

ROTARY WING DRONE „MANTIS“

Loitering munition armed with a 120 mm bomb



PURPOSE:

The **MANTIS** (codename KAM-120) drone is a rotary-wing kamikaze drone with a range of up to 15 km, designed and manufactured by the **PR-DC** company in a quadcopter configuration. It is armed with a 120 mm diameter aerial bomb (like Krušik M62), which is quickly and easily attached to the aircraft's structure before launch. The flight can be fully autonomous according to a predetermined path and target coordinates, or manually guided using a camera.

MAIN CHARACTERISTICS:

Powertrain:	4 BLDC electric motors
Optimal payload mass:	12.6 kg (27.8 lb)
Range:	up to 15 km (up to 9 miles)
Dimensions:	2050 mm x 1750 mm x 530 mm (6.72 ft x 5.74 ft x 1.74 ft)
Transport package dimensions (set of three):	1500 mm x 800 mm x 400 mm (4.92 ft x 2.62 ft x 1.31 ft)
Maximum take-off mass:	34 kg (75 lb)
Guidance:	based on GNSS and camera
Source of energy:	Lithium battery
Remote controller:	IKA-CTRL with custom FlightControl App

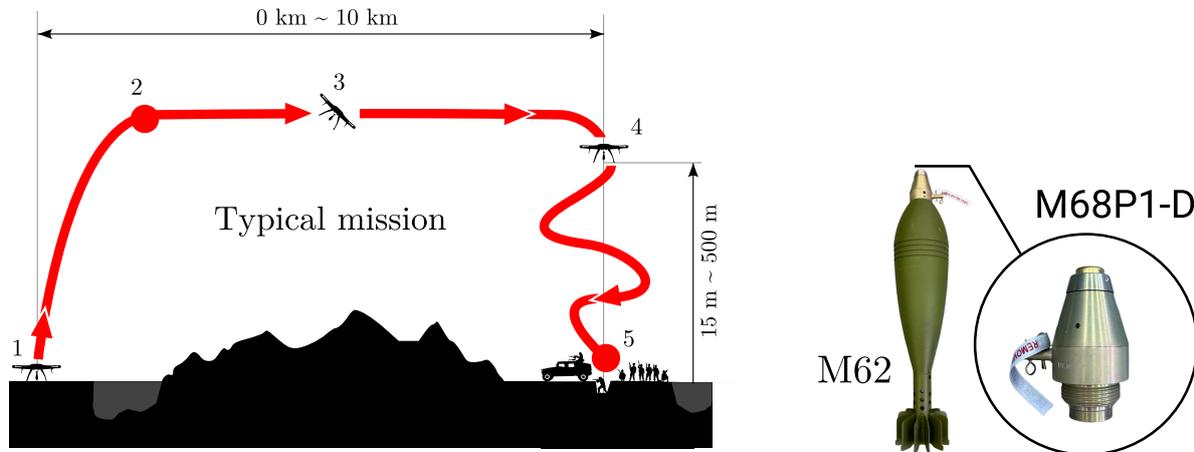


Figure 1 - Typical mission (left) and armament (right)

ARMAMENT CHARACTERISTICS:

Type:	aerial bomb with a diameter of 120 mm
Bomb length with fuze:	606 mm (23.8")
Fuze type:	impact, superquick action, specially designed for drone use
Fuze safety:	two safety pins
Mass of a single bomb with fuze:	12600 g (27.8 lb)
Explosive charge:	trotyl (TNT)
Mass of explosive charge:	2400 g (5.3 lb)
Blast radius (1 penetration / m ²):	18 m (59 ft)
Safe operation temperature range:	-30°C to +50°C (-22°F to 122°F)