

Sky Drone FPV 3

4G/5G Connectivity for Drones

Sky Drone FPV 3 is an end-to-end encrypted low latency transmission system for drones utilizing 4G / 5G networks. It provides an unlimited-range command & control as well as video-link via an included Full HD camera.

Digital High Definition Video

The Sky Drone FPV 3 system comes with a high resolution camera with a wide dynamic range. Its low latency live video feed delivers up to 1080p at 30fps.

HD 1080p

Telemetry and Command & Control Link

A bidirectional data link between your drone and your Ground Control Station adds remote Command & Control to your UAV. This can be used to visualize telemetry data and/or control the drone. The MAVLink protocol as well as any generic serial protocol that interfaces via RS232/UART are supported.

Unlimited Range

By using existing cellular networks, the Sky Drone FPV system provides you with virtually unlimited range. The only requirement is cell tower coverage. The system is optimized for the 4G / 5G networks to provide best video quality and lowest latency but can also fall back to 3G networks. It adapts to varying signal and bandwidth conditions by automatically adjusting video parameters without interrupting the stream.

Low latency

By using our proprietary highly optimized video processing pipeline, the system is designed for lowest latency video from scratch. The typical end-to-end latency is less than 150ms.

Ground Station / SDK

The client software to receive Video from the Sky Drone FPV 3 unit runs on Windows and Linux with version for MacOS, Android and iOS in the pipeline to be released in Q2/2019. It provides seamless integration with third party GCS applications for command & control (e.g. QgroundControl). An SDK is available for custom integrations or video-processing on the ground.



Technical Details

Variant: 4G (LTE Advanced Pro)	B1, B2, B3, B4, B5, B7, B8, B9, B12, B13, B18, B19, B20, B26, B28, B29, B30, B32, B41, B42, B43, B46, B48, B66 + 3G fallback 3.5GHz local private networks (CBRS band) Carrier Certifications: AT&T, Verizon Certification in progress: Bell, docomo, KDDI, Rogers, Softbank, Telstra, Telus
Variant: 5G	Available in Q4/2019
Connectors	DroneCode connector standard (JST-GH telemetry connector, JST-GH power connector)
Typical Data Consumption	10 minutes of streaming consumes: Full HD at 6mbit/s: 450MB HD at 2mbit/s: 150MB Low quality at 100kbit/s: <8MB
Typical Glass-to-Glass Latency	<150ms
Antenna	dual external antenna included
Lens	Interchangeable, default: 92° FOV
Video Resolution	Full HD (up to 1080p 30fps)
Encryption	Secure Real-Time Protocol (SRTP) / Datagram Transport Layer Security (DTLS) using AES256.
Power Input	5V@1A
Weight	159g incl. Camera, lens, case and cables



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