## **Schedule of Quantity**

S. No	Description	Qty	Unit
1	Thermal imaging cameras	1	No.
2	Rechargeable battery pack	2	No.
3	Truck mounted battery charger	1	No.
4	Retractable lanyard	1	No.
5	Carry case/ Soft bag	1	No.

## **Specifications**

Sr No.	Requirement	
1.	The thermal camera should be handheld and easily transferable between fire fighters without the removal	
	of personal protective clothing.	
2.	The camera model should be certified the National Fire Protection Association NFPA 1801:2021Standards	
	on thermal imagers for the fire services OEM Should provide certification related to water and dust ingress protection.	
3.	The camera shall remain operational after submersion in water as per IP67 (IEC 60529)water ingress test.	
4.	The camera shall have image frequency 60hz or better& 30mk thermal sensitivity or better.	
5.	The thermal camera should be light weight weighting not more than 1100gms +50gm (complete with battery pack).	
6.	The camera shall be ergonomically designed and the outer casing be manufactured from Fire/ flame	
	resistant tough material like Radel 5100, polyphenylsulfone (PPSU) or equivalent.	
7.	The camera shall be drop resistant as per IEC60068-2-31& Shock resistant as per IEC 60068-2-27	
8.	The camera shall use detector capable of sensing and imaging infrared in 8-14 micron spectral range.	
9.	The camera shall use focal plane array (uncooled microbolometer) detector of 320x240pixels or higher resolution.	
10.	The camera should be automatic in nature without requiring need for adjustment/focus setting etc.	
11.	The camera shall have option of germanium lens for long term serviceability and facilitating long life	
	maintenance serviceability.	
12.	The camera should be able to start promptly not more than <20 sec and <5 seconds in sleep mode.	
13.	The camera should be able to operate for 4 hours using standard lithium ion rechargeable battery pack.	
	The camera should be supplied with Rechargeable battery capable to operate for minimum 4 hours in ambient temperature of upto 75-90 Fahrenheit.	
14.	The camera shall have a minimum 4 inch LCD Display to allow multiuser viewing.	
15.	The camera should be able to provide clear imagery and resolve detail in the entire fire scene across a	
16	dynamic object temp. range at extremely hot temperature zone of 40 deg. Fahrenheit without white out	
16.	The camera shall have internal flash memory.	
17.	The camera should have image capture facility, capable of taking and scoring minimum or videos files with maximum duration not less than 30 minutes. The stores files shall be of jpeg Format.	
18.	The camera should be supplied with truck mounting charging system.	
19.	The camera should also be supplied with retraceable lanyard so as not to restrict fire fighters movement- when he require to operate fire fighting nozzle.	
20.	The fire fighters must be able to quickly scan and search entire rooms. Therefore a thermal shall have a	
20.	>45 field of view.	
21.	The lens assembly shall be protected by a user replaceable germanium window to provide a fast repair	
~	without the need of return to manufacturer.	
22.	EN60529 For IP67 Confirming that the camera is waterproof to 1m for 30 minutes.	

23.	The camera supplied, including supplied standard accessories shall be warranted for a minimum of 60
	months from the date of delivery to the end user.
24.	The manufacturer shall be accredited to ISO 9001 to ensure all quality, manufacturing and design systems
	are being met.

- **1.** GST & PAN Certificate to be upload with bid.
- **2.** Bidder/ must upload ISO: 9001.45001.37001.
- **3.** Self declaration of Authorized Signatory/Proprietor for accepting all the terms and conditions of bid to be uploaded.
- **4.** Copy of Test Reports to be uploading with bid.
- **5.** The required material to be deliver at PGI, Chandigarh without any extra cost/component.
- **6.** The Bid value is inclusive of all GST/Taxes/duties/cess etc.