

## Mini Full-HD Wireless COFDM AV Transmitter

Model: SG-HDS1000A



### 1. Summary

SG-HDS1000A is a mini HD 1080P COFDM video transmitter, which uses the 4th generation mobile communication core COFDM multi-carrier modulation transmission system. It has high efficiency innovative H.264 compression encoding, integrated with lightweight, low power consumption of OLED display control panel, integrating digital modulation, and highly integrated HD moving LOS and NLOS digital video transmission equipment. Built-in with HDMI or HD-SDI interface. It can transmit high quality full 1080P HD video and audio even though there are some building blocks or high-speed mobile shooting.

### 2. Features

- \* The transmitter only has 195g without battery;
- \* COFDM modulation,H.264 compression;
- \* HDMI/SDI ports;
- \* Support 1080P/720P resolution;
- \* High performance,high capacity power of Li-battery (replaceable);
- \* Small dimension,light weight,easy to carry ,heat dissipation of aluminum case;
- \* Support NLOS,high-speed mobile transmission;
- \* Highly integrated modular combination design.

### 3. Specifications of transmitter:

Voltage	DC7.2V(7.2V/1400mA standard matching mini battery)
Current	1A
AV Input	AV:3.5mm port,connect to standard resolution analog video signal
	Camera:2.5mm port,connect to HD camera
	HD-SDI/HDMI:supportHD1080P,720P,576,480; with audio demultiplexing function
Battery working time	1 hour
Frequency	300-900MHz(option)
Bandwidth	2/2.5/4/8MHz(adjustable)
Output power	30dBm (1Watt)
Data encryption	AES128/256bits
Modulation	COFDM
Constellation	QPSK, 16QAM
Carrier	2K,8K
Flatness	Full band $\leq$ 2dB, 8MHz $\leq$ 0.5dB
FEC	1/2、2/3、3/4、7/8
Guard Interval	1/32、1/16、1/8、1/4
Video Compression	H.264
Image resolution	HD1080i/P(1920*1080), compatibility 1080I,720P,480P and standard resolution
Parameter control method	Set up the related parameters through the control panel
CNR (weighting) dB	$\geq$ 58
Sloping field SNR (unweighted) dB	$\geq$ 50
Standard	SMPTE 425M (Level A and Level B), SMPTE 424M, SMPTE 292, SMPTE 259M-C SMPTE 272M SMPTE 299M
Input range (mV)	800 $\pm$ 80
RF Interface	SMA
Video formats	PAL/NTSC(self-adaption)
Working temperature	-20 $\sim$ +75 $^{\circ}$ C
Dimension	100*59*22mm
Weight	195g(without battery) 288g(with battery)

#### 4. Matched Receiver:



Frequency	300-900MHz,1.2G/2.4G/4.4GHz
Receiving sensitivity	≤-102dBm @ /4MHz, ≤-95dBm @ /8MHz
BER	BER≤1×10 <sup>-4</sup>
RF interface	N(type), Dual antenna diversity reception technology
Constellation	QPSK,16QAM
Carrier	2K,8K
Video formats and amplitude	PAL/NTSC, 1Vp-p/75Ω
Voltage	AC220V±20V, DC14V~DC16V
Current	≤1A@DC12V
Modulation	COFDM
Encryption	AES128
AV Interface	BNC
FEC	1/2、 2/3、 3/4、 7/8
Guard Interval	1/32、 1/16、 1/8、 1/4
Revolution	HDMI/SDI: HD1080, 720P, 576, 480
Video output	Composite video RCA, HDMI, HD-SDI (alternative)
Audio Output	Analog stereo left and right channels
Video channel characteristic	Differential gain DG≤1.5% Differential phase DP≤1°
Work environment	-30~70
Weight	3.5KG
Size	440*340*65mm

### 5. Application:

It's widely used in UAV aviation filming, military, broadcast, police, covert investigation, image monitor or real-time wireless video transmission and so on.

