



WN100

DMR Drone-mounted Ad-hoc Repeater

The WN100 repeater focuses on solving communication obstacles such as complex rescue site environments and long distances. It adopts a lightweight design and can be deployed on drones, unmanned vehicles, unmanned boats, rescue robots and other types of equipment to solve the problem of communication blind spots where personnel cannot reach due to various complex environments.



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Key Features

- Ultralight Design**
 The WN100 weights only 1.75Kg with antenna, which can meet the mounting requirements of various small and mediumsized drones or unmanned vehicles.
- High Compatibility**
 The WN100 adopts the standard DMR protocol, supports AMBE++ audio code, and can be seamlessly interconnected with existing DMR system, such as DMR backpack ad-hoc system and DMR fixed ad-hoc system etc..
- One-button Start, Easy Maintenance**
 The WN100 adopts independent mechanical buttons for quick power on and off operations. It supports frequency presets or firmware updates via Type-C.
- Clearly Operating Status Indicator**
 There are 4 indicator lights on the side of WN100 to intuitively display the networking status and operating status.
- Multiple Dynamic Networking Methods**
 Multiple WN100s, WN500s, WN1000s can automatically address each other when powered on, realizing centerless networking and immediate use, supporting chain, star, mesh and hybrid networking.
- GPS Positioning**
 The WN100 supports GPS positioning. You can view the location information of the entire device by entering the management software interface through the Type-C port.
- Adjustable Transmit Power**
 Supports 25W adjustable power in 1w steps.

Specifications

Product Model	WN100
Frequency Range	350 - 400, 400 - 470MHz
Dimension	185mmX140mmX57mm(without battery), 185mmX140mmX81mm(with battery)
Latency	≤90ms
Working Mode	DMR Tier II
Weight	1.75kg(with antenna), 2.3kg(with battery and antenna)
Power Supply	Supports power supply from drones, unmanned vehicles and other devices. Supports 14.4V 6700mAh battery optional.
Indicator Lights	4-digit three-color light
Networking Capacity	Up to 32 nodes networking, and support single-frequency relay
Positioning	GPS
Supply Voltage	DC18 ~ 36V
Power Button	Independent physical power button
Operating Temperature	-20°C ~ +60°C(with battery), -30°C ~ +60°C(without battery)
Transmit Power	25W(Adjustable)
Sensitivity	≤-120dBm, BER@5%
Dustproof & Waterproof	IP67

Application Scenarios



Water Rescue



Forest Rescue



Tunnel Rescue



Natural Disaster Rescue