

## ROTARY WING DRONE „IKA-ROCKET“

Armed with 3 x 57 mm aircraft rockets



### PURPOSE:

**IKA-ROCKET** is a certified military-grade, rotary-wing hexacopter designed and built by **PR-DC**. Its airframe is constructed from carbon-fiber-reinforced epoxy, enabling flights over 30 minutes with up to 20 kg of payload - an unrivaled capability on the market. The drone can operate fully autonomously, day and night, and can carry up to three 57 mm aircraft rocket (e.g., Krušik BR-1-57 or S5), launching them one by one to neutralize multiple 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>	3-axis EO/IR gimbal camera with 10x optical zoom.

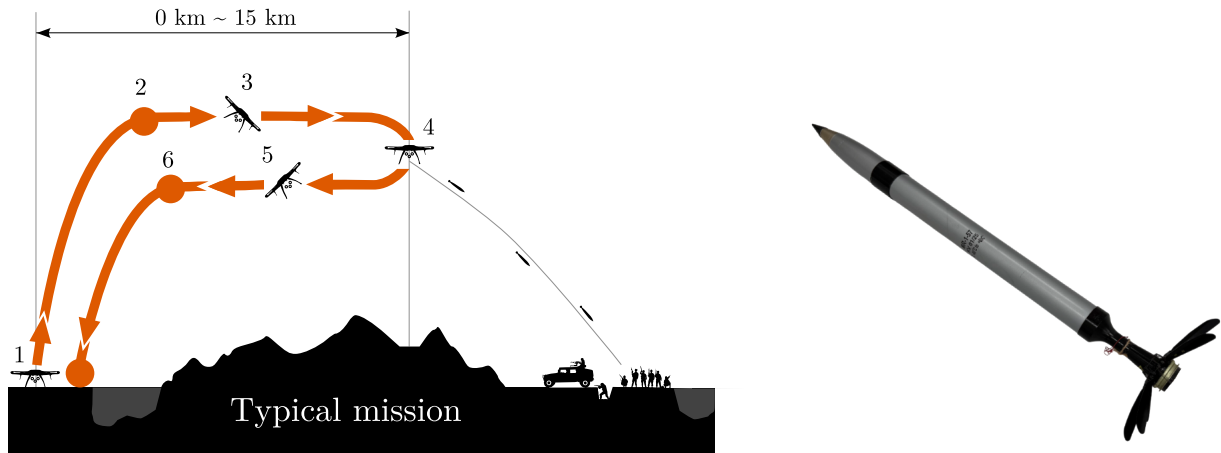


Figure 1 - Typical mission (left) and rocket (right)

## FLIGHT PERFORMANCE:

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

## ARMAMENT CHARACTERISTICS:

Type and quantity:	3 x 57 mm aircraft rockets (S5, BR-1-57, BR-2-57 or BR-20-57)
Rocket calibre:	57 mm (2.24")
Mass of a single rocket:	around 4000 g (8.8 lb)
Rocket length:	around 900mm (35.4")