

TECHNICAL SPECIFICATION OF ANTI-TANK GUIDED WEAPON (ATGW) / ANTI-TANK GUIDED MISSILE (ATGM)

Serial	Description	Specification
(a)	(b)	(c)
Part-1: General Specification		
1.	Nomenclature	Anti-Tank Guided Weapon (ATGW)/Anti-Tank Guided Missile (ATGM)
2.	Characteristic	Man portable Tripod version/Shoulder controlled
3.	Model	Specific model to be mentioned
4.	Caliber	To be mentioned
5.	Name of the manufacturer with complete address	To be mentioned
6.	Name of the principal with complete address	To be mentioned
7.	Country of origin	Group B
8.	Country of manufacture	Group B
9.	Country of assembly	Group B
10.	No of crews	To be mentioned
11.	Generation	2 nd and higher
12.	Guidance System	To be mentioned
13.	Year of production	Not before the year of contract
Part-2: Technical Specification		
14.	Function and Capability	
	a. To be able to aim, track and engage any target (moving or static) direct or indirect role within maximum effective range in all-weather condition both in day and night time	To be mentioned
	b. To be able to fire from confined space	To be mentioned
	c. Should be man portable	To be mentioned
	d. Can defeat any Modern Battle Tank or Armoured Fighting Vehicle	To be mentioned
	e. Can defeat minimum 2 nd generation Explosive Reactive Armour (ERA)	To be mentioned
15.	Operational Aspects/Requirements	
	a. Effective range at day and night	To be mentioned
	b. Maximum range of the weapon system	To be mentioned
	c. Minimum effective range	To be mentioned
	d. Minimum operation angle/ gradient ⁰¹	To be mentioned
	e. Maximum operation angle/ gradient	To be mentioned
	f. Effectiveness in fog/rain/ mist	To be mentioned
	g. Altitude (Above sea level)	Up to 2000 m
	h. Separated firing capability	To be mentioned
	j. Immunity to Electronic Counter Measure (ECM)	To be mentioned in details
	k. Immunity of Detection of Infrared (IR) if IR used	To be mentioned



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(a)	(b)	(c)
	I. Launching platform: (1) Shoulder (2) Tripod	To be mentioned
16.	Guidance and Control Mechanism of Guidance Control Unit (GCU)	
	a. Guidance System/ Method (Mention only applicable method/ combination of methods): (1) Command to Line of Sight (CLOS)-SACLOS/ ACLOS (2) Homing- Active/Semi-Active/ Passive (3) Beam Riding	To be mentioned
	b. Tracking method	To be mentioned
	c. Guidance method	To be mentioned
	d. Provision of fire and update method	To be mentioned
	e. Provision of integrated self- test system prior operation	To be mentioned
	f. Provision of testing equipment/ device in the field	To be mentioned
	g. Provision of integrating night firing device/Thermal Imager	To be mentioned
	h. Waterproofness of GCU	To be available
	j. Storage condition (Under normal ambient temperature condition)	To be mentioned
	k. Carrying facilities/Provision of back pack and harnesses	To be mentioned
	l. Triggering positions (Details to be mentioned)	To be mentioned
	m. Provision of safety in trigger/launch button	To be mentioned
17.	Performance	
	a. Combat rate of fire (Missile per minute)	To be mentioned
	b. Single shot hit probability or accuracy (Moving target)	To be mentioned
	c. Single Shot Hit Probability or accuracy (Static Target)	To be mentioned
	d. Operational temperature range	To be mentioned
	e. Operational humidity range	To be mentioned
	f. Ready to combat state (Time)	To be mentioned
	g. Speed of the Missile	To be mentioned
	h. Time of Flight to Maximum Range	To be mentioned
18.	Missile and Warhead Performance	
	a. Type of warhead	To be mentioned
	b. Minimum angle of attack	To be mentioned
	c. Top attack capability	To be mentioned
	d. Provision of thermobaric warhead	To be mentioned
	e. Fuze arming distance	To be mentioned
	f. Type of fuze	To be mentioned
	g. Self destruction capacity	To be mentioned
	h. Name, Type & Weight of main filling	To be mentioned
	j. Boost with limited signature	Preferable
	k. Launching sound	To be mentioned
	l. Waterproofness of the missile	Yes
	m. Shelf life	Minimum 15 years



