

J10 UAV 10km Ethernet AV Wireless Transmission System

Description

J10 is a HDMI wireless transmission COFDM system, 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, J10 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(like Pixhawk) and remote controls(like 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 the omnidirectional antennas

Specification

Weight	Tx/Rx: 68g
Dimension	Tx/Rx: 48mm*68mm*15mm
Wireless Transmission Range	Air to ground 8km-10km
Latency	15-30ms(1080P60/720P60 coding and decoding)
Temperature Range	Operating Temperature: -40°C+85°C
	Storage Temperature: -55°C+100°C

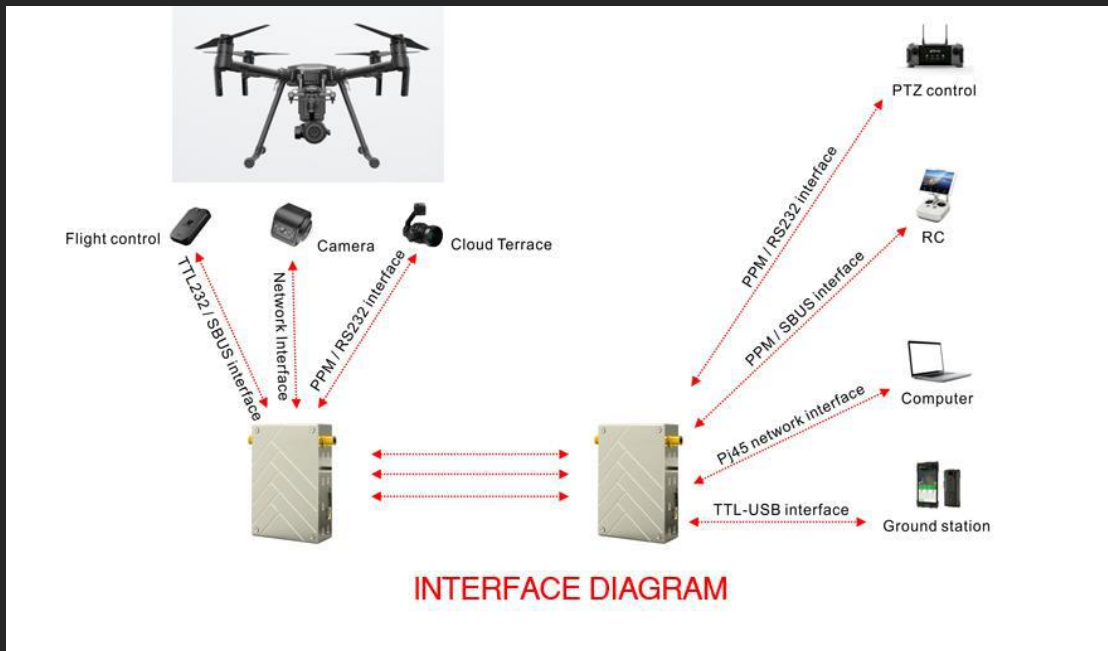
Wireless Channel	2.4GHz(2.400-2.482GHz)	
Power Supply	DC-12V(7-18V)	
RF Transmission Power	30dbm	
Overall Consumption Power	Transmitter Terminal:	4W
	Decoder Terminal:	4w
Communication Bandwidth	1MHz-8MHz	
Max Date Volume	4.5Mbps for two way communication	
Video Color Space	Default:4:2:0 Optional:4:2:2/4:4:4	
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 port to USB/RJ45 on Windows x1	
	1* series port	
	1* power input interface	
	2* antenna interface	
Antenna	Transmitter	Main Antenna: 19cm
	2 MIMO Antennas (omnidirectional)	Slave Antenna: 19cm
	Receiver	Main Antenna: 29cm
2 MIMO Antennas (omnidirectional)	Slave Antenna: 20cm	
Indicator	Power indicator	
	Transmitting&receiving indicator	
Appearance Design	CNC process/aluminum-alloy double-shell anti-storm design	

Packing Details

- 1* Transmitter
- 1* Receiver
- 4* Feed Line(2pcs for each length 0.5m, 2m)
- 4* MIMO Antenna
- 2* HDMI Cable(Soft wire used in airborne terminal, spring wire used in receiving terminal)
- 4* Standard TTL serial port line(including 2pcs USB)
- 2* T33 module
- 4* Ethernet Cable
- 4* Power 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

