



MLRS G-2000 122mm

Pushing the limits of contemporary warfare

The G-2000 represents an enhanced iteration of the famous 122mm GRAD artillery rocket. It stands out as one of the most precise unguided artillery rockets available, boasting the longest range in its calibre, extending up to 40.2 km with CEP less than 1%. During the last three decades, with this rocket EDePro has demonstrated unparalleled expertise in modernising obsolete rocket systems and artillery munitions. The combat-proven and highly reliable G-2000 is presently operational in various artillery forces worldwide.

Tactical Use

G-2000 is widely recognized for its operational reliability and can be effectively employed in diverse scenarios where wide area coverage takes precedence over pinpoint accuracy.

Warhead Type

The baseline configuration of the G-2000 rocket comprises HE warhead, the original 122mm GRAD warhead with fuse design, but it may be equipped with several types of warhead.

Rocket Motor Design

The rocket motor comes with completely new and the latest *state-of-the-art* design. It leverages in-house developed propellant production technology, ensuring optimal performance. With its high specific impulse value, it can deliver up to 60% more energy without increasing dimensions. The RM contains two types of propellant, each with a different burning rate, resulting in a high-level loading factor and nearly neutral burning. Our rocket motor is a distinct subsystem that can be delivered separately to the customer, while preserving the original RM design's connecting thread for the warhead. The electrical properties of igniters for RM can be tailored to the specific parameters of the launcher according to the customer's demands.

Standardization Protocols

G-2000 fulfils all relevant procedures and certifications to meet, both MIL-STD test requirements and GOST (*Russian: ГОСТ*) product standards.

MAIN SPECIFICATIONS

- Calibre: 122 mm
- Range: 40.2 km
- Initial mass: 69 kg
- Length: 2875 mm



Composite Solid Propellant Solution

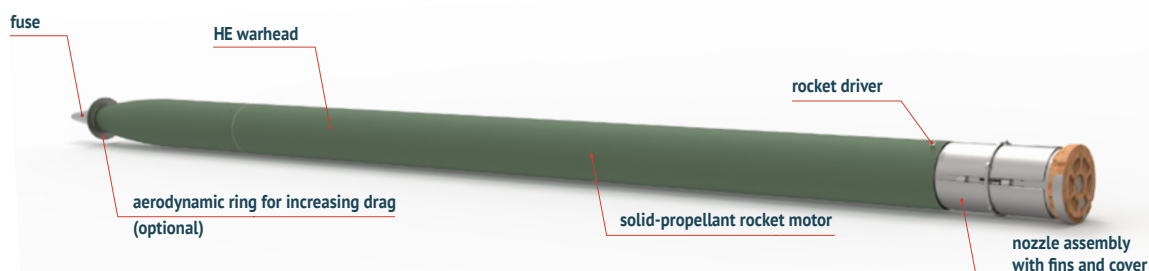
The propellant grain is crafted utilizing EDePro's thermoplastic composite technology. Both the propellant and inhibitor are formulated with a shared binder, ensuring robust cohesion. The inclusion of PVC polymer guarantees that the mechanical and ballistic characteristics remain unchanged over time.



MAIN TACTICAL AND TECHNICAL PERFORMANCES

Parameters	9M22U/M-210F	G-2000	unit
Calibre	122		mm
Length	2875		mm
Initial mass	66	69	kg
Maximal range (Xe)	20	40.2	km
Temperature range	-30 ÷ +50	-40 ÷ +60	°C
Fuse designation	MRV-U		-
Warhead type	HE M-210F		-
Warhead's mass (with MRV-U fuse)	19.1		kg
Number of warhead fragments	3920		pcs
Ready-made (weighing 5g)	0		pcs
Ready-made (weighing 3g)	2280		pcs
From the body (average ~2.5g)	1640		pcs
Type of explosive filling	TNT		-
Warhead lethal radius	25		m
Type of propellant	double base	composite	-
Propellant's mass	20.45	27.3	kg
RM's burning time	2.0	2.7	s
RM's total impulse	39700	62800	Ns
RM's specific impulse	1940	2300	Ns/kg
Max velocity at max range (Xe)	690.6	1080	m/s
Apogee	7100	17800	m
Time of flight at max range (Xe)	76	120	s
CEP	1.27	< 1	%

ROCKET's SUBCOMPONENTS



BENEFITS

- » with extended range of 40.2 km and CEP less than 1%, G-2000 has a new combat role in the modern warfare;
- » compatibility with existing launchers for 122mm GRAD rockets;
- » rocket's package - launcher and logistics remained the same;
- » all certifications according to MIL-STD and GOST test standards;
- » upgrading process is simple, quick and carried out with the customer and doesn't require additional personnel training.

