40MM HIGH VELOCITY AIR BURSTING MUNITION SYSTEM

GREATER FIREPOWER, HIGHER LETHALITY & PRECISION

ST Engineering

GREATER FIREPOWER, HIGHER LETHALITY & IMPROVED ACCURACY

ST Engineering's 40mm High Velocity Air Bursting Munition System (HV ABMS) comprises:

- 40mm Air Bursting Munition (ABM)
- 40mm Air Bursting Weapon Upgrade Kit with
  - Fire Control System (FCS)
  - Programming Kit (PK)

The HV ABMS is adaptable for use on existing 40mm automatic grenade launchers such as the STK 40AGL Mk2, MK19 Mod 3 and GMG.

Air Bursting Munition

ST Engineering's 40mm HV ABM is uniquely different from conventional 40mm ammunition as it uses a programmable time fuze technology. The computed time to detonation is programmed into the time fuze of the round after it exits from the muzzle.

The timer in the fuze counts down to zero, detonates at the intended spatial point and showers the target with a cloud of lethal fragments. The round is highly effective against concealed or defilade targets. The ammunition may also be programmed to burst right in front of an armoured vehicle for a total "vision kill".

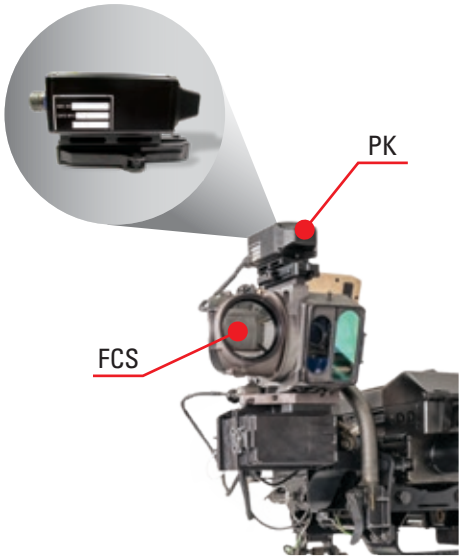
The ABM fuze can be programmed between point of impact and air bursting mode with a self-destruct capability. This is advantageous in soft ground terrain as it effectively eliminates duds.

For enhanced reliability, there are no shelf life limiting components such as batteries in the fuze.

40mm Air Bursting Weapon Upgrade Kit

The FCS automatically computes a firing solution after lasing the target. By programming the round as it leaves the muzzle end rather than in the chamber, the ABMS eliminates the potential of inadvertently arming the round while it still resides in the weapon. When a round is fired from the grenade launcher, the PK will send and set via radio frequency (RF) the time of burst onto the fuze based on the data computed by the FCS.

With a full colour, high resolution CMOS day camera, the FCS can be used to identify personnel targets up to 2km away, and engage the target consistently up to 1.5km. Night operation is also possible with the FCS's in-built night optics with the latest generation 17mm 640 x 512, 30Hz thermal imager.



Fire Control System with Programming Kit

Modular

The ABMS is an upgrade solution for current automatic grenade launchers, improving hit probability with the use of new generation programmable munition. This translates into minimal cost for training crew and maintenance since no modification is required on existing automatic grenade launchers.

Safe

The ABM round has a built-in self-destruct feature which ensures detonation even in the unlikely event of a programming error or upon impact on soft ground. This reduces the incidence of unexploded rounds, eliminating potential accidents and the costs of clearing dangerous duds.

The base fuze design configuration enables the ABM to be fired at short distance targets (40m) without endangering the gun crew as virtually all fragments fly forward.

Cost-Effective

Programmable ammunition is more accurate and lethal compared to conventional ammunition, resulting in fewer rounds needed to defeat potential targets.

Incapacitates troops in defilade terrain

Effective against soft skin vehicles

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TECHNICAL SPECIFICATIONS

40mm HV ABM Round		**HV ABM HE S472**	**HV ABM F&B S478**
	Calibre	40 x 53 mm	40 x 53 mm
	Length	112 mm	112 mm
	Weight	350 g	350 g
	Primer Type	Percussion	Percussion
	Warhead / Charge	Fragmentation / Comp A5	Flash & Bang / Report Charge
	Fuze	Programmable Time Fuze	Programmable Time Fuze
	Safe and Arm	Mechanical and Electronic	Mechanical and Electronic
	Arming Distance	18 m to 40 m	18 m to 40 m
	Operating Temperature	-40°C to +63°C	-40°C to +63°C
	Hazard Classification	1.1E	1.3G
	UN Number	0006	0430
	Maximum Range	2200	2200
Fire Control System – Key Sub-systems	Colour Video Display	Full colour, high resolution, LCD display with graphic user interface overlays	
	Ballistics Processor	High performance computer processor module which calculates the corrected aim point	
	Day Optics	Full colour, high resolution CMOS day camera	
	Night Optics	Latest generation 17mm, 640 x 512, 30Hz thermal imager	
	Laser Range Finder	Accuracy to 2,590 m, ANSI Z136.1 Class 1M	
	Power	Single BB-2590 or BA-5590 internal or external 28 VDC	

Note: Specifications are subject to change by the manufacturer without prior notice.

ST Engineering

249 Jalan Boon Lay, Singapore 619523
www.stengg.com

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