

IT720GS

Product Introduction

IT720GS ground-side equipment is matched with air-side equipment to achieve long-distance two-way wireless video, audio, and data transmission. The longest air-to-ground transmission distance can reach more than 100km. The communication method can meet point-to-point two-way communication, and can also realize point-to-multipoint star network communication.

The device provides multiple business interfaces, including 1 Ethernet port and 1 transparent TTL serial port. It has the characteristics of small size, light weight, easy installation, and easy use. The structure can be customized according to the usage scenario. It is very Suitable for use in image-data integrated wireless data transmission scenarios such as drones, unmanned ships, unmanned vehicles, and robots.

Specifications

System	
Frequency	1428~1448MHz (supports frequency band expansion)
Bandwidth	5MHz/10MHz/20MHz (flexible and configurable)
Transmission	OFDM
Modulation	BPSK/QPSK/16QAM/64QAM (adaptive)
Transmission capacity	20Mbps@10MHz (peak rate)
Transmission distance	≥100km
Transmitting power	10W
Receiving sensitivity	-99dBm@5MHz
Frequency hopping	Supports automatic hopping between the bands
Encryption	Supports AES128
Power supply	DC12V
Power consumption	≤30W
Interface	
Antenna	N type
Power	DC5.2
Ethernet	RJ45
UART	Quick connection base
Data	
Dimensions	218*208*65mm (excluding mounting holes and antenna interface)
Weight	≤2kg
Operation Temp Range	-20℃~+75℃

Interface

Pin#	Name	Function	Remarks
Enclosure: POWER (power port) / DC socket			
1	VCC	power supply +12V	-
2	GND	ground signal	-
Enclosure: UART (communication serial port)/Quick connection base			
1	EXT_TX0	Data serial port TX	TTL/3.3V
2	EXT_RX0	Data serial port RX	TTL/3.3V
3	GND	ground signal	-
Enclosure: ETHERNET (Ethernet port) / RJ45 socket			
1	ETH_TXP	TX+ (white green)	10/100M self-adaptive
2	ETH_TXN	TX- (green)	
3	ETH_RXP	RX+ (white orange)	
4	ETH_RXN	RX- (orange)	
Enclosure: M-ANT (main transceiver antenna port)/SMA socket			
1	RFS1	radio frequency signal	impedance: 50Ω
Enclosure: S-ANT (auxiliary receiving antenna port) / SMA socket			
1	RFS2	radio frequency signal	impedance: 50Ω

Design

