

## 4W Long Range Customizable 56Mbps Transparent IP Data Transmission Drone Data Link

Our Product Introduction

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### Basic Information

- Place of Origin: Shenzhen, China
- Brand Name: ZKManet
- Certification: CE, ISO9001
- Model Number: ZKManet3451
- Minimum Order Quantity: 1
- Price: USD 1999~9999
- Packaging Details: Brown Carton
- Delivery Time: 4 working weeks
- Payment Terms: T/T, Western Union
- 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 (>1000 Hop/s)
- IFS: Optional
- Network Size: 8 Nodes Customizable
- Range: Long Range Customizable
- Data Rate: 56Mbps
- Delay: 7ms
- Highlight: 70-120km Drone Data Link, drone data transmission, digital data link



### More Images



### Product Description

#### 4W Long Range Customizable 56Mbps Transparent IP Data Transmission Drone Data Link

##### Product Description

The ZKManet3451 is an airborne Mesh radio that utilizes an FPGA solution. It supports adaptive frequency hopping and

Our Product

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	Long range 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

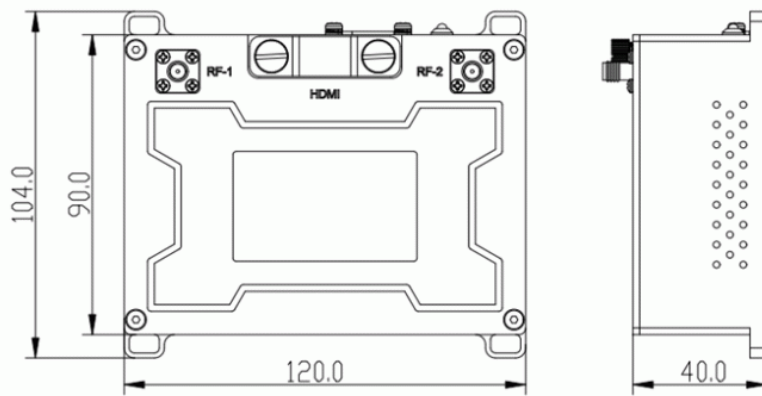
##### Physical/Environment

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
$SNR \geq 17$	Excellent	Deep Green
$12 \leq SNR < 17$	Good	Light Green
$7 \leq SNR < 12$	Fine	Yellow
$2 \leq SNR < 7$	Medium	Orange
$-10 < SNR < 2$	Bad	Red
$SNR = -10$	Disconnected	N/A

#### Application

4W 56Mbps Long Range 70~120km Uav Radio Video Data Link Transmitter4W 56Mbps Long Range 70~120km Uav Radio Video Data Link Transmitter

#### Company Profile

Zhongke Lianxun (Shenzhen) Technology Co., Ltd. was established in 2005, focusing on the research and development of products for drone defense/control, wireless video transmission, and network security encryption/decryption. We leverage the technical expertise of renowned university network security institutes.

Adhering to the principles of "unity and dedication, technological innovation, and service innovation," we serve users both domestically and internationally. We uphold the tenet of "quality first, reputation first" to provide high-quality, efficient, and customized services to our clients worldwide. The company is committed to promoting an innovative spirit of "exploration and progress."

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#### FAQ

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