

MG1400K-2

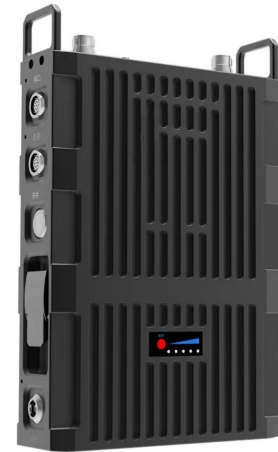
Backpack Individual Self-organizing Network Radio



*IP66 *Rapid deployment *Beidou positioning *No center network



*Customizable power *Ready to use *Changeable battery

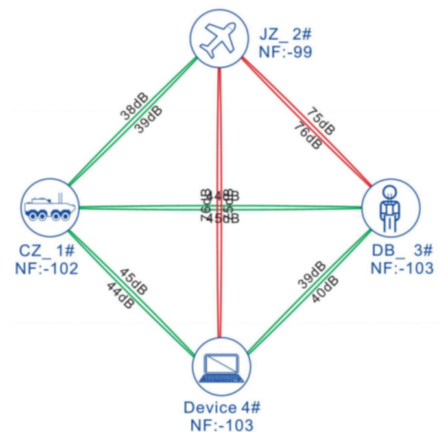


Product Introduction

The backpack-type individual self-organizing network radio is small in size, light in weight, and equipped with a high-capacity detachable battery, which is easy for a single soldier to carry and fully free his hands. With fast network access and automatic multi-hop relay, it can provide voice group calls, video return, relay transmission and other multimedia communication services for single soldiers, tactical teams, and tactical police dogs to achieve efficient collaboration. It has both Beidou positioning function and supports wifi coverage, and can be used with smart terminals with wifi function for various communications. The system adopts the same frequency networking and multi-hop relay, and supports any network topology, such as point-to-point, point-to-multipoint, chain relay, mesh network and hybrid network topology. It can provide wireless broadband communication for emergency response, anti-terrorism and riot control, covert reconnaissance, special operations, disaster relief, daily patrol and other "peace and war" tasks at the first time. The transmission distance can reach more than 10km in an open environment on the ground, 300~1000m in a blocked environment (depending on the blocking environment), and more than 30km from the air to the 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	2W	
Receive sensitivity	-97dBm@1MHz	
Video input	Support IP network video input, WIFI video access (HDMI video input needs to be customized)	
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 25.2V changeable battery	
Power consumption	≤30W	
Device interface		
Antenna interface	TNC-K×2	
GPS interface	SMA-K	
WIFI interface	SMA-K	
Ethernet interface	Aviation plug connector, supports 100M Ethernet port	
Voice Interface	Aviation plug connector, supports handphone or headphones	
Physical indicators		
Device size	≤275×198×52mm (battery include)	
Device weight	≤3kg (battery include)	
Protection level	IP66	
Operating temperature	-30℃~+65℃	

Accessories

								
RF antenna	Beidou antenna	Wifi antenna	Hand phone	Network port	Power supply	Adapter	Back Pack	Packaging aviation box