



262mm Guidance Kit (GK)

Effective and efficient weapon delivery

The EDePro's Guidance Kit is a system developed to enhance the accuracy and precision of our artillery rocket *Hurricane*. It transforms existing 262mm high explosive rocket into affordable missile. By integrating guidance kits into unguided weapons, technology like GPS or inertial navigation increases the chances of hitting the intended target with greater accuracy and reduced CEP. Our solution for improved navigation and calculation of flight commands is carried out using aided INS (AINS) navigation based on INS or GPS. This capability allows the missile to maintain an acceptable trajectory even when GPS signals are blocked or jammed.

The Purpose

The Guidance Kit (GK) are crucial for military missions to ensure effective and efficient weapon delivery. Rockets fitted with our GK provide artillery units with accurate fire support capabilities in areas where collateral damage is a concern, resulting in more precise targeting and reducing the risk of civilian casualties.

The INS/GPS guidance

Our GK combines both INS and GPS technologies to leverage the strength of the guidance system and provide an accurate and reliable trajectory. Our guidance section is based on flight path steering (FPS), impact point prediction (IPP) and GSC pre-set trajectory points with enabled communication with the GCS during mission setup. GPS signals allow munitions to determine precise location in real time, enabling them to navigate towards the target with high precision. In this scenario firing accuracy at any range (CEP) is less than 10m.

The INS guidance

The simpler and more compact guidance kit uses inertial navigation to correct the rocket's flight in the first 40s of launch. This kit does not require a Ground Control Station (GSC) or any modifications to the launch container. The guidance kit itself is slightly smaller than traditional one because it has a shorter operating time.

MAIN SPECIFICATIONS

- » accurate navigation
- » compact design
- » lightweight, low cost
- » integrated section - navigation, guidance & control

Overall modifications

The missile and launcher may need some mechanical and electronic changes to work with the 262mm Guidance Kit. The fins need to be able to rotate freely and the warhead fuse needs to be modified. If the missile uses the INS/GPS guidance kit, a GSC is required to set the mission.

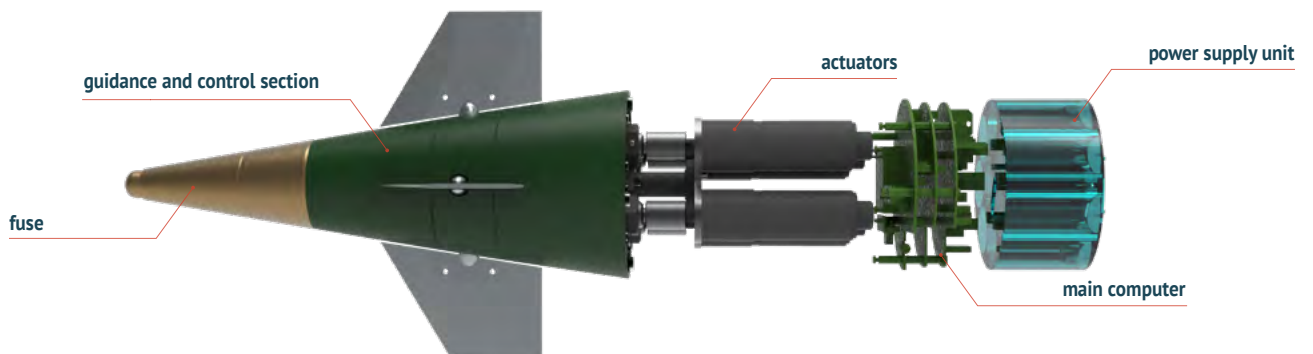




TECHNICAL AND TACTICAL PERFORMANCES

Technical specification	Data	Unit
Calibre	262	mm
262mm GKit's mass	8	kg
CEP - with GPS	< 10	m
CEP - without GPS	< 0.3	%
INS operating time	40	s
GPS operating time	up to 150	s
Operating temp. range	-30 ÷ +60	°C

GUIDANCE KIT's COMPONENTS



BENEFITS

- » aided INS (AINS) based on INS or GPS depending on availability;
- » improved targeting capabilities;
- » demonstrated accuracy is less than 10m CEP with GPS;
- » affordable solution for accurate navigation;
- » reduced number of projectiles required to execute a mission.

