ZKMANET3451 4W Long Distance IFS FHSS Mesh Drone Image Transmission Data Link

Basic Information

- Place of Origin: Shenzhen
- Brand Name: ZKMANET
- Certification: CE, ISO9001
- Model Number: ZKMANET3451
- Minimum Order Quantity: 1
- Price: USD 999~9999
- Packaging Details: Brown Carton
- Delivery Time: 15 working days
- Payment Terms: L/C, D/A, D/P, T/T, Western Union, MoneyGram
- Supply Ability: 10000 pieces per year

Product Specification

- Frequency: 1300-1500MHz (70MHz-6GHz Customizable)
- Channel Bandwidth: 2.5M/5M/10M/20MHz (40MHz Optional)
- Output Power: 2x2W
- Receive Sensitivity: -100dBm@2.5MHz
- FHSS: Optional
- IFS: Optional
- Network Size: 9 Nodes Customizable
- Range: 49KM
- Data Rate: 56Mbps@20MHz
- Delay: 7ms@2.5MHZ/hop
- Movement Speed: >1000km/h
- Positioning: GPS/BD/GLONASS
- Output Power: 2*2W
- Application: Drone Uav Image Transmission

More Images

Product Description

ZKMANET3451 4W Long Distance IFS FHSS Mesh Drone Image Transmission Data Link

Product Description

The ZKManet3451 is an airborne Mesh radio that utilizes an FPGA solution. It supports adaptive frequency hopping and selection, automatically choosing the optimal frequency in the presence of electromagnetic interference. This enables

broadband network self-organization and transmission in complex scenarios. It can be used in various communication combinations for different usage scenarios, such as on moving UAVs or USVs, allowing for easy plug-and-play operation without the need for configuration or parameter changes. It is primarily used for multimedia interconnection between drones and base stations, as well as serving as a Mesh relay node.

Features

* Data rate up to 56Mbps
* Full transparent IP data transmission
* With HDMI input
* Supports GPS/BD
* Supports 8 nodes customizable
* With TTL and LAN interface

Quick Deployment
Mesh self-organizing network technology enables rapid mobile deployment, allowing for the establishment of a reliable wireless communication network in a short period of time to meet the timeliness requirements of emergency communications.

Strong Stability
Mesh self-organizing network technology features self-healing capabilities, ensuring that even if some devices fail, the entire network can continue to operate stably, preventing communication interruptions.
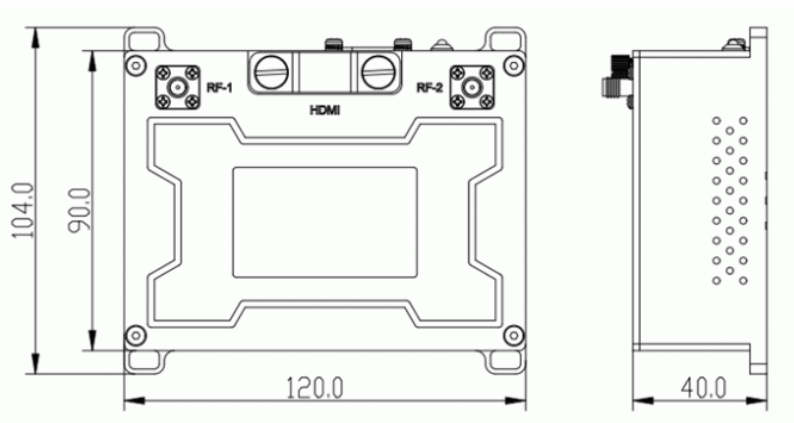
High Security
Advanced encryption algorithms and security authentication mechanisms are employed to effectively safeguard the security and confidentiality of communication data, preventing information leakage and malicious attacks. With FHSS of over 1000hops/s, it has strong capabilities for anti-search, anti-interception, and anti-jamming.

