

No. P/604/2013(389)/NSG
Government of India/भारत सरकार
Ministry of Home Affairs/गृह मंत्रालय
Police Modernization Division/पुलिस आधुनिकीकरण प्रभाग
Prov.I Desk/संभरण-I डेस्क

Jaisalmer House,
26, Mansingh Road, New Delhi

To,

DsG: AR (through LOAR), BSF, CISF, CRPF, ITBP, SSB, NSG & BPR&D.

Subject : Qualitative Requirements and Trial Directives of Explosive Trace Detector, Desktop version.

Sir,

The Qualitative Requirements and Trial Directives of Explosive Trace Detector, Desktop version as per Annexure-I and Annexure-II respectively have been accepted by the Competent Authority in MHA.

2. The CAPFs concerned will be accountable for correctness of the QRs/Trial Directives.
3. Henceforth, all the CAPFs should procure the above item required by them strictly as per the laid down Technical Specifications/QRs.

Encl: as above

Yours faithfully,


(Manohar N. Sukote)

Under Secretary to the Govt. of India

Tel: 23381278

11.8.2015

Copy forwarded for necessary action to :

SO (IT), MHA : It is requested to host the QRs and Trial Directives (soft copy attached) on the MHA website (under the page of Organizational Set up- Police Modernization Division- Qualitative Requirement under BDDS Equipments.

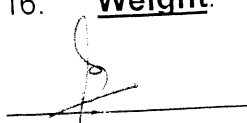
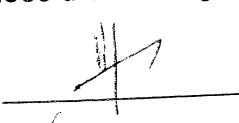

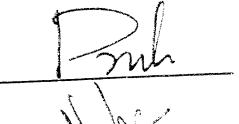
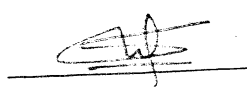
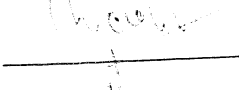
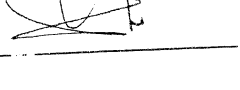

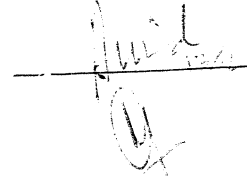
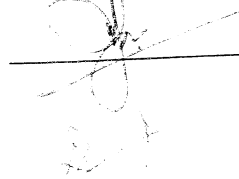
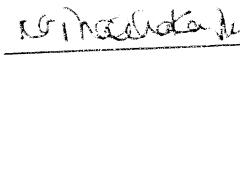
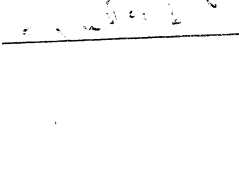

(R. K. Soni)

Section Officer (Prov-I)

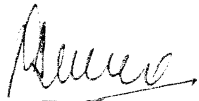
Copy to: DDG (Procurement), MHA.

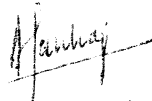
**QR/TECHNICAL SPECIFICATION FOR EXPLOSIVE TRACE DETECTOR (ETD)
DESKTOP VERSION (DT)**

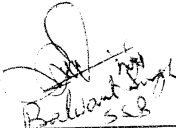
1. **Introduction.** The Explosive Trace Detector should be capable to detect traces of Explosives and Narcotics.
2. **Detection Capacity.** The equipment should be able to detect explosives such as RDX, PETN, NG, TNT, HMX, TATP and other explosives and should have the capability of detection of narcotics like Cocaine, Heroin, Amphetamine, Methamphetamine, MDA, THC and others.
3. **Detection Technology.** Based on Ion Trap Mobility Spectrometry/ Ion Mobility Spectrometry/ Mass Spectrometry/ Energetic Materials Detection Technology or better.
4. **Sensitivity.** Nanogram level
5. **Selectivity.** $\leq 2\%$ typical false alarm rate and should not respond to non-explosive/Non Narcotic substances.
6. **Carrier Gas.** Detector system should not require the use of carrier gas.
7. **EMI.** Operation should not be affected by Electromagnetic interference of other electrical/electronic devices.
8. **Indication.** Both visual (through TFT-LCD display) and audio alarm signal.
9. **Analysis Time.** <20 sec per sample.
10. **Re-Calibration.** Not more than 2 minutes.
11. **Calibration.** Automatic calibration.
12. **Sample Collection.** Surface wipe (Optional Sample collection unit as per user requirement).
13. **Power (AC Input).** 220 – 240 V AC,50Hz.
14. **Battery Back up.** Optional. If required to be specified by the user.
15. **Detection mode.** Explosives Only, Narcotics only, Explosives/Narcotics Simultaneously.
16. **Weight.** Less than 30 Kg.


			
			
			

- 17. Operating Temperature. 0 degree to +40 degree C.
- 18. Relative humidity. 0 to 95% non-condensing.
- 19. Safety Factor and Regulations. Should meet National Safety Regulations .
- 20. Data Transfer Capability. Should allow data transfer through USB and Ethernet port.
- 21. In Built/On Board Printer. The Explosive Trace Detector should have in built/onboard printer.



