Anti Interference Vehicle Mounted Data Link

Basic Information

- Place of Origin: Guangdong, China
- Brand Name: ZKMANET
- Certification: CE, ISO9001
- Model Number: ZKManet3561
- Minimum Order Quantity: 1 piece
- Price: USD 9999 per piece
- Packaging Details: carton
- Delivery Time: 3-7 work days
- Payment Terms: T/T, Western Union, MoneyGram
- Supply Ability: 10000 pieces per year

Product Specification

- Frequency: 70~6000MHz Customizable
- Bandwidth: 2.5/5/10/20MHz Customizable
- RF Channel: 2T2R,2*2MIMO
- Output Power: 43dBm
- Range: ≥70KM
- Video Interface: HDMI For Optional
- FHSS: Optional
- Intelligent Frequency Selection: Optional
- Highlight: **56Mbps Vehicle Mounted Data Link,
                            Anti Interference Vehicle Mounted Data Link,
                            data transceiver device**

More Images

Product Description

50-70km Anti Interference 56Mbps Outdoor Base Station Video Wireless Data Transceiver

Product Description

ZKManet3561 is a high-power MESH self-organizing outdoor base station product utilizing an FPGA solution. The device can

be fixedly installed using pole mounts, wall mounts, or brackets, primarily deployed at outdoor fixed points. The IP rating is IP67. With high transmission power and long coverage distance, it integrates data transmission, dynamic routing, and relay forwarding into one unit. It quickly self-organizes with other node devices to form a wireless multi-hop broadband network, providing users with wireless transmission services for voice, data, and video multimedia services. It is particularly suitable for applications such as long-distance communication coverage, information aggregation and feedback, regional coverage support, elevated point coverage enhancement, and relay transmission nodes.

Features

* Data rate up to 56Mbps
* Supports two-way voice intercom
* Supports WIFI
* Supports GPS/BD
* Supports HDMI input
* Supports IP data transparent transmission
* Easy operation

Flexible Networking
No central distributed networking, flexible carrier bandwidth configuration, supports various network topologies such as point-to-point, chain, star, mesh, mixed dynamic, etc.

Powerful Adaptivity
Built-in H.265 encoder adjusts video bitrate, resolution, and frame rate adaptively based on channel bandwidth to ensure the continuity and smoothness of video transmission services.

Intelligent Routing
Devices can move quickly and network topology can be updated accordingly with dynamic route reconstruction in real-time without affecting overall system communication.

Anti-interference
Wideband carrier frequency hopping (optional) effectively enhances anti-interference capabilities. Additionally, it supports intelligent frequency selection (optional) mode where devices can intelligently choose interference-free frequencies for network transmission to avoid interference. It also utilizes ARQ error control transmission mechanism to reduce data loss rates and improve data transmission reliability.

Full IP Interconnection
With Fully IP-based design, it supports various data transmissions for seamless integration with heterogeneous communication systems.

Secure Encryption
It has independently developed system with custom transmission protocols and 64-bit key for air interface transmission encryption. It can dynamically generate scrambling sequences for channel encryption. The system also supports DES56/AES128/AES256 source encryption to enhance security.

Easy Operation
Built-in Wi-Fi communication module allows mobile devices, laptops, or PADs to access and control without the need for wired connections, making user management and maintenance convenient.

GIS Services
With built-in BD/GPS, it supports real-time display of geographical location and latitude/longitude positioning information through. It can measure distances between individual radio stations and track the continuous position of selected radio station groups.

Specifications

RF Parameters

Default Frequencies	70MHz-6GHz customizable
Channel Bandwidth	2.5M/5M/10M/20MHz (40MHz optional)
RF Waveform	TDD-COFDM + 2T2R
Output Power	2x40dBm
Receive Sensitivity	-100dBm@2.5MHz
Modulation Type	BPSK/QPSK/16QAM/64QAM (adaptive)
FHSS	Optional (>1000 hop/s)
IFS	Optional

Network Parameters

Network Size	Up to 32 nodes
Multi-hop Capability	15 hops (short message); 10 hops (voice); 8 hops (video)
Range	50-70km (Air-to-Ground LOS) 30-50 km (Ground-to-Ground LOS)
Data rate	Up to 28Mbps@10MHz & 56Mbps@20MHz
Delay	7ms
Movement Speed	>1000km/h
Start Time	27s
Positioning	GPS/BD
Network Access Time	<1s
Network Extension	WIFI AP

Electrical Parameters

Working Voltage	AC220V
Power Consumption	≤937dBm

Physical/Environment

Weight	6.5kg
Dimensions	300*238*133mm
IP Rating	IP67
Working Temp.	-40°C~70°C

Interface

LAN Interface	*1
RS232	*1
Voice Interface	PTT Mic (7-pin LEMO connector*1)
Video Interface	HDMI*1

Dimensions

Panel Description

2*40dBm 2T2R 56Mbps 50~70km Fpga Fhss IP67 Outdoor Base Station Radio Transmitter

1. MESH antenna interface-1, N-F
2. GPS/BD antenna interface, SMA-F
3. HDMI input interface type A (Optional)
4. WIFI antenna interface-1, SMA-F
5. MESH antenna interface-2, N-F
6. LAN interface, RJ45
7. MESH 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

8. Power input port, 3-pin
9. Power push button

Company Profile

Zhongke Lianxun (Shenzhen) Technology Co., Ltd. was established in 2005. We focus on the research and development of products for drone defense/control, wireless video transmission, and network security encryption/decryption. With excellent quality and advanced technology, we provide comprehensive network communication solutions to our customers.

Our chief scientist team, led by professors from the Network Security Institute of Wuhan University, has achieved remarkable results in the development of man-in-the-middle platforms for network security. The company currently offers platforms such as a drone denial system platform, long-distance wireless video transmission platform for drones, network encrypted data analysis platform, IPSEC man-in-the-middle platform, and SSH man-in-the-middle analysis platform.

FAQ

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