



KMesh1000

DMR Ad-hoc Fixed Repeater

KMesh1000 is a DMR ad-hoc fixed repeater, which is designed to provide safe and reliable communications for places lacking network infrastructure, such as urban area, wildland, sea, and forest. It adopts wireless interconnection technology to quickly build a multi-node narrowband network through cascading.



Key Features



Automatic Networking

The KMesh1000 supports up to 32 repeaters to automatically interconnect. In this ad-hoc network, the failure of any repeater will not affect network operation.



Flexible Deployment

The KMesh1000 repeaters can be fast installed on poles, walls, vehicles, ships or drones without relying on pre-existing infrastructure such as equipment rooms, saving installation time and costs.



Highly Compatible

The KMesh1000 is fully compatible or third-party DMR Tirell radios.



Built-in 4G Module

The KMesh1000 has a built-in 4G module to ensure that when there is 4G network signal coverage, it can form a stable network with other repeaters or control centers without geographical restrictions.



Wireless Programming

The KMesh1000 can be programmed by a network management system via Wi-Fi network, which eliminates the hassle of programming via cables and minimizes downtime on site.



Various Power Supplies

The KMesh1000 can be powered by batteries, solar energy, wind energy, or mains electricity to meet the needs of various scenarios.

Specifications

General

Frequency Range	136-174MHz, 350-400 MHz, 400-470 MHz
Channel Capacity	1024
Protocol	DMR TierII
Latency	≤ 90 ms
Channel Spacing	12.5 kHz
Networking Capacity	32 nodes
Vocoder Type	AMBE++
Operating Voltage	DC 10 - 17 V
Adapter Input Voltage	100V-240V AC 50Hz
Antenna Impedance	50Ω
Operating Temperature	-30°C to +60°C
Storage Temperature	-40°C to +85°C
Weight	5 kg
Dust & Water Intrusion	IP65

Receiver

Sensitivity	≤-120dBm, BER@5%
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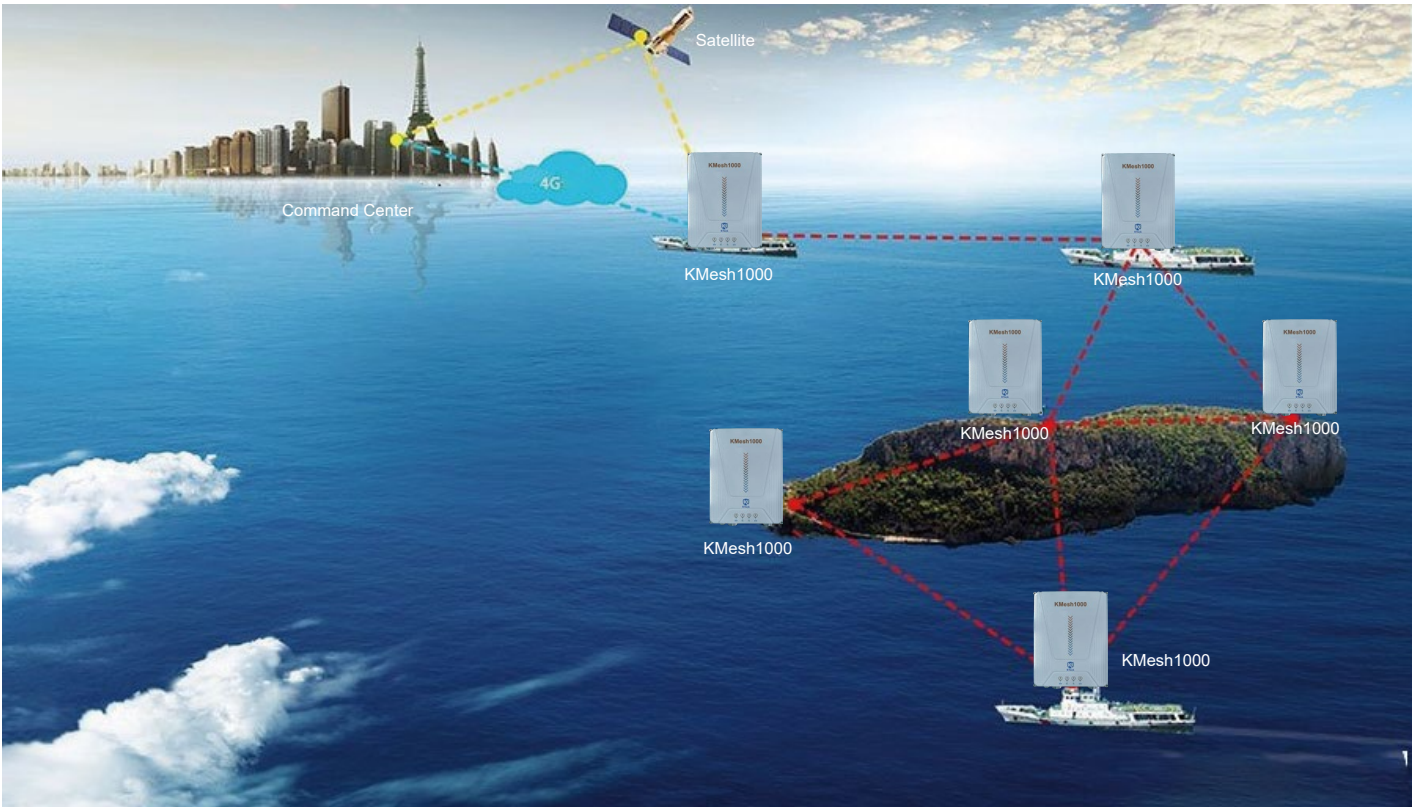
Transmitter

