

MG1400B-20

Base-station Self-organizing Network Radio



*Rapid deployment



*Beidou positioning



*No center network



*Customizable power



*Ready to use



50+

*Long-distance



Product Introduction

Base station type self-organizing network radio station can be fixedly installed by pole, wall and bracket, etc. It is mainly deployed at outdoor fixed points and mobile points on ships. It is waterproof and dustproof, easy to install and simple to operate. The equipment has large transmission power, covers a long communication distance, integrates data transmission and reception, dynamic routing, relay forwarding, and quickly self-organizes with other node devices to form a wireless multi-hop broadband network, providing users with wireless transmission services for multimedia services such as voice, data and video. All nodes are in line-of-sight or non-line-of-sight environments, without the need for a central gateway, all nodes are equal, and do not rely on wired communication lines, and wireless communication networks can be quickly established. It is particularly suitable for applications such as long-distance coverage link communication, information aggregation and return, regional coverage support, commanding heights enhanced coverage and relay transmission nodes, and can play a powerful role in emergency response, anti-terrorism and riot prevention, disaster relief, large-scale event support, temporary deployment and relay transmission. The transmission distance can reach more than 20km in an open ground environment, 1-5km in a blocked environment (depending on the blocking environment), and more than 50km from air to ground.

Main features

* Networking without a center: nodes are equal in status and can be used as terminal nodes, relay nodes or central nodes

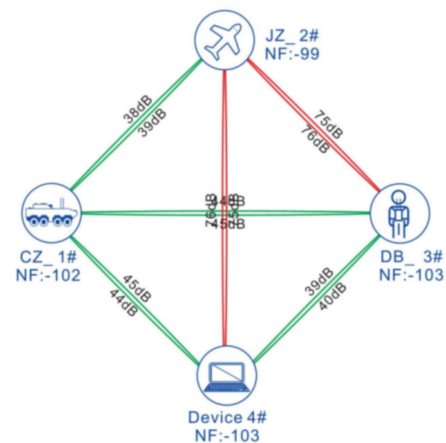
* Networking with any structure: nodes automatically identify and select the optimal route for bandwidth data

* Security and confidentiality: through layer-by-layer encryption such as working frequency, carrier bandwidth, scrambling code, etc., support AES128/256 encryption

* Anti-interference and anti-destruction: using COFDM, MIMO, ARQ and other technologies to improve data bandwidth and anti-interference performance

* Flexible networking of multiple nodes: according to channel quality, rate, error code and other indicators, link routing is automatically calculated and networked flexibly









* Full IP networking and intercommunication: support data transparent transmission, interconnection of multiple systems, and real-time interaction of multimedia services



System parameters

Operating frequency	1428~1448MHz	
Carrier bandwidth	5/10/20MHz, self-adaptable	
Transmission system	COFDM	
Modulation mode	BPSK/QPSK/16QAM/64QAM(adaptive)	
Transmission capacity	Peak rate 90Mbps@20MHz	
Transmit power	20W	
Receive sensitivity	-97dBm@1MHz	
Video input	Support IP network video input and WIFI video access	
Networking	Networking capability	≥52 nodes
	Networking hop count	> 10 hops
	Networking time	5s after system hot start
	Network topology	No center network, star network, chain network, mesh network, etc.
Encryption method	AES128/AES256	
Power supply	DC 28V	
Power consumption	≤200W	
Device interface		
Antenna interface	N-K×2	
GPS interface	SMA-K	
WIFI interface	SMA-K	
Ethernet interface	Aviation plug connector	
Power interface	Aviation plug connector	
Physical indicators		
Device size	≤340×240×135mm (battery include)	
Device weight	≤7.5kg	
Protection level	IP65	
Operating temperature	-30℃~+65℃	

Accessories

							
RF antenna	Beidou antenna	Wifi antenna	Aviation plug cable network port	Aviation plug cable power supply	Adapter	Mounting bracket	Packing box