S.no	Parameter	Technical Specification
1	Purpose	For carrying out non-intrusive inspection of the articles like personal belongings, vehicles, packaging and structures in search of organic or inorganic materials that may be involuntarily or intentionally hidden.
2	Technology	Backscatter X-Ray Imaging Technology (should not contain live radioactive source)
3	X-Ray Source	120 keV X-Ray tube or better.
4	Scanning Speed	i. Should be able to scan at the speed of 5 Inch per second or better.
		ii. The system operator shall be able to view scanned images in real time.
5	Size and Operational weight	Should be Hand Held with weight maximum 6 Kg including battery.
6	Dimensions	Length: 25 cm ± 5% Width: 35 cm ± 5% Height: 25 cm ± 5%
6	Design	i. Should be self contained, with no required extra set-up and consumables, apart from the battery.
		ii. Compact, Hand Held, Easy to carry and single person operable.
7	Display	i. Inbuilt LCD/LED Touch Screen Interface Display of at least 7 inch active High Resolution Color or better.
		ii. Colour display 1920x1080 pixels.
		iii. Should have front integrated camera for recording object being scanned.
9	Camera	5 MP colour front facing or better
10	Data Management/ Storage Capacity	Internal Storage should have minimum 256 GB or better
11	Image Format	JPEG/PNG/BMP or any other format that can be opened in any operating system.
	Power Supply	i. AC:220 240 V AC Mains, 50/60Hz frequency.
12		ii. DC: with rechargeable batteries (minimum 06 hours stand by back up or better) One set of extra batteries should be provided.
13	Environmental working condition	Temperature: Operating: -20°C to + 60°C, Storage: -30°C to 60°C (should be able to be operated in rain, snow, high altitudes up to 4500 mtrs)Humidity : Must work smoothly up to 95% non- condensing humid conditions
		EMI: Protected from Electromagnetic Interference.

Hand Held Backscatter X-Ray Imaging System

14	Radiation Safety	i. Should be radiation safe and should comply all applicable health and safety regulations for X-Ray systems.
		ii. There should be built-in audio or visual status indicators as well as X-Ray shielding to prevent the user from inadvertent X-Ray emission.
		iii. Should preferably have hardware time out option.
		iv. Mandatory Atomic Energy Regulatory Board, Govt.of India approval certificate.
		V. Single or Dual Trigger Modes
		X-Ray indicator Lights
		X-Ray beam Arming inter locks
		Dual X-Ray Demarcation Lasers
15	Standard Computer Connectivity and software update	 Should comply for the following standard features: Pseudo Colour Image recall Date and Time display Search Indicator Search Indicator Black and White image Variable zoom 4x or more Penetration minimum 25 mm steel or better (with equivalent density Aluminium, plastic and wood) viii.Laser indication for detecting outline of the area under inspection. System compatibility to use with its own transmission panel in future. Detachable battery system. Dual flash light for operation in dark. Option for computer connectivity (Using USB/Wi-Fi/Bluetooth ect) download/export images undating software
		 ect. Should be available. Internet connectivity facility through NIC cloud storage- e.g. Meghraj ii. The firm will provide software upgrades free of cost during warranty period as and when they released. Machine should support easy implementation of software upgradation.
17	Warranty	Offer must include minimum three years comprehensive warranty from the date of installation and acceptance. During Warranty period supplier should replace the faulty components and repair/replace faulty unit free of cost within three working days after reporting of fault by the user.
18	Packaging	i. Hard and soft carry-on baggage for transportation of the product.
		ii. The baggage should be designed to protect the product from travelling shocks and vibrations.
19	Support	Complimentary software update training services.
20	Demonstration	Practical demonstration of the quoted equipment is required

		for the verification of technical parameter claimed for the product by the firm. During the demonstration the equipment will be evaluated by the board of officer's of technical evaluation committee (TEC) in presence of representative of the bidder. The same will be tested at the time of delivery for technical acceptance.
21	Other terms and Conditions	i) Technical evaluation will be carried out at Om Niwas Security HQ Lkw by the board of officers of technical evaluation committee, however the store shall be accepted only after getting successful testing of the equipment on the specifications and trial directive framed by Security HQ .?
		ii) During technical Evaluation, if there are minor variations in offered model from the desired technical specification, but its performance is found to be fulfilling the requirement of Security HQ it may be taken into consideration by the technical evaluation committee with proper and logical justification.
		iii) A test protocol will be used for technical Evaluation of the equipment and the same will be discussed with vendors on a suitable date before starting evaluation. The same will be used for evaluating equipment offered by the vendors.
		iv) Firm will be liable to product the quoted model for Technical Evaluation within two weeks as and when desired by Security HQ. , Otherwise their offer may be rejected.
		v) Pre-Delivery Inspection (PDI) will be done at the place of delivery.
		vi) Operating and maintenance manual should be provided with each unit.
		vii) List of deliverables, must be attached with technical bid.
		viii) After supply, the firm should provide free training for 02 days to Security HQ. Lkw up to their satisfaction level on the use of equipment as well as in house maintenance of the equipment.
		ix) The firm should undertake to provide maintenance/spare support for a period of at least 8 to 10 years including warranty period of three years.
		 x) After sales services and service centre of the equipment must be available in any part of India preferably in Lkw & Delhi with availability of essential spares. A certificate in this regard must be submitted to technical Evaluation Committee during evaluation of the product.
		xi) Also for those technical specification which cannot be verified practically the vendor will provide OEM undertaking as well as test report from a international accredited laboratory.