



# A8 ANTI-HAIL ROCKET

*The modern reality of hail suppression*

The anti-hail A8 rocket system is another high-tech solution designed by EDePro to answer fast-changing global climate challenges. Protection from natural disasters and prevention of the devastating effects of hailstorms is today enabled with a new generation of anti-hail rockets launched from their containers, thus increasing velocity, extending operation range, and ensuring better performance and reliability. AHR A8 represents a field-proven solution with worldwide operational usage

## MAIN SPECIFICATIONS

- Ø Calibre: 55 mm
- CG\*: 544 m
- Takeoff mass: 5.1 kg
- Length: 1201 mm

\*Centre of gravity measured from rocket nose tip

## Tactical Use

The A8 anti-hail rocket is used for dispersion of reagent into hail clouds. The rocket carries a 400g of reagent mass and disperses it at high altitudes in a period of 36 to 43 seconds. Single projectiles or a salvo of rockets are used to produce nuclei during the burning of pyrotechnic substances and inject these nuclei directly into the cloud region preventing hail formation.

## The Rocket & Container System

The A8 anti-hail new generation rocket is launched from its container which increases velocity and enables reduction of the total mass of the propellant compared to rockets propelled by thrust force only. The advantage of such a launching system is demonstrated in enhanced performance and easy operating.

## Compact Design

Small calibre (55 mm) reduces the material consumption of the rocket, thereby reducing its cost. The dimensions of the launcher are minimal. The construction is compact and robust and it enables swift gaining of elevation and azimuth.

## Safety & Environment Protection

The environment pollution is disabled with thermoplastic materials used in the construction of the rocket, and the propellant grain of the main rocket motor is made of composite thermoplastic propellant and inhibitor. The combustion chamber is made of composites (glass-epoxide) while the nozzle material is glass-phenolic.





## MAIN TACTICAL AND TECHNICAL PERFORMANCES

### Technical Specification

	Data	Unit
Vertical range (elevation angle 850)	7750	m
Period of reagent emission*	36	m
Moment of self-destruction*	43	s
Operating temperature range	-30±60	°C
Ignition circuit resistance	1.2	Ω
Required electricity for the activation	0.68	A
Required voltage	24	V
Calibre (container)	60	mm
Calibre (rocket)	55	mm
N° of containers	6	/
Length (container)	1422	mm
Mass (container)	1.4	kg
Takeoff mass	3.5	kg
Launcher's mass	65	kg
Elevation range (50 incr.)	450 ~ 850	/
Azimuth range (50 incr.)	0~3600	/
Burning time	3.0	s
Motor total impulse	3500	Ns
Propellant's mass	1.8	kg
Start of discharge*	8	s
End of discharge*	43	s
Reagent's mass	400	g
Reagent activity at -100 °C	2.5*1013	par/g mixture

\*adjustable according to customer's requirements.

### BENEFITS

- » Simple and fast usage requiring only a few hours of training of an operator.
- » Solid propellant built with in-house technology.
- » Main performances adjustable to specific user's requirements.
- » Two independent pyrotechnic timers enable the right timing of rocket self-destruction.

