

S400 2.4GHz 5km HDMI Video and Dual Direction Data Transmission System

Description

S400 is the mini 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, S400 features on ultra-high resolution(**1080P60**), and ultra-low latency(**15-30ms**). The whole system supports adjustable video resolution; data rate output coupled with Tplayer realizes the soft decoding with low latency. S400, 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(93g), Rx(93g)
- Ultra-low latency 15-30ms
- Video input/output: HDMI and Ethernet
- 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)
- Video sources self-adaptive(Max 1080P), supporting HDMI input and output
- 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 93g
Dimension	Tx/Rx:76mm*48mm*20mm
Wireless Transmission Range	Air to ground 4km-7km(subject to the environment)
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	200mW
Overall Consumption Power	Transmitter Terminal: 6W
	Decoder Terminal: 5w
Communication Bandwidth	2/4/8MHz
Date Rates	1.5/3/6Mbps
Antenna	Transmitter: 1MIMO Antenna(19cm)
	Receiver: 1 MIMO Antenna(29cm)
RX Sensitivity	-97/-94/-90dbm
Wireless Fault Tolerance	FEC/MPEG
Startup Time	25S
Re-connection Time	Less than 1s after the signal has been recovered
TDMA Adjustment	Down QPSK/Up QPSK
Video Color Space	Default:4:2:0 Optional:4:2:2/4:4:4
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	1080P60 HDMI Mini RX x1
	Power Input x1
	Antenna x1
	TTL serial port x1

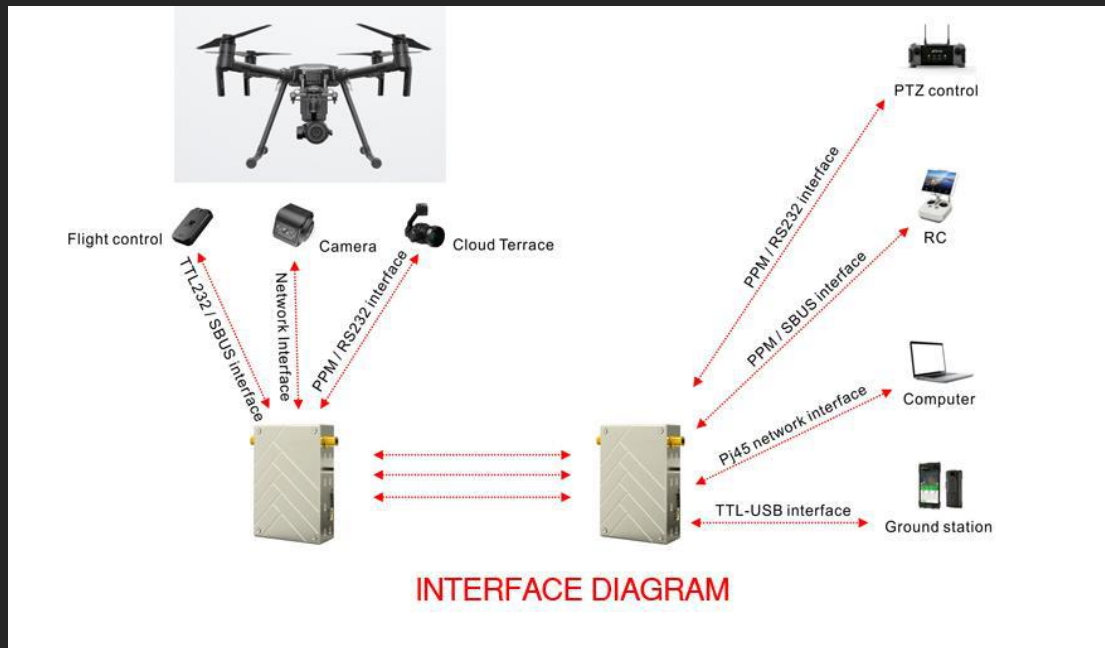
	100Mbps Ethernet to USB/RJ45 on windows x1
Indicator Light	Power
	HDMI input/output indication
	Transmitting&receiving status
	Video board working status
Appearance Design	CNC process/aluminum-alloy double-shell anti-storm design

Packing Details

- 1* Transmitter
- 1* Receiver
- 4* Power Cable
- 2* Feed Line(0.5m, 2m)
- 2* MIMO Antenna(1T 19cm&1R 29cm)
- 2* HDMI Cable(Soft wire used in airborne terminal, spring wire used in receiving terminal)
- 4* Standard TTL serial port line(including 2pcs USB)
- 1* T33 module
- 3* Ethernet Cable(2*Lan card)
- 1* Secret Key



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

