Lightweight multi-purpose aircraft
MAGNUS FUSION

The robotic version of the lightweight multi-purpose aircraft MAGNUS Fusion is a low-wing monoplane made of composite materials with alloy steel power elements and fixed landing gear.

The aircraft can be equipped with guided flying weapons - MALANKA missiles and is designed to counter small UAVs, as well as high-speed maneuvering targets before they enter the protected air zone. Moreover, MAGNUS Fusion weapons can be used to engage ground targets.

The iSky-30 HD three-channel high-sensitivity optical-electronic station installed on MAGNUS Fusion allows you to automatically detect, track and identify targets. In addition, the laser illumination function provides precise guidance of MALANKA missiles with a semi-active laser and passive thermal imaging homing head.

TARGETS:

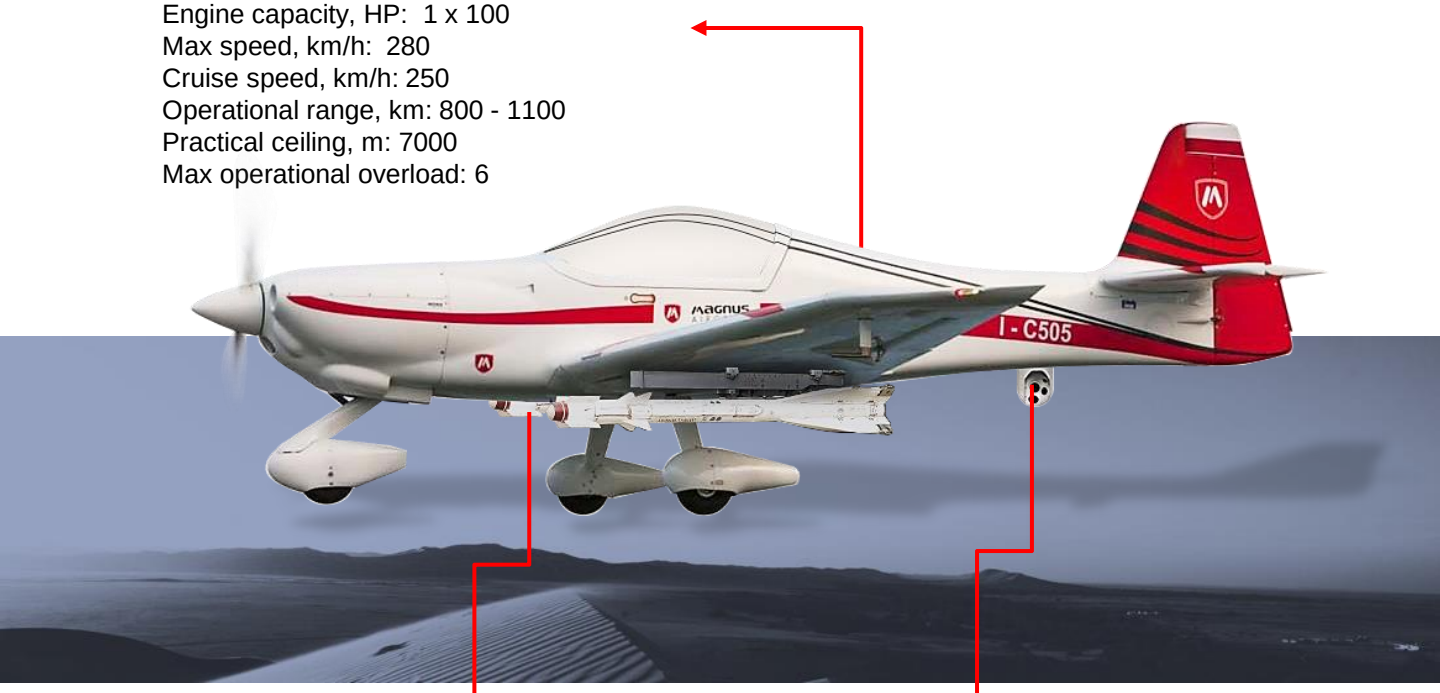
- UAVs of ALL TYPES
- helicopters
- airplanes
- cruise missiles
- military transport aircraft
- ground targets

FEATURES:

– Autonomous patrol of protected sites and territories
– Real-time video transmission
– Detection and control of small maneuvering air targets

MAGNUS FUSION

Wing span, m: 8.44
Length, m: 6.62
Height, m: 2.40
Weight: Empty: 299Kg / MTOW: 600Kg
Fuel, L: 90
Engine type: PD Rotax 912ULS
Engine capacity, HP: 1 x 100
Max speed, km/h: 280
Cruise speed, km/h: 250
Operational range, km: 800 - 1100
Practical ceiling, m: 7000
Max operational overload: 6



Missiles MALANKA x 2 pcs

Has two types of homing heads
- semi-active laser
- passive thermal imaging

MALANKA missile features:
It can engage not only air, but also ground targets.
There are two modes of use - air-to-air and air-to-surface

Target engagement range, km	0,3 – 8
Target engagement altitude:	0,1 – 5
Kill probability (by one missile)	0,9
Max overload, g	47
Engage target overload, g	12
Guidance system	passive homing

Optical-Electronic Station iSky-30 HD

- Thermal Imaging (TI) Camera with 250 mm focal length
- High Sensitivity Color HD Day Camera
- Optional Eye-safe Laser Range Finder
- Optional Laser Illuminator
- Optional Laser Pointer
- Weight – 21 kg
- Diameter – 305 mm
- Detection range – 18 km

Modernized guided missile R-60 BM MALANKA

DESCRIPTION

The upgrading of the R-60 BM guided missile to the R-60 BML and R-60 BMT MALANKA levels implies improving the combat capabilities of the missile by replacing the infrared homing head with a thermal imaging homing head with increased targeting angles, installing a semi-active laser homing head, and also increasing the fuse resistance to electronic interference and the use of a more advanced automatic flight control system.
The new dual-band homing head increases the missile's capabilities for the effective destruction of small-size aircrafts, as well as low-contrast in the thermal range light-armored ground targets.
The missile upgrading preserves the structural, technological and aeroballistics characteristics as much as possible.
The MALANKA missile can be installed both on standard aviation launchers and placed in transport and launch containers when used on anti-aircraft missile systems.

ADDITIONAL FEATURES
- highest pointing accuracy due to the use of modern algorithms for target recognition and tracking
- modern rocket autopilot system
- laser proximity sensors

WORK IN THREE MODES
- Air-to-air
- Air-to-surface
- Surface-to-air
- Surface-to-surface

Seeker : **semi-active laser or passive thermal imaging**
Target engagement range, km **0.3 – 8**
Target engagement altitude, km **0.1 – 5**
Missile speed, m/s **730 – 850**
Kill probability (by one missile) **0,9**
Max overload, g **47**
Engagable target overload, g **12**
Controlled flight time, s **25**
Engine type **double–mode missile engine solid–fuel**
Guidance system **homing**