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	n. Storage under normal temperature/ humid condition (operation /field condition)	To be mentioned
	p. Storage with special facility (controlled environment)	Minimum 15 years
	q. Safety falling height	To be mentioned
	r. Penetration Power (For both static & moving target)	Minimum 800 mm behind ERA
	s. Penetration against Rolled Homogeneous Armour (RHA), Spaced Armour, Composite Armour	Minimum 800 mm
19.	Propulsion and Power Supply	
	a. Type of boost and propulsion/ engine	To be mentioned
	b. Provision of boost with limited signature	To be mentioned
	c. Power supply system during operation	To be mentioned
	d. Durability of power supply system	To be mentioned
	e. Shelf life of power supply	To be mentioned
20.	Vision Device-Day	
	a. Brand	To be mentioned
	b. Model	To be mentioned
	c. Quantity	To be mentioned
	d. Country of Origin, Manufacture and Assembly of the Device	Group B
	e. Name and complete address of Manufacturer of the Device	To be mentioned
	f. Brand of Detector (if applicable)	To be mentioned
	g. Model of Detector (if applicable)	To be mentioned
	h. Country of Origin, Manufacture and Assembly of the Detector (if applicable)	Group B
	j. Name & Complete Address of Manufacturer of the Detector (as applicable)	To be mentioned
	k. Year of Production	Not earlier than the year of contract
	l. Aiming Distance (Detecting target at minimum 2000 m)	To be mentioned
	m. Magnification of the Device	To be mentioned
	n. Field of View (Both Horizontal & Vertical)	To be mentioned
	p. Power System/source including Charging Facilities	To be mentioned
	q. Device Resolution	To be mentioned
	r. Detector Resolution (if applicable)	To be mentioned
	s. Capable of using in any terrain and weather condition without losing its effectiveness	To be available. Details to be mentioned
	t. Environment Issue (Military Standard 810G)	
	(1) Operating Temperature	To be mentioned
	(2) Storage Temperature	To be mentioned
	(3) Humidity	Maximum 95%
	u. Weight (with and without battery)	To be mentioned
	v. Usage / Storage Life	Minimum 15 years



Serial (a)	Description (b)	Specification (c)
	w. Continuous Operation Period (with One Power Source Unit)	To be mentioned
	x. Provision of Reticle illumination	To be mentioned
21.	Vision Device-Night (Thermal Imaging)	
	a. Brand	To be mentioned
	b. Model	To be mentioned
	c. Quantity	To be mentioned
	d. Name and complete address of Manufacturer of Device	To be mentioned
	e. Country of Origin, Manufacture and Assembly of Device	Group B
	f. Brand of Thermal Detector	To be mentioned
	g. Model of Thermal Detector	To be mentioned
	h. Name & Complete Address of Manufacturer of Detector (as applicable)	To be mentioned
	j. Country of Origin, Manufacture and Assembly of Thermal Detector	Group B
	k. Year of Production	Not earlier than the year of contract
	l. Magnification of the Device	To be mentioned
	m. Compatibility of Device – cooled or uncooled	To be mentioned
	n. Aiming Distance (Tank Size Target)	
	(1) Detection Range	Minimum 2000 m
	(2) Recognition Range	To be mentioned
	(3) Identification Range	To be mentioned
	p. Field of View (Both Horizontal & Vertical)	To be mentioned
	q. Power System/Source Including Charging Facilities	To be mentioned
	r. Device Resolution	To be mentioned
	s. Thermal Detector Resolution	To be mentioned
	t. Integrated Thermal Imaging or detachable	To be mentioned
	u. Capable of using in any terrain and weather condition without losing its effectiveness	To be available. Details to be mentioned
	v. Environment Issue (Military Standard 810G)	
	(1) Operating temperature	To be mentioned
	(2) Storage temperature	To be mentioned
	(3) Humidity	Maximum 95%
	w. Weight With and Without Battery	To be mentioned
	x. Usage / Storage Life	Minimum 15 years
	y. Continuous Operation Period with One Power source unit	To be mentioned
22.	Shape and Dimension	
	a. Weight of missile with container/ canister	To be mentioned
	b. Weight of missile	To be mentioned
	c. Weight of command and launch unit (CLU)	To be mentioned
	d. Weight of tracker sight including associated power supply system	To be mentioned
	e. Detail weight of any other major operating components	To be mentioned



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Serial (a)	Description (b)	Specification (c)
	f. Weight of full complement/ total system along with missile loaded	To be mentioned
	g. Length of the missile inside container	To be mentioned
	h. Diameter/caliber of the missile	To be mentioned
	j. Height of the launcher (Ready to fire)	To be mentioned
23.	<u>Other Important Features</u>	
	a. Back blast area/ Backward Ejection distance (If applicable)	To be mentioned
	b. Laser safety classification as per IEC (International Electro technical Commission) 60825-1 Standard if laser used	To be mentioned
	c. Destruction/ dangerous area (For Thermobaric Warhead)	To be mentioned
	d. Transportation distance and method (Air, Road, Waterways) – In Packing Condition	To be mentioned
	e. Time of continuous operation for whole system	To be mentioned
24.	<u>Testing and Maintenance Equipment/ Device</u>	
	a. Type and Name	To be mentioned
	b. Testing/Maintenance description	To be mentioned
	c. Power source (AC/DC) (Details to be mentioned)	To be mentioned
	d. Continuous working hours	To be mentioned
	e. MTBF (Mean time before failure)	To be mentioned
	f. BIT (Built In Test)	To be mentioned
	g. Operating Crew	To be mentioned
	h. Storage temperature	To be mentioned
	j. Shelf life (Details to be mentioned)	To be mentioned
	k. Any other features	To be mentioned
25.	<u>Training Facilities</u>	
	<u>a. Indoor Simulator</u>	
	(1) Brand	To be mentioned
	(2) Model	To be mentioned
	(3) Quantity	To be mentioned
	(4) Name and Complete Address of Manufacturer	To be mentioned
	(5) No of Trainers can be trained simultaneously	To be mentioned
	(6) Various types of BD Terrain and Target Depiction	To be mentioned
	(7) Scoring Method	To be mentioned
	(8) Resemblance to Original Gun	To be Available
	(9) Operating Temperature	To be mentioned
	(10) Storage Temperature	To be mentioned
	(11) Maximum Humidity for Operating and Storage	To be mentioned
	<u>(12) Computer System</u>	
	(a) Brand	To be mentioned
	(b) Model	To be mentioned
	(c) Quantity	To be mentioned
	(d) Country of Manufacture and Assembly	Group B
	(e) System Software including recovery software	Details to be mentioned



