

ST11HPT

Description

ST11HPT is a mini HD Video and 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 8-12km) 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

- **Ultra-high Resolution Image:** Independently developed CABAC (h.264+h.265) coding&decoding technology
- **Ultra-distance:** Air to ground 8-12km
- **Ultra-low Delay:** $\leq 12-25\text{ms}$
- **Transmission Mode:** PTP, PTMP for LOS and NLOS distance
- **Transmission Signal:** Video, Audio and data(RS232)
- **Dimension:** 72*47*19mm
- **Weight:** 94g

Video

- HDMI input/output and support SBUS,PPM,TTL
- Image & data transmission, combined multiple radio links into one radio link to transmit and receive
- 1080P 60fps &30fps /720P 60fps resolution adjustable
- 1080P 60fps/720P 60fps coding/decoding delay is 12~25ms
- Support 100Mbps Ethernet to output

Communication

- Support the 2.4GHz(2.402 - 2.478 GHz) TDMA OFDM
- Transmitted power: 400mW/1000mW/1500mW
- 2/4/6/8MHZ Adjustable
- Support point to point, point to multipoint.
- Radio communication mode: reconnection time < 1 ms.
- Encryption: AES

- Antenna: Omnidirectional antenna can increase the sensitivity of signal reception

Parameters

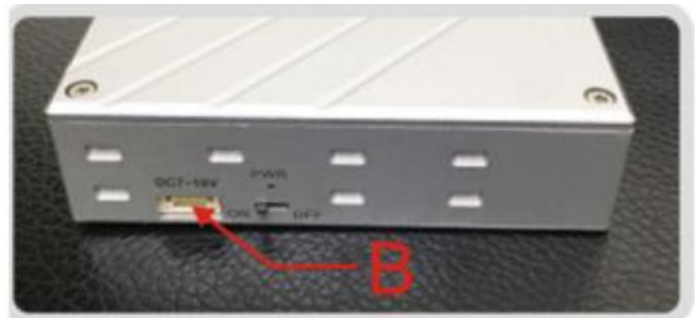
Frequency	2.4GHZ (2.402-2.478GHz)		Adjustable
Wireless Fault-tolerant	LDPC FEC		
RF Transmitted Power	ST5HPT: 400mW (Air to ground 5km) ST11HPT: 1Watt (Air to ground 10km)		
Frequency Bandwidth	2/4/6/8MHz		Adjustable
Latency	≤12-25ms		
Receive Sensitivity	-100dbm/95dbm/90dbm		
Transmitter Interface	1080P 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		
	DC7-18V		
	SMA RF		
Video Color Space	Default 4:2:0 optional: 4:2:2/4:4:4		
Antenna	1T1R		
Video Input/output Interface	HDMI mini TX/RX, or transform FFC to HDMI-A RX/TX		Support the voice function
Video Compressed Format	H.264+H.265		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 10-15km		
Start-up time	< 30s		
Total delay of the system	12-25ms of 1080P60/720P60 coding and decoding		
Two-way function	Support video and duplex data simultaneously		
Data	Support SBUS/PPM/TTL		
Power supply	DC 7- 18V		DC7-18 V Optional
Total Power Dissipation	ST5NPT	ST11HPT	Maximum value
	TX: 6Watts	TX: 7Watts	
	RX: 5Watts	RX: 5Watts	

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	
	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	72×47×19mm	
Weight	Tx: 94g, Rx: 98g	

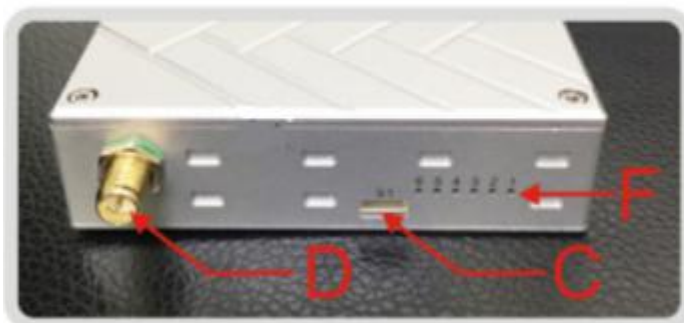
Connectors



A: 1* Mini HDMI Port on TX & RX



B: DC 7-18V Input



C: 1*TTL Bidirectional Serial Port

D: 1*SMA Antenna Port

F: Working State Indicator



E: 1*100Mbps Ethernet

G: WL Signal Indicator

Package List



Package List:

- 1* Transmitter
- 1* Receiver
- 2* Power Cable
- 2* TTL Cable(TX+RX)
- 1* TTL to USB Cable
- 2* Omni Antenna(TX+RX)
- 2* HDMI Cable(TX+RX)
- 2* Ethernet Cable
- 1* Packing Box



Package Box

