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(Pixhaw) 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



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Specification

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°C-+85°C
	Storage Temperature: -55°C-+100°C

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 Decoder 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		
RF Transmission Power Overall Consumption Power Transmitter Terminal: 3W Decoder Terminal: 3W Tensmitter Terminal: 3W Decoder Terminal: 3W Tensmitter Terminal: 3W Tensmitter: 1MIMO Antenna(1PCM) Tensmitter: 1MIMO Antenna(1PCM) Tensmitter: 1MIMO Antenna(1PCM) Tensmitter: 1MIMO Antenna(2PCM) Tensmitter: 1MIMO Antenna(2PCM) Tensmitter: 1MIMO Antenna(2PCM) Tensmitter: 1MIMO Antenna(2PCM) Tensmitter Terminal: 3W Tensmitter: 1MIMO Tensmitter: 1MIMO Antenna(1PCM) T	Wireless Channel	
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1* power input 1* antenna Indicator Power indicator Transmitter&receiver indicator		Windows x1
1* antenna Indicator Power indicator Transmitter&receiver indicator		1* series port
Indicator Power indicator Transmitter&receiver indicator		1* power input
Transmitter&receiver indicator		1* antenna
	Indicator	Power indicator
Appearance Design CNC process/aluminum-alloy		Transmitter&receiver indicator
	Appearance Design	CNC process/aluminum-alloy
double-shell anti-storm design		double-shell anti-storm design



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Packing Details

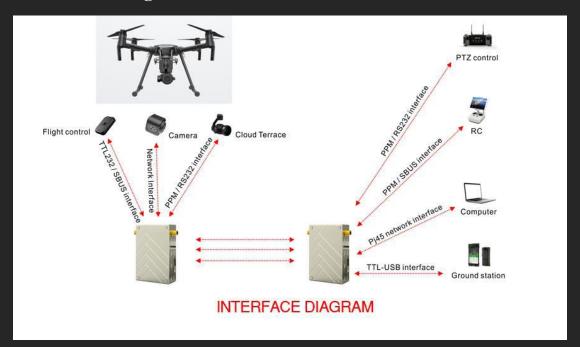
- 1* Transmitter
- 1* Receiver
- 4* Power Cable
- 2* Feed Line(0.5m, 2m)
- 2* MIMO Antenna(1T&1R)
- 4* Standard TTL serial port line(including 2pcs USB)
- 1* T33 module
- 4* Ethernet cable







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



