

## ROTARY WING DRONE „IKA-BOMBER“

Armed with 12 aerial bombs with a diameter of 60 mm



### PURPOSE:

The **IKA-BOMBER** military grade rotary wing drone was designed and manufactured by the PR-DC company in a hexacopter configuration. The construction of the aircraft is made of composite materials, primarily carbon fiber and epoxy resin, which enables a 30-minute flight with 20 kilograms of cargo, which is unique on the market. The flight can be fully autonomous and can carry 12 60mm aerial bombs (like Krušik M73) which can be accurately dropped one by one and neutralize different targets.

### MAIN CHARACTERISTICS:

<b>Powertrain and power source:</b>	BLDC electric motors and 4.3 kWh replaceable lithium-based battery
<b>Propeller diameter/pitch:</b>	812.8 mm / 279.4 mm (32" / 11")
<b>Max power of each motor:</b>	5.7 kW (for 24 kgf at 4600 rpm)
<b>Dimensions:</b>	2490 mm x 2400 mm x 670 mm (8.2 ft x 7.9 ft x 2.2 ft)
<b>Transport package dimensions:</b>	1200 mm x 1100 mm x 850 mm (3.9 ft x 3.6 ft x 2.8 ft)
<b>Structure material:</b>	Carbon fiber reinforced polymer
<b>Maximum takeoff weight:</b>	70 kg (154 lb)
<b>Optimal payload mass:</b>	20 kg (44 lb)
<b>Remote controller:</b>	IKA-CTRL with custom FlightControl Application, simultaneous use of multiple controllers (control and monitor modes, separate armament control)
<b>Equipment:</b>	Main 3-axis EO/IR gimbal camera and 10x zoom targeting camera.

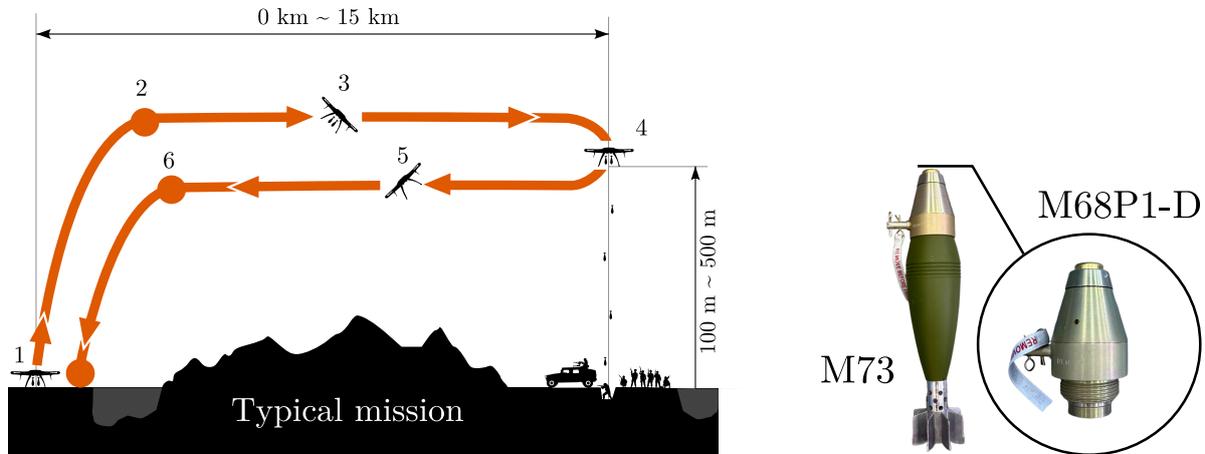


Figure 1 - Typical mission (left) and armament (right)

## FLIGHT PERFORMANCE:

<b>Mission radius:</b>	from 5 km to 15 km (from 3 miles to 9 miles)
<b>Operating altitude:</b>	from 150 m to 500 m (from 500 ft to 1600 ft)
<b>Flight time:</b>	from 20 min to 40 min
<b>Max flight distance:</b>	up to 30 km (19 miles)
<b>Flight ceiling:</b>	7000 m (23 000 ft)
<b>Top speed:</b>	90 km/h (56 mph)
<b>Cruise speed:</b>	60 km/h (37 mph)
<b>Climb rate:</b>	10 m/s (22 mph)
<b>Wind resistance:</b>	8 m/s (18 mph)

## ARMAMENT CHARACTERISTICS:

<b>Type and quantity:</b>	12 aerial bombs with a diameter of 60 mm
<b>Bomb length with fuze:</b>	286 mm (11.3")
<b>Fuze type:</b>	impact, superquick action, specially designed for drone use
<b>Fuze safety:</b>	two safety pins (transport and release)
<b>Mass of a single bomb with fuze:</b>	1350 g (3 lb)
<b>Explosive charge:</b>	trotyl (TNT)
<b>Mass of explosive charge:</b>	250 g (0.55 lb)
<b>Blast radius (1 penetration / m<sup>2</sup>):</b>	10 m (33 ft)
<b>Safe operation temperature range:</b>	-30°C to +50°C (-22°F to 122°F)
<b>Release altitude above ground:</b>	>150 m (> 500 ft)