RF Output Power	10W/25W/45W(Adjustable)
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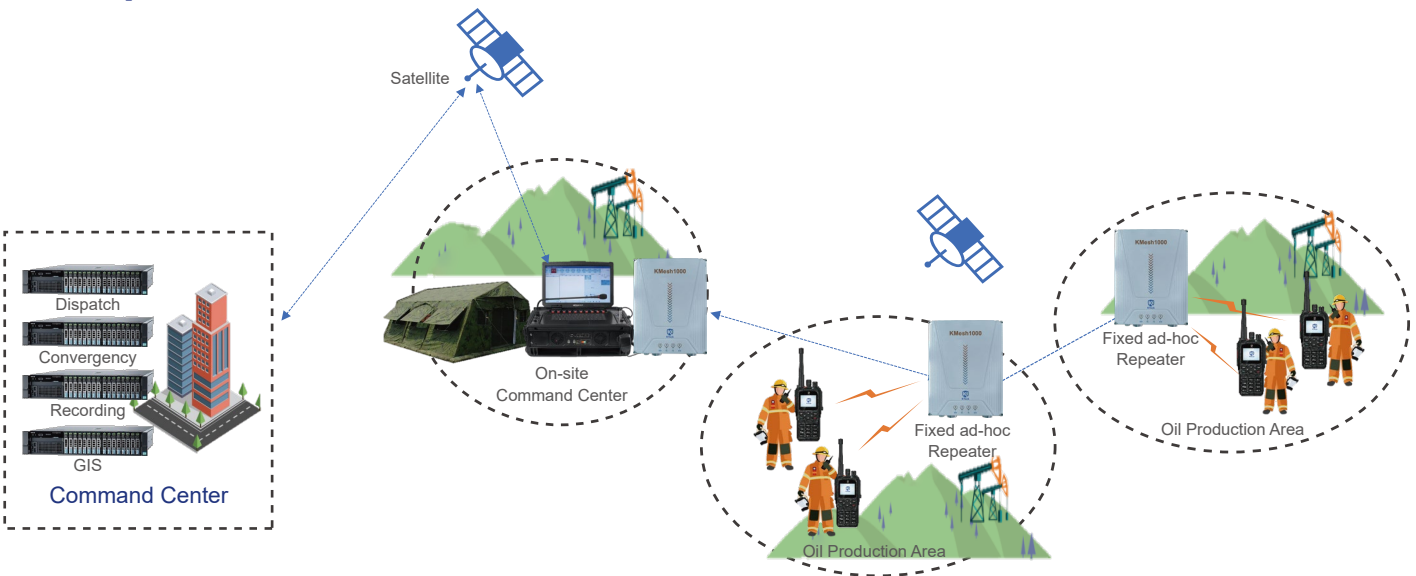
Typical Application Scenarios