Specifications

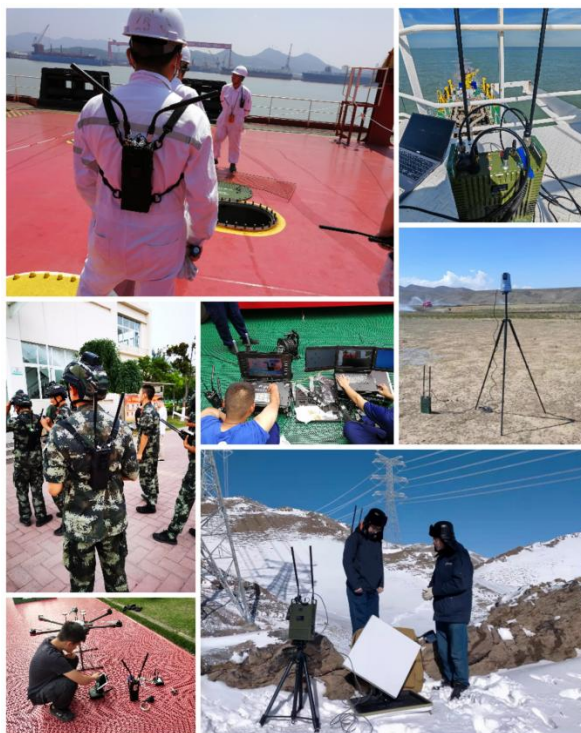| RF Parameters	
Default Frequencies	1300-1500MHz (70MHz-6GHz customizable)
Channel Bandwidth	2.5M/5M/10M/20MHz (40MHz optional)
RF Waveform	TDD-COFDM (2T2R)
Output Power	2x2W, 1dBm step adjustable
Receive Sensitivity	-100dBm@2.5MHz
Modulation Type	BPSK/QPSK/16QAM/64QAM (adaptive)
FHSS	Optional (>1000 hop/s)
IFS	Optional
Network Parameters	
Network Size	8 nodes customizable
Multi-hop Capability	15 hops (short message); 10 hops (voice); 8 hops (video)
Range	40KM customizable
Data rate	Up to 28Mbps@10MHz & 56Mbps@20MHz
Delay	7ms@2.5MHz/hop
Movement Speed	>1000km/h
Start Time	27s
Positioning	GPS/BD/GLONASS (GNSS)
Network Access Time	<1s
Network Extension	WIFI AP
Electrical Parameters	
Working Voltage	12-36V DC
Power Consumption	≤237dBm
Physical/Environment	
Weight	475g
Dimensions	120*90*40mm
Working Temp.	-40°C~70°C
Interface	
LAN Interface	*1
Serial Interface	RS232*1 (Or TTL)
Video Interface	Mini HDMI*1

Dimensions

Panel Description

4W 56Mbps Long Range 70~120km Uav Radio Video Data Link Transmitter

1. MESH antenna interface-2, SMA F
2. WIFI/LoRa antenna interface, SMA F
3. HDMI input interface, Mini HDMI
4. GPS antenna interface, SMA F
5. MESH antenna interface-1, SMA F
6. Mounting hole x4
7. LAN/TTL interface
8. Power input interface (XT60)
9. Signal Indicator

SNR	Link Quality	Topology Color
SNR ≥ 17	Excellent	Deep Green
12 ≤ SNR < 17	Good	Light Green
7 ≤ SNR <12	Fine	Yellow
2 ≤ SNR <7	Medium	Orange
-10 < SNR <2	Bad	Red
SNR = -10	Disconnected	N/A

Application

Company Profile

Zhongke Lianxun (Shenzhen) Technology Co., Ltd is a high-tech R&D enterprise. Our products mainly use Mesh and LTE as core technologies and auxiliary decision-making software to form underground building emergency communication systems, and police investigation communication systems, and police noncombat training communication systems, urban emergency communication systems, emergency communication vehicle communication systems, etc., suitable for law enforcement forces

and government departments such as public security, armed police, , forest fire prevention, civil air defense, and maritime. Especially the intelligent communication products of special robots have solved the long-distance communication and control problems of robots in complex environments.

4W 56Mbps Long Range 70~120km Uav Radio Video Data Link Transmitter

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FAQ

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