Two Way Voice Communication COFDM NLOS Video & Audio Transmission System

Model: ST9502T

TX   **RX**

Introduction

ST9502T is a powerful COFDM bi-directional soldier body worn video and audio transmitting system with strong penetrating ability. It adopts H.264 technology supportting HDMI and CVBS video input. And it also support RS485 and RS232 data transmittng. 80ms latency making it very sutable for projects which beed real time transmission.

The system can access to USB flash disk, TF card for local audio and video synchronization storage. It is widely used in urban emergency response, anti-terrorism, border defense, armed police fire, maritime, UAV and other units of the emergency map transmission demand. It supports ground to air, air to air, urban environment, forest environment and other multi-dimensional audio and video signal transmission.

Features

1) H.264 compressed encoding support 1080P@60fps
2) Support RS485 two way data transmitting
3) Support RS232 transparent transmission
4) Support HDMI, CVBS video transmission
● Mini HDMI: 1080 60P/1080 50P/1080 30P/1080 25P/1080 24P/1080 60I/1080 50I/1080 30I/720 60P/720 50P/720 30P(self-adaption)
● AV in: 720x480 60I(NTSC)/720x576 50I(PAL)(self-adaption)
5) Two way voice communication
6) Latency: 80ms
7) RF power, frequency and bandwidth are adjustable
8) Support AES256 encryption
9) Support stable transmission during high-speed mobile

TX Parameters

Frequnecy	Video: 300MHz~860MHz
	Data: 223~235MHz
Power	37dBm (5Watts)
Video Coding	H.264
Video	Mini HDMI: 1080 60P/1080 50P/1080 30P/1080 25P/1080 24P/1080 60I/1080 50I/1080 30I/720 60P/720 50P/720 30P(self-adaption)
	AV in: 720x480 60I(NTSC)/720x576 50I(PAL)(self-adaption)
Audio	Mini HDM
	AV in & Audio in
Antenna	UHF
Data	One-way transparent data transmission (OSD UART)
	Serial port (Config UART) RS485
Modulation	Convolution coding ratio: 1/2, 2/3, 3/4, 5/6, 7/8
	Support QPSK/QAM16/QAM64
	Support IFFT: 2K/8K
	Guard Interval: 1/4, 1/8, 1/16, 1/32
	Bandwidth: 2/3/4/5/6/7/8 MHz
	Encryption: AES256
Power Input	DC12V3.5A
Weight	1.6kg

TX Interface Definition

HDMI Input

DC 12V Input

CVBS Video Input

Audio

RS485

Power ON/OFF

Video Antenna Interface

Data Antenna Interface

RX Parameters

Power	DC Input	DC 12V/3A
	Built-in Lithium Battery	12V/6Ah
Video	HDMI Output	HDMI-A-type port audio and video output, support H.264 video decoding, maximum support 1080P @ 60fps
	CVBS Output	CVBS Video Output
Audio	Two way voice function(Optional)	MIC/LINE-IN, LINE-OUT, connecting handle microphone
RF	Convolution coding ratio	1/2, 2/3, 3/4, 5/6, 7/8
	Modulation	QPSK/QAM16/QAM64
	IFFT	2K/8K
	Guard Interval	1/4, 1/8, 1/16, 1/32
	Bandwidth	2/3/4/5/6/7/8 MHz
Receive Sensitivity	4MHz	≤-104dBm
	8MHz	≤-97dBm
Video Storage	USB	Support max 32GB U disk for local audio and video storage
	TF Card	Support max 32GB TF card for local audio and video storage
Serial Port	RS232	Support 1 channel RS232 transparent serial port (optional)
Physical Characteristics	Operating Humidity	10%—95%
	Working Temperatue	-15℃—60℃
	Dimension	368*48*230mm
	Weight	2.2kg

RX Interface Definition

Antenna

On/Off

HDMI Output

TF Card for Video Recording

Button for Recording

USB Port for video recording

Antenna