



Part Number: KIT-HGDRONEK66

Description: HoverGames Drone Kit

Overview

The KIT-HGDRONEK66 kit provides the mechanical and other components needed to evaluate the [RDDRONE-FMUK66](#) and adds BLDC motor control capabilities and a mechanical platform, which it can be mounted on. This developer kit may be used as part of, and contains the components needed for the [HoverGames](#) coding challenges. It should be noted that this is a professional developer kit, not a complete functional system and includes no software. The flight management unit (FMU) is supported by the business-friendly open source PX4.org flight stack. In addition, a separate suitable hobby-type LiPo battery and country-specific telemetry radio will be required.

When assembled the frame has appropriate additional space in order to mount other components such as an adapter for [Rapid IoT](#), NXP Freedom boards, or a companion computer such as [i.MX 8M Mini](#) to be used as a vision processor running Linux and ROS. The HoverGames drone and rover development platform is very flexible, fully open for development of robotics, control algorithms, security networking and communications protocols, and can include another add-on component, companion computer, software, or associated solutions.



Target Applications

1. UAV Data Buses and Battery Management
2. UAV Intermediate Flight Controller
3. UAV Vision, Advanced Sensing and Processing Board
4. Unmanned Vehicles (Ground, Air, Water)

Technical and Functional Specifications

General Features

This is a DIY professional development kit and detailed assembly is required
May be used to participate in HoverGames.com, or as a robotics development platform

Size

Carbon fiber mechanical frame approx. 500mm diagonal size
150mm x 150mm large top and bottom plate for mounting electronics
Dual 10mm diameter rod x 60mm rail mounting system

Support and Software

No software is provided by NXP. Supported by the open source project PX4
Supports expansion using a Linux companion computer for Vision, ROS, Artificial Intelligence
Supports connection to Rapid IoT with add-on adapter board