

J5 UAV 5km Ethernet Video and Data Transmission System

Description

J5 is the smallest HDMI wireless transmission COFDM system among J series products, supporting video and Duplex data transmission in the same link. Through the winning combination of self-developed CABAC(H.264+H.265 CODEC) technology and high-end transmission module of 2.4GHz, J5 features on ultra-high resolution(**1080P60**), and ultra-low latency(**15-30ms**). The whole system supports adjustable video definition; data rate output coupled with Tplayer realizes the soft decoding with low latency. J5, of industrial grade, is ideal for the drone, UAV, UGV or other applications requiring UHD video image, ultra-low latency, ultra-low power consumption.

Features

- A compact, lightweight, robust package, Tx(68g), Rx(68g)
- Ultra-low latency 15-30ms
- Video and data(dual-direction) transmission in the same link
- Supporting SBUS/PPM/TTL/RS232/MAVLINK
- Compatible with different flight controllers(Pixhawk) and remote controls(FUTABA)
- 100Mbps Ethernet transmission
- Data rate output coupled with Tplayer software with low latency to display video in PC
- Point-to-point communication
- Amazing sensitivity by using an omnidirectional single antenna

Specification

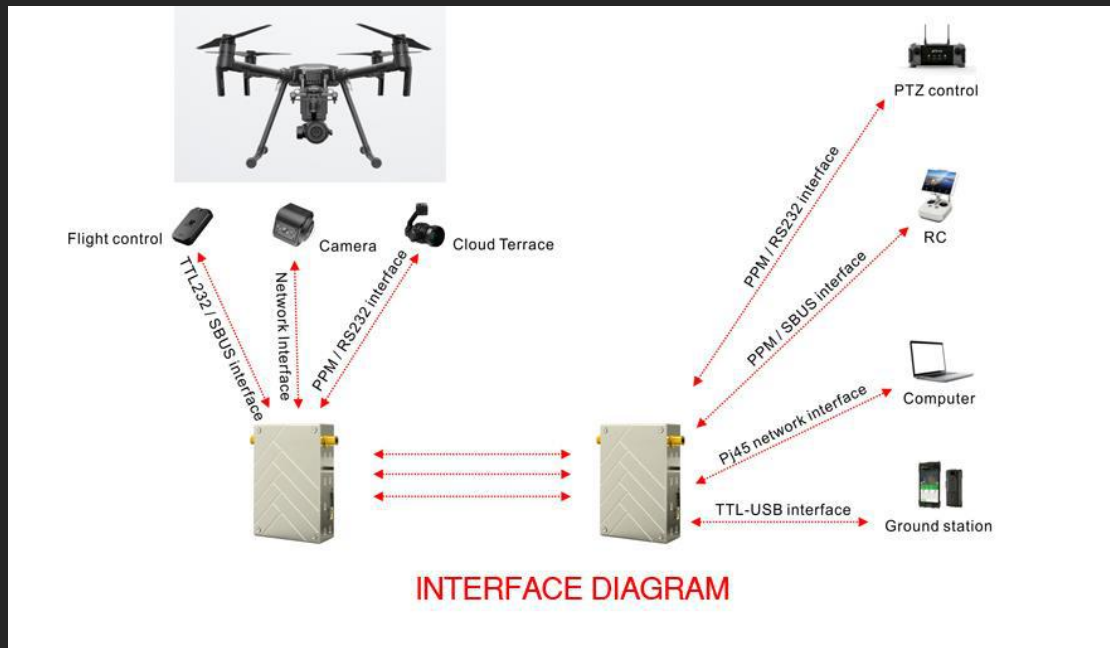
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|-----------------------------|---|
| Weight | Tx/Rx 68g |
| Dimension | Tx/Rx: 48mm*68mm*15mm |
| Wireless Transmission Range | Air to ground 4km-6km |
| Latency | 15-30ms(1080P60/720P60 coding and decoding) |
| Temperature Range | Operating Temperature: -40℃-+85℃ |
| | Storage Temperature: -55℃-+100℃ |
| Wireless Channel | 2.4GHz(2.400-2.482GHz) |
| Power Supply | DC-12V(7-18V) |
| RF Transmission Power | 27dbm |
| Overall Consumption Power | Transmitter Terminal: 3W |
| | Decoder Terminal: 3w |
| Communication Bandwidth | 1MHz-8MHz |
| Max Date Volume | 4.5Mbps for two way communication |
| Video Color Space | Default:4:2:0 Optional:4:2:2/4:4:4 |
| Antenna | Transmitter: 1MIMO Antenna(19cm) |
| | Receiver: 1 MIMO Antenna(29cm) |
| Startup Time | 25S |
| Channel Encryption | WEP, WPA(PSK), WPA2(PSK), WPA+WPA2(PSK) |
| Transmission Mode | Point-to-point |
| Two-Way Function | Supporting video and dual-direction data transmission in the same link |
| | SBUS/PPM/TTL S1 Pro communication module; integration of multiple radio channels for reception and transmission |
| Interface | 2* 100Mbps Ethernet to USB/RJ45 on Windows x1 |
| | 1* series port |
| | 1* power input |
| | 1* antenna |
| Indicator | Power indicator |
| | Transmitter&receiver indicator |
| Appearance Design | CNC process/aluminum-alloy double-shell anti-storm design |

Packing Details

- 1* Transmitter
- 1* Receiver
- 4* Power Cable
- 2* Feed Line(0.5m, 2m)
- 2* MIMO Antenna(1T&1R)
- 4* Standard TTL serial port line(including 2pcs USB)
- 1* T33 module
- 4* Ethernet cable



Interference Diagram



Application

- Disaster relief, forest-fire prevention, emergency rescue by UAV, emergency communication, live streaming, rebroadcast
- Aerial scouting, monitoring by helicopter, airship, especially for the environment unsuitable or unable for wiring
- Image transmission for public security system, firefighting command truck, etc
- Real-time surveillance at sea in frontier areas
- Real-time news gathering and match broadcasting in wireless mobile trucks

