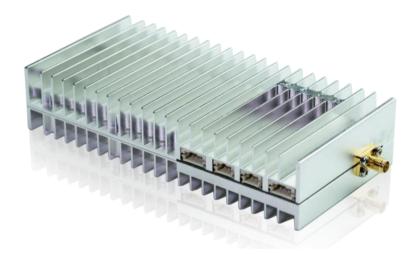


# 10Watts 2\*2 MIMO Broadband IP Point to Multi-Point Link



FDM-615PTM is a point to multi-point network board for long range video and data downlink to ground. It supports multi transmitters in air sending HD video and TTL data to one receiver on ground. It is special designed for fixed wing drone/helicopter/Vehicles video downlink for 100km-150km during fast moving.

Smart antenna MIMO make FDM-615PTM provide real-time HD video and broadband Ethernet connection with 30Mbps transmission rate and distance of 100km-150km or more. It is special for wireless communication in critical private networks.

#### **KEY BENEFITS**

- Bandwidth 1.4Mhz/3Mhz/5Mhz/10Mhz/20Mhz
- Transmitting Power: 40dBm
- Support 800Mhz/1.4Ghz frequency options
- Air to ground 100km-150km range
- NLOS 3km-10km ground to ground distance
- Automatic power control
- Automatic frequency point control
- Ethernet communication via PH2.0 interface
- TTL communication via PH2.0 interface

## **Application**

- Point-to-multipoint long-distance communication
- Power and hydrological line patrol monitoring
- Emergency communications for fire fighting, border defense, and military
- Maritime communications
- Digital oilfield
- Fleet formation

GENERAL		MECHANICAL	
TECHNOLOGY STANDARD	Wireless Transmitting based on TD-LTE Technology Standards	TEMPERATURE	-20º to +55ºC
ENCRYPTION	ZUC/SNOW3G/AES(128/256) OptionalLayer- 2 Encryption	DIMENSIONS	160.4*68*30mm
DATE RATE	30Mbps(Uplink+Downlink)	WEIGHT	280g
SENSITIVITY	-103dBm/10Mhz		
RANGE	100km-150km(Air to ground) NLSO 3km-10km(Ground to ground) (depends on the actual environment)	MATERIAL	Silver Anodized Aluminum
MODE	Point to multi-point	MOUNTING	Vehicle-mounted/Onboard
MODULATION	QPSK, 16QAM, 64QAM		
МІМО	2x2	POWER	
Anti-jamming	Automatically frequency hopping		
RF POWER	40dbm	VOLTAGE	DC 24V±10%
LATENCY	End to END: 60ms-80ms	POWER CONSU MPTION	30watts
FREQUENCY		INTERFACES	
1.4Ghz	1427.9-1447.9MHz	RF	2 x SMA
800Mhz	806-826 MHz	ETHERNET	1xPH2.0
Note: The frequency band supports customized		PWER INPUT	1 x DC Input
		TTL Data	1xPH2.0
		Debug	1xPH2.0

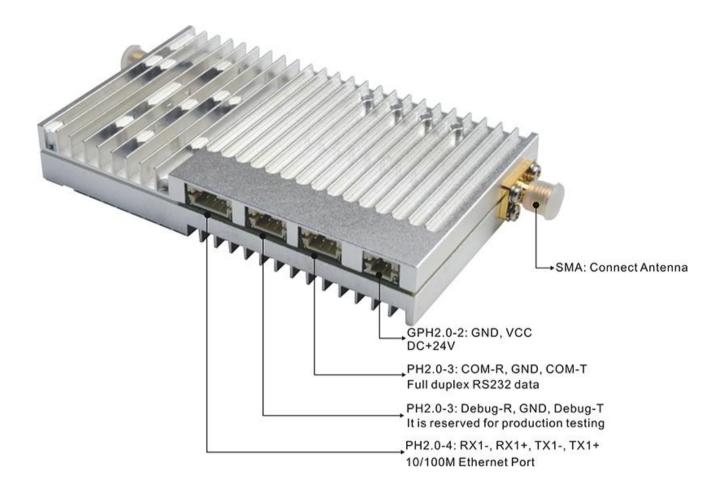
COMUART		
Electrical Level	3.3V and compatible with 2.85V	
Control Data	TTL	
Baud rate	115200bps	
Transmission Mode	Pass-through mode	
Priority Level	Higher priority than the network port When the signal transmission is crowed, the control data will be transmitted in priority	

### Note:

- 1. The data transmitting and receiving is broadcast in the network. After successful networking, each FDM-615PTM unit can receive serial data.
- 2. If you want to distinguish between sending, receiving and control, you need to define the format yourself

SENSITIVITY			
1.4GHZ	20MHZ	-100dBm	
	10MHZ	-103dBm	
	5MHZ	-104dBm	
	3MHZ	-106dBm	
800MHZ	20MHZ	-100dBm	
	10MHZ	-103dBm	
	5MHZ	-104dBm	
	3МНZ	-106dBm	

### **INTERFACE**



## **Automatic Frequency Point Control**

After booting, it will try to network with the pre-stored frequency points before the last shutdown. If the pre-stored frequency points are not suitable for network deployment, it will automatically try to use other available frequency points for network deployment.

#### **Automatic Power Control**

The transmit power of each unit is automatically adjusted and controlled according to its signal quality.

# **Dimension and Weight**

W: 280g

D: 160.4\*68\*30mm

