

RESTRICTED

BROAD AoN DETAILS FOR PROCUREMENT OF QUANTITY 1000 MULTIPURPOSE THERMAL MONOCULAR SIGHT WITH LASER RANGE FINDER (MTMSL) UNDER BUY (INDIAN) CATEGORY AS PER THE PROVISIONS OF CHAPTER V OF DAP 2020 (FAST TRACK PROCEDURE)

1. **AoN Date.** 02 Nov 2022.
2. **Item Description (Weapon / Equipment / Platform).** Multipurpose Thermal Monocular Sight with Laser Range Finder (MTMSL).
3. **Quantity.** Quantities 1000 Multipurpose Thermal Monocular Sight with Laser Range Finder (MTMSL) with associated accessories.
4. **Categorisation.** Buy (Indian) as per provisions of Chapter V of DAP 2020 Fast Track Procedure.
5. **ORs of the Item.** Broad ORs of the item is as given below :-

<u>S No</u>	<u>Aspect</u>	<u>ORs</u>									
(a)	Weight	Not more than 5kg \pm (plus minus) 20% including Battery/Battery mount.									
(b)	Colour	Non reflective black or Desert brown or White									
(c)	Carriage & Transportation	(i) A soft case for carriage. (ii) A hard case for transportation.									
(d)	Range achieved during moonless night/ adverse weather condition	<table><tr><td></td><td>Detection</td><td>Recognition</td></tr><tr><td>(i) Single Man</td><td>1800m</td><td>500m</td></tr><tr><td>(ii) Vehicle</td><td>2500m</td><td>1000m</td></tr></table>		Detection	Recognition	(i) Single Man	1800m	500m	(ii) Vehicle	2500m	1000m
	Detection	Recognition									
(i) Single Man	1800m	500m									
(ii) Vehicle	2500m	1000m									
(e)	Options	Hand-held and tripod-mounted									
(f)	Power Source	(i) Commercially available rechargeable Lithium Ion or Ni MH or NCMH battery (ii) Should function on 180 volt to 240 volt, 50 Hz AC main and Generator through AC/DC adapter									
<u>Technical Specification</u>											
<u>Integrated Laser Range Finder</u>											
(g)	Measurement range	30m or less to 2500m or better									
(h)	Accuracy	5m or better									
(j)	Eye Safe	Minimum CI-1 with 15335nm									
(k)	Operating temperature	Minus 20 degree C to Plus 45 degree C.									
(l)	Day & Ni Capability	Should have Capability to operate in day and night									

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<u>S No</u>	<u>Aspect</u>	<u>ORs</u>
<u>Optics and Sensors (Day and Night Monocular)</u>		
(m)	Type of TI	Day & Night Monocular with Uncooled Micro bolometer technology
(n)	Storage Capacity	Minimum 32 GB (For storage of recorded data)
(o)	Detector Resolution	FPA (Focal Plan Array) resolution of min 640 x 480 pixel with pitch of \leq (Less than equal to) 17 μ m (micro meter).
(p)	Sensitivity of Detector	NETD (Noise Equivalent Temperature Difference) of uncooled Thermal Detector 40mK (Millikelvin) to 55 mK (Millikelvin).
(q)	Start Up Time	< (Less than) 10 sec from display mode and < (Less than) 30 sec from power of mode.
(r)	Polarity Modes	Minimum two polarity control modes i.e. white HOT and Black Hot
(s)	Ruggedness	It should adhere to JSS-55555 for high and low temp, humidity, vibration, rain and altitude test supported by National/ International accredited lab certificate. Ruggedized container for transportation. Details of test certificate should be provided.
(t)	Pixel Pitch	< (less than equal to) 17 μ m (micro meter)
(u)	Field of View	Maximum 12 degree x 9 degree
(v)	Diopter Adjustment	+ (plus minus) 4D or better
(w)	Magnification/ Zoom	5x / Continuous
(x)	Altitude	Operable up to 15000ft above mean sea level
<u>Accessories</u>		
(y)	Training manual and User Hand Ghosh	Vendor Provided
(z)	Illustrated Spare Parts List	Vendor Provided
(aa)	Power Supply Adapter	01
(ab)	USB Cable/Connector Cable	Minimum 5 meters length
(ac)	Spare Batteries	03

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<u>S No</u>	<u>Aspect</u>	<u>ORs</u>
<u>External Video Display</u>		
(ad)	Screen Size	7 inch
(ae)	Operation	Ruggedised, Battery operated external video display
(af)	Features	The display should feature real time video output and image snap shot and video
<u>Miscellaneous</u>		
(ag)	Warranty	Two years
(ah)	EMC	Military Standards (MIL-STD) Certification issued by Army Centre for Electromagnetics (ACE), Mhow (MP)

6. **Service Life of Equipment.** Not less than 10000 (Ten Thousand) hours or 5 (five) years whichever is earlier with a minimum of 3000 Battery charging cycles from the date of acceptance post JRI.

7. **Special Instructions on Field Demonstration.**

(a) Field demonstration will be conducted post issue of RFP at locations decided by Empowered Committee through BOO for evaluation of operational requirements at No Cost No Commitment Basis. Contract will be signed only after successful evaluation of field demonstration.

(b) EMI/EMC compliance will be on certificates from either NABL /IABL accredited labs.

8. **Special Instructions.** RFP will be uploaded as per the provisions of Chapter V of DAP 2020.

Station : New Delhi

Date : 10 Nov 2022



(Robin Mathew)

Lt Col

Offg Col AC-4 (FRCV &EM)

For DG Armcd Corps

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