 (A.K. SHUKLA AC)
 SSP



 (Abhishek Ranjan)
 DC, CRPF



 Rajiv Singh
 SSB



 PRADEEP MINHAS
 AERA, DGQA (C)


(ANAL) GCLPROV, HANSG

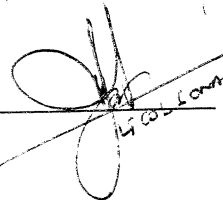

 Shivpal Singh, Ael
 22 ITBP

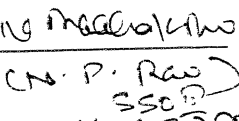

 R. SHARAN
 LT COL
 ASSAM RIFLES.

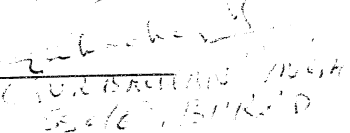

 M. VARMA
 MAJ TRG CENTRE
 NSDC, NSG


 M. VARMA
 MAJ TRG CENTRE
 NSDC, NSG



 ANAND SINGH
 EDU, NSG


 C.N. P. Rao
 SSB


 C.N. P. Rao
 SSB
 DGA (MSB) (C) -


 C.N. P. Rao
 SSB (C) (MSB) (C)

Approved / Not Approved



 (J N Choudhury)
 DG, NSG

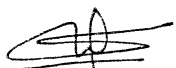
TRIAL DIRECTIVES FOR EXPLOSIVE TRACE DETECTOR (ETD)
DESKTOP VERSION (DT)

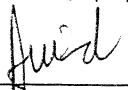
<u>Ser No</u>	<u>QR/Technical Specifications of ETD</u>	<u>Trials Methodology</u>
1.	<u>Introduction.</u> The Explosive Trace Detector should be capable to detect traces of Explosives and Narcotics.	Compliance certificate along with Lab Test Reports from national / international accredited lab to be provided by the firm and the parameter of the QR also to be checked physically by the BOO by using available samples of explosives and/or narcotics.
2.	<u>Detection Capacity.</u> The equipment should be able to detect explosives such as RDX, PETN, NG, TNT, HMX, TATP and other explosives and should have the capability of detection of narcotics like Cocaine, Heroin, Amphetamine, Methamphetamine, MDA, THC and others.	
3.	<u>Detection Technology.</u> Based on Ion Trap Mobility Spectrometry/Ion Mobility Spectrometry/ Mass Spectrometry/ Energetic Materials Detection Technology or better.	Compliance certificate along with Lab Test Reports from national / international accredited lab to be provided by the firm.
4.	<u>Sensitivity.</u> Nanogram Level	-do-
5.	<u>Selectivity.</u> $\leq 2\%$ typical false alarm rate and should not respond to non- explosive substances.	Minimum fifty samples of explosives/narcotics and non explosive substances will be used. The typical alarm rate should be $\leq 2\%$.
6.	<u>Carrier Gas.</u> Detector system should not require the use of carrier gas.	Compliance certificate from national/international accredited lab.
7.	<u>EMI.</u> Operation should not be affected by Electromagnetic interference of other electrical/electronic devices.	-do-
8.	<u>Indication.</u> Both visual (through TFT-LCD display) and audio alarm signal.	To be checked physically by the BOO.
9.	<u>Warm up time.</u> Maximum 30 minutes.	-do-
10.	<u>Analysis Time.</u> < 20 sec per sample.	-do-

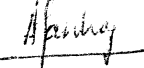
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<u>Ser No</u>	<u>Technical Specifications of ETD</u>	<u>Trials Directives</u>
11.	<u>Re-Calibration</u> . Not more than 2 minutes.	To be checked physically by the BOO.
12.	<u>Calibration</u> . Automatic calibration.	-do-
13.	<u>Sample Collection</u> . Surface wipe (Optional Sample collection unit as per user requirement).	-do-
14.	<u>Power (AC Input)</u> . 220 – 240 V AC ,50Hz	-do-
15.	<u>Detection mode</u> . Explosives Only, Narcotics only, Explosives/Narcotics Simultaneously.	-do-
16.	<u>Weight</u> . Less than 30 Kg.	-do-
17.	<u>Operation Temperature</u> . 0 degree to +40 degree C.	Compliance certificate from national/international accredited lab.
18.	<u>Relative humidity</u> . 0 to 95% non-condensing.	-do-
19.	<u>Safety Factor and Regulations</u> . Should meet National Safety Regulations.	Undertaking to be provided by the OEM/Firm/Vendor.
20.	<u>Data Transfer Capability</u> . Should allow data transfer through USB and Ethernet port.	To be checked physically by the BOO.
21.	<u>In Built/On Board Printer</u> . The Explosive Trace Detector should have in built/onboard printer.	-do-



 A.K. SHUKLA CISEJ
 AC
 NSG

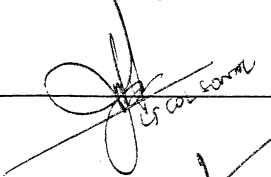

 Shivpal Singh, Ael GD
 22 Bn ITBP



 MAJ ARVIND SINGH
 BDU, NSG

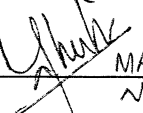

 (Abhishek Ranjan)
 DC, CRPF

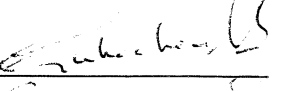

 (Balwant Singh)
 Inspector SSB


 R. SHARAM
 LT COL
 ARAM RIFLES


 N. Pradeep Kumar
 (N. P. Rao)
 SSO
 DQA (ms BCEL)


 PRADEEP MINHAS
 AE(QA), DQA(L)


 MAJ M. VARMA
 NBDC, NSG.


 SUBHACHAN SINGH
 SSC(e), BPRD

Approved / Not Approved


 (J N Choudhury)
 DG, NSG