

3Watt 1080P HD Wireless COFDM AV Transmitter

SG-HD103



Introduction:

Such new design 1080P HD transmitter is a powerful HD transmit system, it can transmit good quality and stable full HD digital video signal under the condition of high speed mobile and heavy building blocks transmission in city environment.

Support full HD 1080P H.264 encoding format and HDMI/SDI (single selection) as well support stereo balance audio input and narrow-band transmission system.

Features:

- RF power 3W with small size and light weight
- Built-in with HDM and HD-SDI interfaces (single selection)
- Support AES encryption user-defined password
- Supports full HD video H.264 encoding compression
- RF bandwidth 4/8MHz (adjustable)
- COFDM modulation, video compression code stream bandwidth can up to 12Mbps

Specifications:

Power section	
Voltage	DC11V~DC16V
Current	≤1.1A@DC12.5V
Transmitter section:	
Frequency range	300-4400MHz (customizable)
RF bandwidth	2/2.5/4/8MHz(adjustable)
Power output	28-34dBm(adjustable), turning step 1dBm
CNR	30dB @ 30dBm
SHG	>52dBc
Encryption	AES
Modulation	COFDM
Constellation	QPSK, 16QAM
FEC	1/2,2/3,3/4,5/6,7/8(option)
Carrier	2K,8K
Guard Interval	1/32,1/16,1/8,1/4 (option)
Flatness	Full band≤2dB,8MHz≤0.5dB
AV interface	HDMI/SDI(single selection)
CNR(weighting)dB	≥58
Sloping field	≥50
SNR(unweighted)dB	
Analog Audio	
Balanced audio input range	V _{max} =±15V
Unbalanced audio input range	V _{max} =3V _{pp}
Standard	SMPTE 425M (Level A and Level B), SMPTE 424M, SMPTE 292, SMPTE 259M-C SMPTE 272M SMPTE 299M
Input range (mV)	800±80



Versions	HDMI/HD-SDI 1.3
HDCP protocol	Yes
Encoding support	
AV rate	64, 96,112,128,160,192,224,256,320,384Kbps(adjustable)
Audio encoding mode	MPEG1 Layer2
Video resolution	Minimum 720×480 50i(720×576 50i) Maximum 1920×1080 60P
Video coding	H.264
Video rate	500kbps-16.68Mbps(autoadaptation)
Format	YCbCr4:2:2
Working Temperature	-25℃~55℃
Storage Temperature	-40℃~70℃
Transmission distance	
NLOS distance	2km max with obstructions
LOS distance	1-40km air to ground if 300-500m flight altitude 1-4km for vehicle to building
Appearance characteristics	
Dimension	167*90*25mm
Weight	515g

Paired receiver (We have several options)

SG-DR2000



Main feature

- Small size and lightweight;
- Easy to be carried, good quality;
- Safe and reliable;
- Stereo audio output;
- <-105dBm Sensitivity;
- COFDM modulation, H.264 video coding
- Support HD, SD video output

Parameter

Frequency	300-800MHz(optional), 1.2GHz/2.4GHz/5.8GHz(customized)
Sensitivity	<-105dBm
RF Interface	N(F)
Power supply	DC12V/AC220V
Modulation	COFDM, 2K
AV Interface	BNC and HDMI or HD-SDI
FEC	1/2
Guard Interval	1 / 32
Video Output	1 line PAL / NTSC analog video
Revolution	1080P
Lines of horizontal	625 or 525 Line
Work environment	-30~70°C
Weight	900g
Size	140*170*30mm

Application

