

CREO-HUB

Personal MANET Radio

High-Performance Communication for Tactical Teams

At the forefront of tactical operations, where flawless connectivity is as crucial as the mission itself, CreoHub introduces an innovative wireless communication solution.

CreoHub is a combat-proven, personal radio designed for military units, law enforcement professionals, and rescue teams to share voice, data, and video across numerous devices. It is suitable for use within buildings, ships, forests, challenging subterrains, and beyond line-of-sight operations.

Harnessing the state-of-the-art capabilities of cognitive software-defined radio, Mobile Ad-Hoc Network (MANET) technology, and advanced waveforms, CreoHub's radios establish secure, self-healing, self-forming, and resilient networks capable of handling data rates of up to 80 Mbps. This ensures robust connectivity even in the most contested and challenging environments.

CreoHub's technology excels in immunity to interference, utilizing advanced software-defined radio and interference avoidance technologies. This ensures clear, continuous communication even in complex electronic warfare environments and areas with heavy electromagnetic interference.

Designed with paramount importance to operational security, CreoHub integrates low probability of interception and detection (LPI/LPD) technology, ensuring maximum performance and minimal exposure even in hostile environments. CreoHub is specifically engineered to meet the requirements of multidomain operations and extensive networks. It seamlessly integrates with hundreds of users, providing a reliable and uninterrupted connectivity.

CreoHub offers two primary configurations: a lightweight, energy-efficient radio for diverse missions and a robust, high-power radio designed for the most demanding operations.







Key Features and Performance



Performance

- Supports applications with variable data rates
- Handles up to 80 Mbps data rates
- Engineered for reliability in variable operational conditions
- · Excels in immunity to interference



Immunity & Security

- · Utilizes advanced frequency hopping
- Employs dynamic spectrum access
- Features low probability of interception and detection (LPI/LPD)
- Incorporates AES256 encryption



Applications

- Ideal for use by military, law enforcement, and emergency services
- Versatile for operations in diverse environments: urban, maritime, forested, and subterranean
- Facilitates multidomain operations with seamless
 data sharing



Network Scalability

- Capable of connecting hundreds of users in large-scale operations
- Supports the creation of expansive, resilient communication networks
- Ensures comprehensive network coverage for situational awareness



Modularity and Integration

- · Offers a modular architecture for easy integration
- Supports a variety of accessories
- Enables flexible and scalable network configurations



Operational Durability

- Built for harsh environmental conditions
- Operates under severe weather conditions
- Designed for continuous operation in the field



Specifications

		CREOHUB Light	CREOHUB Pro	
CreoHub Units				
Transmission	Power	up to 1W	Adaptive, Up to 10W	
	Throughput	Up to 20 Mbps	Adaptive, Up to 80 Mbps	
	Frequency Bands	UHF, L-Band, S-Band, C-Band		
	Modulation	BPSK / QPSK / QAM16 / QAM64		
	Bandwidth	2/4/8 MHz	2/4/8/16 MHz	
	Antennas configuration	SIMO (MRC Diversity)	MIMO/SIMO	
	EMC	MIL-ST	MIL-STD-461E	
COMSEC	Encryption	AES256 Spectrum Monitoring, Frequency Hopping, Interference Avoidance		
	Immunity			
Power Management	Input power	9-18VDC; up to 10W	9-18VDC; up to 50W	
	Power options	Twisted Lock Battery 7Ah/8Ah		
	Autonomy	Up to 12 hours with single battery / dual battery option		
Mechanical, environmental	Weight	430gr	620gr	
	Dimensions (L,W,H)	75mm, 40mm, 140mm	85mm, 50mm, 140mm	
	Material and color	Grey Anodized Aluminum	Black Anodized Aluminum	
	Standards	MIL-STD-810G		
	Ingress Protection	IP65	IP68 (up to 20 minutes)	

About Creomagic

Creomagic develops and manufactures innovative communication solutions that form intelligent Mobile Ad-Hoc Networks (MANET), specifically designed for mission-critical and tactical operations. Our radio technology provides users with reliable, secure, and resilient connectivity for any mission.

At the core of our solutions is CreoNet, a software-defined radio (SDR) technology developed by Creomagic that leverages world-leading capabilities, including advanced waveforms, machine learning, and networking technologies. Our solutions are engineered and fine-tuned by a highly experienced team, committed to the highest standards of innovation across our products and services.



BEYOND SIGNALS CRAFTING TOMORROW'S CONNECTIONS



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