

14-16km Drone HDMI Video, Ethernet and Bi-directional Data Link

Model: FPM-8416

Frequency Option

- 800Mhz: 806-826Mhz
- 1.4Ghz: 1428~1448 MHz



Key Features

- Video Input Interface: HDMI
- Both 1400Mhz and 800Mhz have penetrate ability for barriers
- 1* Serial Ports: Bi-directional Data Transmission
- 2* Antennas: Dual Tx antenna and Dual Rx antenna
- 1*100Mbps Ethernet port support TCP/UDP
- 1/4 inch screw hole on Tx for fixing on UAV

Specifications		
Frequency	800Mhz	806~826 MHz
	1.4Ghz	1428~1448 MHz
Bandwidth	8MHz	
RF Power	0.6watt (Bi-Amp, 0.6watt Peak Power of each power amplifier)	
Transmit Range	800Mhz: 16km 1400Mhz: 14km	
Antenna	800Mhz	TX:Omni Antenna/25cm Length/ 2dbi RX:Omni Antenna/60cm Length/6dbi
	1.4Ghz	TX:Omni Antenna/35cm Length/3.5dbi RX:Omni Antenna/60cm Length/5dbi
Transmit Rate	3Mbps (HDMI Video Stream, Ethernet Signal and serial data share)	
Baud Rate	115200bps(Adjustable)	
Sensitivity	-106@4Mhz	
Wireless Fault Tolerance Algorithm	Wireless baseband FEC forward error correction/ video codec super error correction	

End to End Latency	Latency for encoding + transmission + decoding 720P/60 <50 ms 1080P/60 <80ms
Link Rebuild Time	<1s
Modulation	Uplink QPSK/Downlink QPSK
Video Compression	H.264
Video Color Space	4:2:0 (Option 4:2:2)
Encryption	AES128
Start Time	15s
Power	DC12V (7 ~ 18V)
Interface	Interfaces on Tx and Rx are same <ul style="list-style-type: none"> ✧ Video input/Output: Mini HDMI×1 ✧ Power Input Interface×1 ✧ Antenna Interface: SMA×2 ✧ Serial×1: (Voltage:+-13V(RS232), 0~3.3V(TTL)) ✧ Ethernet: 100Mbps x 3
Indicators	<ul style="list-style-type: none"> ✧ Power ✧ Wireless Connection Setup Indicator
Power Consumption	Tx: 9W(Max) Rx: 6W
Temperature	Working: -40 ~+ 85°C Storage: -55 ~+100°C
Dimension	Tx/Rx: 93 x 55.5 x 23.5 mm
Weight	Tx/Rx: 130g
Metal Case Design	CNC technology/ double aluminum alloy shell
	Double Aluminum Alloy Shell
	Conductive anodizing craft

Package List



FPM-8416 Tx & Rx



Ethernet Cabel*3



Antenna Cable*6



Tx HDMI Cable*1



Rx HDMI Cable*1



TTL-USB Cable*4



Power Cable*4



Tx Antenna*2



Rx Antenna*2