

ST50HPT

Description

ST50HPT is a mini HD Video and Duplex data transmission COFDM system for UAV. It develops CABAC (H.264+H.265) coding&decoding technology to achieve Ultra-high resolution(1080P), long distance(air to ground (40-70km) and low delay(12-25ms) transmission. The system supports two-way(data&image) communication, adjustable video resolution, bit rate output with the TPlayer software. It can realize the soft decoding with low delay. Meanwhile this SUNTOR series products have small size, light-weight, low consumption, high stability and high sensitivity. They are suitable various environment of different application.



Features

- Working Temperature: -40°C — +85°C
- Support SBUS/PPM/TTL/232/485
- Video: Video sources self-adaptive(Max 1080P), Support HDMI Input/output
- Support Video and Duplex Data
- Compatible with different brand flight controller and remote controller
- 100Mbps Ethernet for option
- Matching with our TPlayer software (low latency software decoder) to display video on PC.

Frequency	2.4GHZ (2.400-2.482GHz)	Adjustable
Wireless Fault-tolerant	LDPC FEC	
RF Transmitted Power	33dbm(Air to ground 40-70km)	
Power Consumption	TX: 10Watts/RX: 7Watts	
Bandwidth	1-8Mhz	Adjustable
Video Input/output Interface	Onboard HDMI mini TX/RX or FFC convert to HDMI-A TX/RX	
Latency	≤15-30ms	
Bit rate and channel adjustment mode	DIP or SPI2MCU	
Receive Sensitivity	-100dbm/95dbm/90dbm	
Transmitter Interface	1080P 60 HDMI Mini RX	
	100Mbps Ethernet Port	

	S1 TTL bidirectional serial port	
	S2 TTL bidirectional serial port	
	SMA RF	
Receiver Interface	1080P 60 HDMI Mini RX	
	100Mbps Ethernet Port	
	S1 TTL bidirectional serial port	
	S2 TTL bidirectional serial port	
	SMA RF	
Antenna	1T1R TX: 7db(25cm Omni Antenna) RX: 10db(Omni Antenna)	
Video Input/output Interface	HDMI mini TX/RX, or transform FFC to HDMI-A RX/TX	Support the voice function
Video Color Space	Default 4:2:0 optional: 4:2:2/4:4:4	
Video Compressed Format	AVC, H.265, TS	Support the bitrate output
Adjustment mode of bitrate	Software adjustment	
Communication Channel Encryption	WEP, WPA(PSK), WPA2(PSK), WPA+WPA2 (PSK), AES 125/256	
Transmission Mode	point to point / point to multipoint	
Transmission Distance	Air to ground 40-70km	
Start-up time	25s	
Total delay of the system	15-30ms of 1080P60/720P60 coding and decoding	
Two-way function	Integrate multiple radio links, SBUS/PPM/TTLs 1 pro communication module	Optional

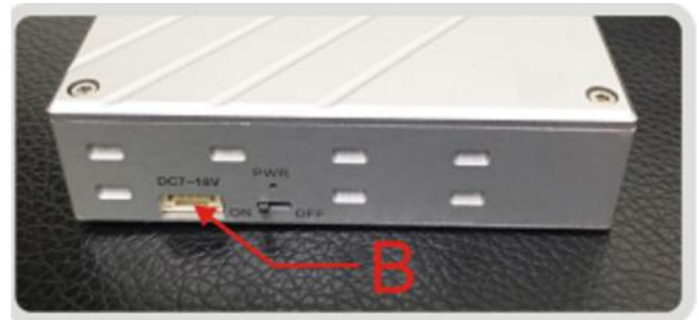
Parameters

Power supply	DC 7- 18V (DC16.8V advised)	DC7-18 V Optional
Temperature Range	Operating temperature: -40°C ~ 85°C	
	Storage temperature: -55°C ~ 100°C	
Interface	Power input interface × 1	
	Antenna interface × 1	
	RS232 Bidirectional Port × 1(With isolation protection, resistance to 3000V pulse voltage)	
	Ethernet to USB / RJ45 on Windows × 1	Software adjustment
Indicator Light	HDMI input/output indicator light	
	Transmitting and receiving indicator light	
	Video board indicator light	

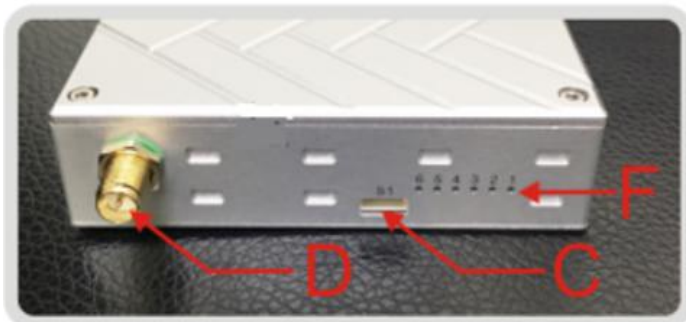
	Power light	
HDMI	HDMI mini/Flexible Flat Cable(FFC)	
Appearance Design	CNC technology/ double aluminum alloy shell with waterproof design	
Size	24mm×73mm×76mm	
Weight	Tx: 208g, Rx: 100g	



A: 1* Mini HDMI Port on TX & RX



B: DC 7-18V Input



C: 1*TTL 232 Bidirectional Serial Port
 D:1*SMA Antenna Port
 F: Working Station Indicator



E: 1*100Mbps Ethernet
 G: WL Signal Indicator