

## ST100 COFDM Wireless Downlink Transmitter

--500mW HD video COFDM wireless downlink transmitter with HDMI or AV input interface

The ST100 wireless digital video transmitter was designed for use with HD or SD cameras, it's a superior miniature wireless video transmitter designed to capture real-time, high-quality video from Point of View Cameras, UAV/UGV/Body Cams/Concealments, and sports cameras. The transmitter features HDMI or AV inputs with COFDM modulation technology and H.264 encoding that complete video audio transmission in high-speed motion and NLOS (none line of sight) conditions with low latency. The ST100 delivers up to 500 mW of power in a small metal case weighing less than 135 grams, providing long range, reliable HD video transmission.

Features:

- COFDM modulation and H.264 video compression;
- Full HD resolution, 1080p/i @60fps;
- Great security by AES encryption;
- Modular design and high integration;
- Stable signal transfer in NLOS and high-speed motion;
- Adjustable working frequency, band width, bitstream rates, RF power, etc.



### Specification:

#### IO

HD Video input	Mini HDMI, HDMI type "B" Connector
Composite Video input	4PIN PH1.25mm Connector
TTL UART data	3PIN PH1.25mm Connector
TTL UART control	4PIN lockable Connector
Power in	4PIN PH1.25mm Connector
RF output	SMA female

#### Modulation

Modulation Formats	COFDM(DVB-T)
Carriers	2K

Bandwidth	Configurable from 1MHz to 8MHz, step by 1KHz
FEC	1/2, 2/3, 3/4, 5/6, 7/8
Guard interval	1/32, 1/16, 1/8, 1/4
Constellation	QPSK, 16QAM, 64QAM
Bitrates	0.5Mbps to 31.67Mbps

## RF

Frequency Bands	Specify: 300~360MHz 350~400MHz 450~500MHz 520~560MHz 580~620MHz 680~720MHz 820~860MHz Other ranges available from 200~860MHz
Tuning Step size	1KHz
Transmission power	500mW(27dBm)

## Video and Audio

Video input	HDMI or CVBS, auto-detected after system start-up
Video formats	1080@60P, 1080@50P, 1080@30P, 1080@25P, 1080@24P, 1080@60I, 1080@50I, 1080@30I, 720@60P, 720@50P, 720@30P, ..... 720*480 60I(NTSC), 720*576 50I(PAL)
Video Coding	MPEG-4/H.264 AVC
Audio input	Embedded HDMI or AV audio
Audio Coding	AAC, 16bit, stereo, 32Kbps
Encryption	AES256

## Monitoring and control

Comprehensive transmitter setup with Sihid Config Panel or PC or other device via Control UART.

## Temperature range

Full specification: 0° to +55°C Ambient

Storage: -40° to +80°C

## Physical Characteristics

Weight: 135g

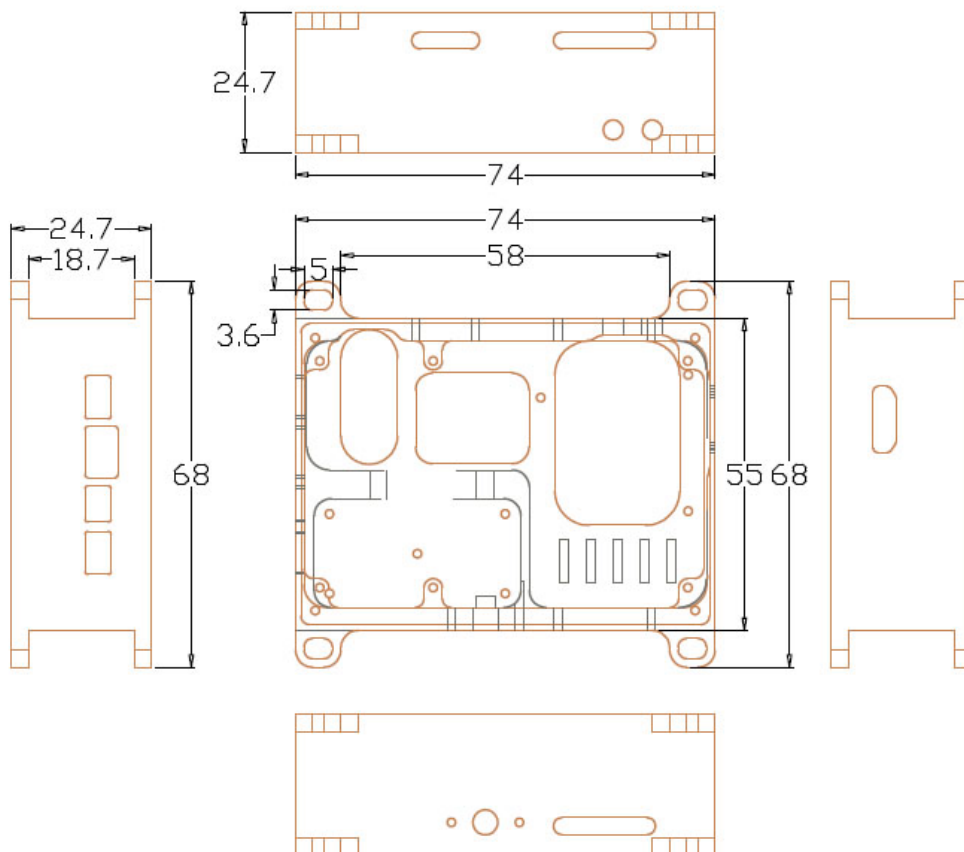
Dimensions: 74x68x24.7mm(not including connectors out of the board)

## Power requirements

Input range: 11~13VDC

Power consumption: <1A@12V

Outline



IO signals

