

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

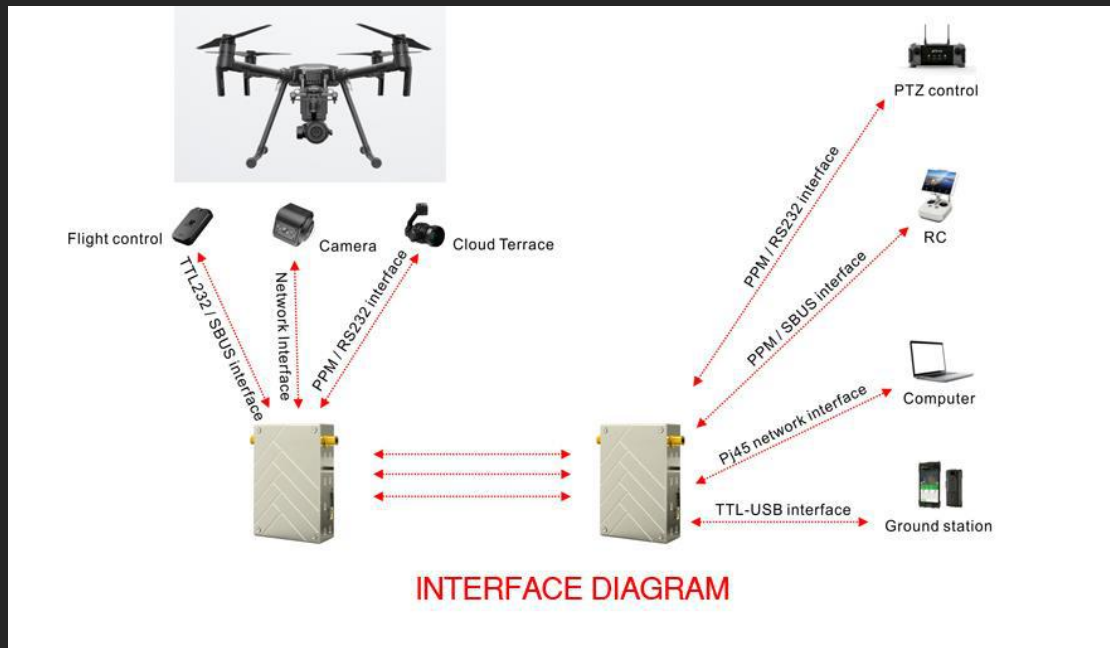
Weight	Tx/Rx 68g
Dimension	Tx/Rx: 48mm*68mm*15mm
Wireless Transmission Range	Air to ground 4km-6km
Latency	15-30ms(1080P60/720P60 coding and decoding)
Temperature Range	Operating Temperature: -40℃-+85℃
	Storage Temperature: -55℃-+100℃
Wireless Channel	2.4GHz(2.400-2.482GHz)
Power Supply	DC-12V(7-18V)
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

