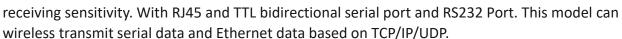# 22km Drone Ethernet TCP/UDP & Bi-directional Data Transmission Radios

Model: FIP-2420

FIP-2420 is a TDD-COFDM wireless communication equipment based on military standard. It supports 2.4GHz(2. 402~2. 478 GHz) and suitable for long distance, high code stream and wireless transmitting application. The transmitting rate up to be 3/6Mbps and the farthest transmission distance is 22km air to ground.

This model has advantages of light weight, mini size, low power consumption, high stability and receiving sensitivity. With RJ45 and TTL bidirectional serial port and RS232 Port. This model can wireless transmit serial data and Ethernet data based on TCP/IP/UDP.

Features

➢ Working temperature: -40°C - +85°C
➢ Support AES-128 encryption
➢ Support TTL/Mavelink Telemetry
➢ Double Serial Ports for bi-directional Data
➢ Offering control, telemetry & payload in, Video Transmission in 1 RF channel
➢ Double Antenna Design: 1T1R
➢ Range: Air to ground 22km
➢ Support: 2.4GHz (2.402 - 2.478 GHz) COFDM
➢ Transmitting Power: 33dbm
➢ Frequency Bandwidth: 4/8Mhz Adjustable
➢ Signal Transmit: Support TCP/UDP/TTL/RS232/MAVLINK Telemetry

Parameter

Frequency	2.4GHz (2.402-2.482GHz)
RF Transmitting Power	33dBm(air to ground 18-22km)
Frequency Bandwidth	4/8MHz
Antenna	1T1R
Adjust bit rate	Software adjustment
Encryption	AES 128

Transmission Mode	point to point
Start-up time	25s
Link rebuilt time	＜ 1s
Error Detection	LDPC FEC
Serial Data	TTL: 0-3.3v
	RS232: ±13V
Ethernet	Support TCP/IP/UDP
Transmission Rate	3/6Mbps
Sensitivity	-100dbm@4Mhz
	-95dbm@8Mhz
Antenna	1T1R(Omni Antenna)
Power	DC7-18V(DC12V Suggested)
Power Consumption	TX: 16Watts
	RX: 5Watts
Temperature	Operating temperature: -40 - +85°C
	Storage temperature: -55 - +85°C
Interface	Power input interface × 1
	Antenna interface × 1
	TTL Bidirectional Port × 2
	RS232 Interface x 1(TTL and RS232 can not be used at same time)
	Ethernet Port x1
Indicator	Power indicator light
	Connection Status Indicator(4, 5, 6)
	Signal Strength Indicator(1, 2, 3)
Metal Case Design	CNC technology
	Double aluminum alloy shell
	Conductive anodizing craft
Size	TX: 76.4×72.9x22.5mm
Weight	TX: 120g
	Rx: 120g

- Overall Dimension: 76.4×72.9x22.5mm
- Weight: 120g