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Serial	Description	Specification
(a)	(b)	(c)
	(f) Provision for installation of the System software in different computer system	To be available
	(g) No of Display (FHD quality 24" LED type or better)	Quantity and details to be mentioned
	(h) Processor, RAM, HDD, Other Parameters of Computer System	Details to be mentioned
	(13) Sound System (Actual sound effect of firing to be depicted)	To be mentioned
	(14) Training Recording Facility (Optional)	To be mentioned
	(15) Power Source (AC/DC) (220 VAC \pm 20%, single/3 phase)	To be mentioned
	(16) Power Consumption	To be mentioned
	(17) Provision of UPS/IPS system	Details to be mentioned
	(18) Uninterrupted Operation Period	To be mentioned
	(19) Dimension (WxHxL)	To be mentioned
	(20) Weight (in KG)	To be mentioned
	(21) MTBF / MTTR	To be mentioned
	(22) Classroom Arrangement	To be mentioned
	(23) Schematic Diagram	To be provided
	(24) Any other features	To be mentioned
	b. Field / Outdoor Simulator	
	(1) Brand	To be mentioned
	(2) Model	To be mentioned
	(3) Quantity	To be mentioned
	(4) Name and Complete Address of Manufacturer	To be mentioned
	(5) No of Crew/Operator can be trained simultaneously	To be mentioned
	(6) Compatibility for training in all weather condition in field use	To be mentioned
	(7) Scoring/Resulting Method	To be mentioned
	(8) Resemblance to Original Gun	To be available
	(9) Operating Temperature	To be mentioned
	(10) Storage Temperature	To be mentioned
	(11) Maximum Humidity for Operating and Storage	To be mentioned
	(12) Power Source (AC/DC) (220 VAC \pm 20%, single/3 phase)	To be mentioned
	(13) Power Consumption	To be mentioned
	(14) Provision of UPS/IPS system	To be mentioned
	(15) Uninterrupted Operation Period	To be mentioned
	(16) MTTR/MTBF	To be mentioned
	(17) Size and Shape	To be mentioned
	(18) Weight	To be mentioned
	(19) Dimension (WxHxL)	To be mentioned
	(20) Operational Readiness Time	To be mentioned
	(21) Portability	To be mentioned
	(22) Carrying Case	To be mentioned
	(23) Any Other Features	To be mentioned
	c. Cutaway / Sectionized Missile	To be available



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Serial (a)	Description (b)	Specification (c)
	d. Mock-up Weapon System (Actual Size and Weight)	Details to be mentioned
	e. Practice Missile	Details to be mentioned
	f. Any Other Training Gadgets/ System	Details to be mentioned
26.	List of Standard Item	To be mentioned
27.	List of Optional Item	To be mentioned
Part-3 : TRAINING REQUIREMENT		
28.	Part-3A : User Training	
	a. Various use of ATGW weapon system (Including all kind of simulators and vehicle)	To be provided
	b. General care and field maintenance of ATGW system (Including all kind of simulators and vehicle)	
	c. Storage related training	
29.	Part-3B : OPERATION, REPAIR AND MAINTENANCE TRAINING	
	Operation, repair and maintenance training of ATGW system (Including all kind of simulators and vehicle)	To be provided
30.	Part-3C : EQUIPMENT MANAGEMENT TRAINING	
	Equipment management training of ATGW system (Including all kind of simulators and vehicle)	To be provided
PART-4: REPAIR AND MAINTENANCE REQUIREMENT LESS LIST OF SPARES		
31.	a. SST/measuring & testing /fault finding and diagnostic set	If available list to be provided
	b. SSM	If available list to be provided
	c. Publications	
	(1) Owners/ operations manual in English (book type) including CD/DVD)	To be provided
	(2) Workshop/repair manual in English (book type) including CD/DVD)	To be provided
	(3) 100% Updated master spare parts catalogue in English (book type) including CD/DVD	To be provided
	(4) Complete and updated master spare parts price catalogue/list in English (book type) including CD/DVD)	To be provided
Part-5 : LIST OF SPARES		
32.	List of spares	To be provided
Part-6 : TOOLS LIST FOR DIFFERENT LEVEL OF MAINTENANCE		
33.	Tool list for different level of maintenance	To be provided
Part-7 : FINANCIAL SPECIFICATION		
34.	Financial aspects	To be provided

