



Łukasiewicz  
Institute  
of Aviation



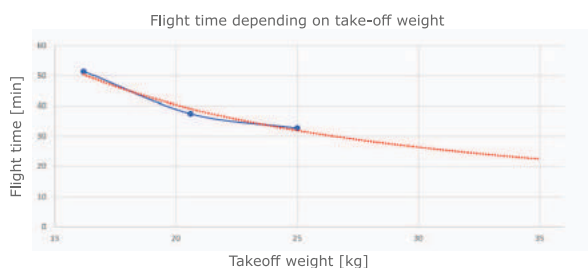
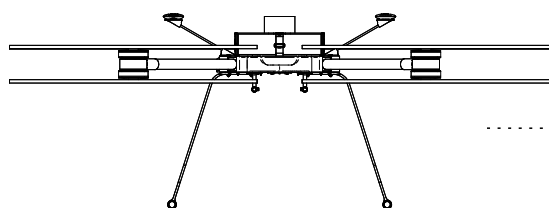
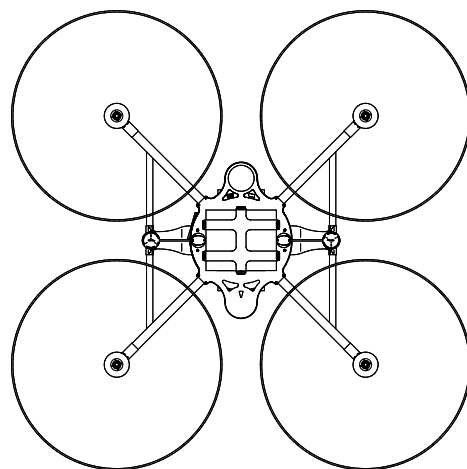
Test and service platform

# UNMANNED AERIAL VEHICLE PIRAT

# CHARACTERISTICS

The Lukaszewicz Institute of Aviation's self-developed UAV project, named PIRAT, features a rotorcraft design in a multi-rotor layout, commonly referred to as an octocopter. This innovative drone is constructed using lightweight carbon composite materials, enhancing its overall structure. PIRAT has undergone rigorous testing and is now ready for flight, positioning it as a viable option within the realm of emerging drone technology.

Furthermore, its design includes versatile elements that could potentially be integrated into various other aircraft projects. Leveraging the X8-based multi-rotor configuration, PIRAT boasts an impressive payload capacity without compromising on its compact form factor.

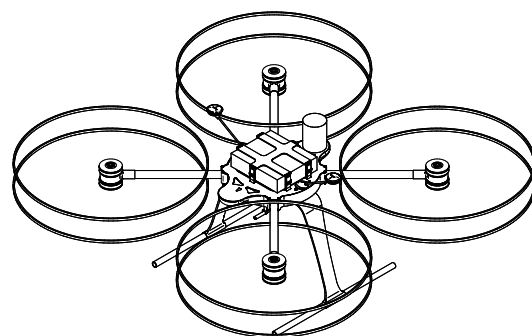


## TECHNICAL DATA

- Rotorcraft in a multicopter layout having 4 sets of counter-rotating propulsion units.
- Dead weight with batteries 16.2 kg.
- Maximum takeoff weight: 25 kg [construction designed for increased payload].
- Continuous flight control with loss of one of the propulsion units equipped with eight.
- T-motor U811 100kV motors.
- Diagonal between the axes of the motors 1220 mm.
- Width 1590 mm.
- Cruising speed 10 m/s – 15 m/s.

# KEY FEATURES

- Easy and quick customization to meet individual customer and mission needs.
- Emergency parachute system (automatic or manual).
- Automated mission capability.
- LTE connectivity.



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