

8-12KM UAV VIDEO & MAVLINK SYSTEM

Offering HDMI Video & TTL Bi-directional Data Transmission Down Link

Model: FIM-2410

FIM-2410 mini transceiver is a new designed TDD-COFDM wireless communication equipment based on military standard for UAVs/Drones/VTOL. It supports 2.3/2.4/2.5Ghz for different environment. The system provides superior performance in 8-12km long range HD video and bi-directional data transmission with 50ms latency.



Features

- Video compression H.264 technology + H.265's Algorithms
- Dual Built-in encoder/decoder
- HDMI and IP Camera interface
- HD video and Telemetry receiver
- Built to enable controlling and transmitting
- Drone Communication + Video Processing
- Bi-Directional Data Link Supporting Simultaneous HDMI and Digital Video Streams
- Ethernet interface support TCP/UDP

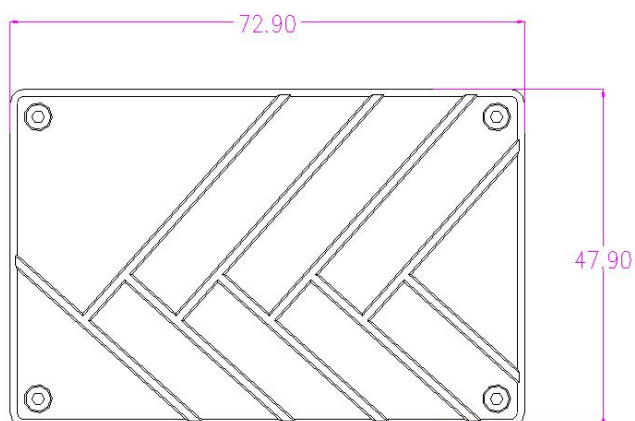
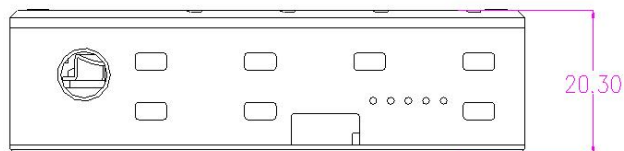
Parameters

Frequency	2.3GHZ(2.304- 2.390Ghz): 2T2R
	2.4GHZ(2.402 - 2.482 Ghz): 1T1R (2T2R on request)
	2.5GHZ(2.500- 2.570Ghz): 2T2R
Error Detection	LDPC FEC/Video H.264/265 Super Error Correction
RF Transmitted Power	30dbm (Air to ground 8-12km)
Power Consumption	TX: 10Watts
	RX: 6Watts
Antenna	TX: Omni antenna /19.6cm Length /3.5dbi
	RX: Omni antenna/24.9cm Length/7dbi
Frequency Bandwidth	4MHz(Default)/8Mhz(for your option)
End to End Latency	50-70ms for1080P60/720P60 Encoding and decoding
Transmission Rate	3Mbps@4Mhz/6Mbps@8Mhz
Receive Sensitivity	-100dbm@4Mhz, -95dbm@8Mhz

Video Color Space	Default 4:2:0
Video Input/output Interface	HDMI mini TX/RX, or transform FFC to HDMI-A RX/TX
Video Compressed Format	H.264+H.265
Bitrate	Up to 115200bps (Software adjustment)
Encryption	AES 128
Transmission Distance	Air to ground 8-12km
Start-up time	25s
Two-way function	Support video and duplex data simultaneously
Data	RS232 ($\pm 13V$), TTL (0~3.3V)
Power supply	DC7- 18V(DC12V Suggested)
Interface	HDMI Mini x1
	10/100Mbps Ethernet to USB / RJ45 on Windows $\times 1$
	S1 TTL bi-directional serial port x1
	SMA Interface*2
	Power Input x1
Indicator Light	HDMI input/output Status(WL Light)
	Signal Strength Indicator(1, 2, 3)
	Connection Status Indicator(5, 6)
	Video circuit board Work Indicator(4)
	Power
HDMI	HDMI mini/Flexible Flat Cable(FFC)
Temperature Range	Operating temperature: $-40^{\circ}C \sim + 85^{\circ}C$
	Storage temperature: $-55^{\circ}C \sim + 100^{\circ}C$
Metal Case Design	CNC Technology
	Double Aluminum Alloy Shell
	Conductive anodizing craft
Dimension	72.9 \times 47.9 \times 20.3mm
Weight	Tx: 93g/Rx: 93g

Dimension: 72.9*47.9*20.3mm

Weight: Tx/Rx 93g



Package List

Item	Qty
Tx	1
Rx	1
Tx Antenna	2
Rx Antenna	2
Antenna Cable	4
Ethernet Cable	3
TTL to USB Cable	4
HDMI Cable	2
Power Cable	4
Package Box	2