

# C50HPT

## Description

C50HPT 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(12-30ms) 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 for various environments of different applications.



## Features

- Working Temperature: -40°C ~ +85°C
- Support SBUS/PPM/TTL/232/485
- Video: Video sources self-adaptive(Max 1080P/60), Support HDMI Input/output
- Support Video and Duplex Data
- Compatible with different brand flight control system and remote controller
- 100Mbps Ethernet for option
- Matching with our TPlayer software (low latency software decoder) to display video on PC.

## Parameters

|                         |  |
|-------------------------|--|
| Frequency               | 2.4GHZ(2.400-2.482GHz)   |
| Wireless Fault-tolerant | Wireless Baseband FEC Forward Error Correction / Video MPEG Super Error Correction |
| TDMA Modulation         | Downstream QPSK / Uplink BPSK  |
| RF Transmitted Power    | 33dbm(Air to ground 40-70km)   |
| Power Consumption       | TX: 12Watts/RX: 9Watts   |
| Bandwidth               | 2/4/6/8Mhz   |
| Link rebuild time       | ≤1s  |
| Latency                 | ≤15-30ms   |
| Antenna                 | 1T1R<br>TX: 5db(Omni Antenna) RX: 12db(Omni Antenna)                               |
| Video Color Space       | Default 4:2:0/optional: 4:2:2/4:4:4  |
| Video Compressed Format | AVC adds H.265 feature TS stream   |

|  |   |
|--|---|
| 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   |
| Two-way function                         | Support SBUS/PPM/TTL  |
| Power supply                             | DC 7- 18V   |
| Temperature                              | Operating temperature: -40°C ~ 85°C<br>Storage temperature: -55°C ~ 100°C   |
| Interface<br>(same interface on TX & RX) | 1. 1080P/60 HDMI Mini RX(SDI on request)  |
|  | 2. 100Mbps Ethernet Port  |
|  | 3. Ethernet Port convert to TTL serial port (Support TCP/UDP)   |
|  | 4. RS232 Serial Port<br>( 12V Electrical Level, Resistant to 3000V pulse voltage for 60 seconds and anti-static protection) |
|  | 5. RS422/485 Serial Port<br>(Resistant to 3000V pulse voltage for 60 seconds and anti-static protection)                    |
|  | 6. SBUS/PPM Serial Port for Extending Application   |
|  | 7. Audio(Trumpet) S2 Port for Extending Application   |
|  | 8. Power Input XT30 (DC7-18V)   |
|  | 9. Antenna SMA RF   |
| Indicator Light                          | HDMI input/output indicator   |
|  | Transmitting and receiving WL indicator   |
|  | Video board indicator   |
|  | Power   |
| Appearance Design                        | CNC technology/ double aluminum alloy shell with waterproof design  |
| Dimension                                | 76x73x24mm  |
| Weight                                   | TX: 146g, RX: 146g  |