranty of at least 01 year and maintenance support for 10 Years.	Firm to submit OEM certificate on GeM along with Bid documents
28.	Must provide conformity certificate by OEM /Authorized lab to support the compliance of all above technical specifications statement wherever applicable.	Firm to submit OEM certificate on GeM along with Bid documents
29.	Accessories- Minimum two Simulants of 100 ml each to be provided with equipment for training purpose.	BOO to physically verify the parameter.

(Signature)