

**DIRECTOR GENERAL BORDER SECURITY FORCE**  
**(PROVISIONING DIRECTORATE (ORD SECTION))**

**EXPRESSION OF INTEREST**

Commandant (Ord)  
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The Sub-group of Technical Experts constituted by MHA vide their letter No. IV-24011/12/2011-Prov-I dated 13 Jun 2012, No. IV-24011/12/2011-Prov-I dated 28 Dec 2012 & UO No. IV-24011/12/2011-Prov-I- 350 dated 27 Jun 2013 held its meeting at BSF Headquarters on 24<sup>th</sup> April 2017 and 08<sup>th</sup> June 2017 to formulate the QRs of '**Hand Held Laser Range Finder (Portable)**).

**Qualitative Requirements OF Hand Held Range Finder (Portable)**

S. No.	Parameters	
1	Range	From 50 mtr to 3000 mtr atmosphere visibility - 10 km (target size 1.5x 0.5 mtr)
2	Accuracy	± 5 mtr
3	PRF	One shot every five second or better.
4	Discrimination	50 mtr (Multiple target)
5	False alarm	less than 0¼ percent
6	Laser pulse	Should be eye safe, nominal ocular hazard distance of zero meter
7	Weight	Less than 600 grams
8	Optics	Can be monocular or binocular
9	FOV	6 degree minimum
10	Magnification	4X minimum
11	Dioptr setting	± 4D or better
12	Power supply	Lithium ion battery (commercially available and one set of spare batteries should also be provided along with the equipment.
13	Battery capacity	It should have rechargeable battery inside cover of main equipment. It should run the equipment for eight hours continuously on single charge and be able to take minimum 5000 or more measurement.
14	Digital Magnetic Compass (optional requirement. To be specified by the user at the time of indent) :	
	i.	Inclination Angle measuring capability 45° minimum.
	i.	Declination Angle measuring capability 45° minimum.

	ii.	Inclination Accuracy : $\pm 1^\circ$
	iii.	Azimuth accuracy : $\pm 1^\circ$
	iv.	Compass Calibration : Menu giddied
	vi.	The DMC should be MIL-STD-461E compliant for EMI/EMC
15	Display	
	i	Type - High Brightness LED with auto brightness control
	ii	Resolution - 640 x 480
	iii	Multiple Targets display upto previous 05 targets.
16	Operating temperature	-30 <sup>o</sup> C to + 55 <sup>o</sup> C
17	Storage temperature	-40 <sup>o</sup> C to + 60 <sup>o</sup> C
18	Ruggedness	Should comply Mil Std 810F or better/JSS55555.
19	Standard Accessories with each LRF	
	i	Soft Carrying Case
	ii	Neck Strap
	iii	Hard Transportation/Packing Box
	iv	Lens Cleaning Kit
20	Literature :with each LRF	
	i	Lens Cleaning Kit
	ii	User manual in English
	iii	Short Instructions
	iv	Technical manual : All the literature should be both in Soft and hard copy.

**Note: - All the firms are requested to comment upon the above mentioned QRs and furnish brochure/catalogue of their products from the OEMs.**

The Sub-group has decided to upload the QRs on MHA/BSF website for 15 days to invite the views/comments/suggestion of prospective bidders to make the QRs more broad based.

  
**( Rishipal Singh )**  
 Second-In-Command (Mod)