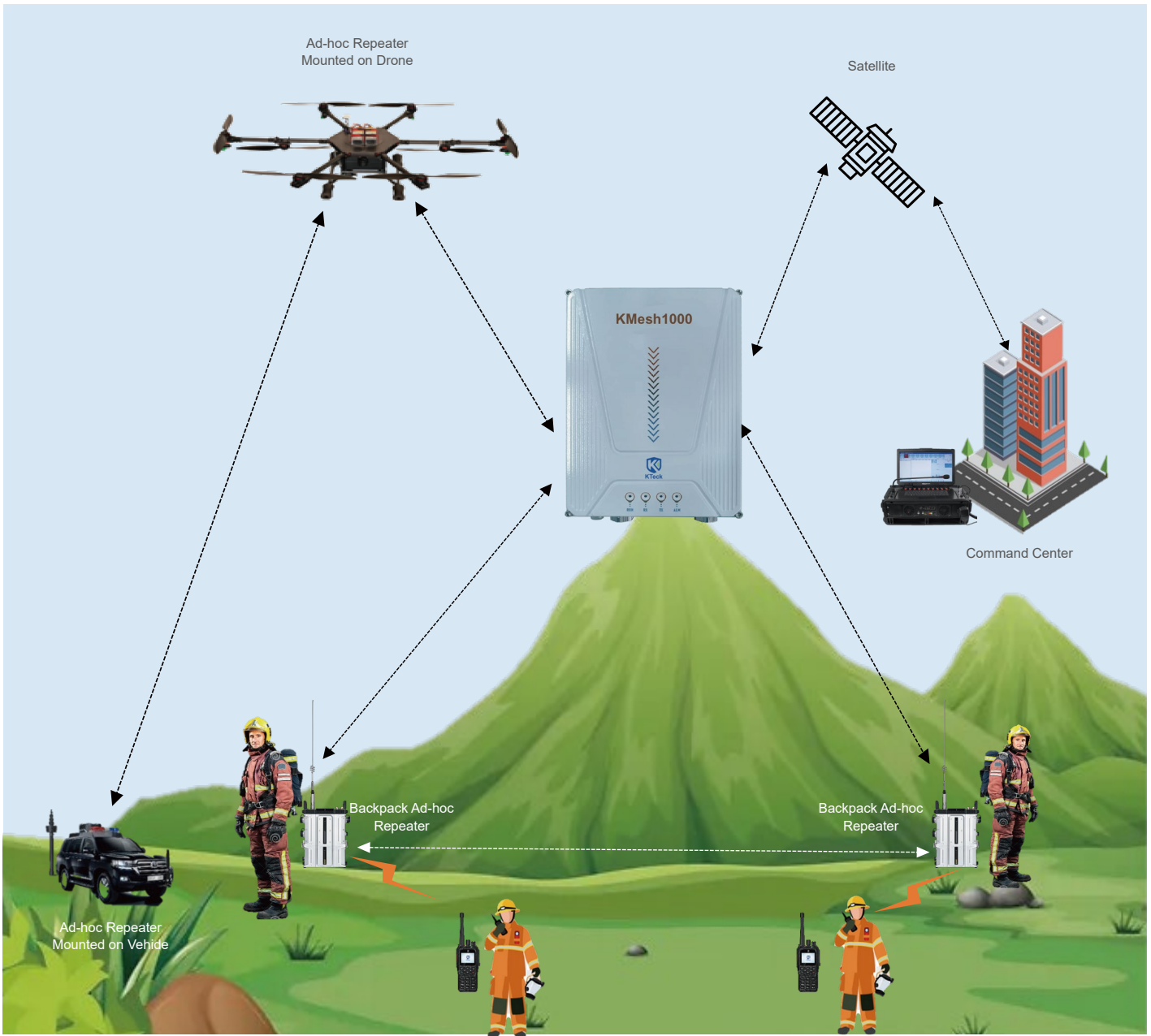
Marine



Oil Exploration



Wildland



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