MOBILICOM

NDAA COMPLIANT

U.S. PRODUCTION AT HIGH VOLUME

SwarmiX

Built for Data-Heavy Missions at Swarm Scale

SwarmiX is a family of secure, high-throughput mesh communication systems built for the shift from individual autonomous platforms to coordinated, swarm-scale operations. Delivering up to 1 Gbps throughput, scalable mesh networking, multi-band spectrum agility and electronic warfare (EW) resiliency, SwarmiX enables reliable, high-volume mission data exchange across multiple air and ground platforms. Extending Mobilicom's Secured Autonomy™ capabilities, the SwarmiX family supports OEMs and operators in executing complex, data-intensive missions across congested and contested RF environments.

UP TO
1 Gbps
THROUGHPUT

MULTI-BAND SPECTRUM AGILITY
2 GHz and 5 GHz
IN A SINGLE RADIO

MESH AT SCALE
FOR HUNDREDS OF NODES

ELECTRONIC WARFARE RESILIENCY & ANTI-JAMMING
COMBAT PROVEN

COST-EFFECTIVE SWAP-C

U.S. PRODUCTION AT HIGH VOLUME

EMBEDDED EDGE COMPUTE

ENABLING LARGE-SCALE AUTONOMOUS MISSIONS

ONE MESH, TWO FORM FACTORS

SwarmiX Pro embedded in the platform, and SwarmiX Tactical carried with the team.

SwarmiX Pro
91 × 38.6 × 13 mm · 72 g

SwarmiX Tactical
135 × 80 × 40 mm · 550 g
(without battery)

BUILT FOR THREE OPERATIONAL USE CASES

Manned & Unmanned ISR
Enable high-volume sensor, video and mission data sharing across coordinated air and ground platforms, connecting autonomous systems and tactical teams in one scalable mesh network.

Loitering Munitions
Support large-scale, coordinated loitering munition operations with high-throughput mesh communications, multi-band spectrum agility and reliable data exchange across multiple launch groups and airborne platforms.

Counter-UAS Interceptors
Connect and coordinate large fleets of interceptor drones operating simultaneously, enabling mission data exchange across high-density networks in congested and EW-contested environments.

ENGINEERED FOR AUTONOMOUS SYSTEMS

RADIO & NETWORK

Multi-Band Frequency	2.4–2.7 GHz and 4.9–6 GHz (up to 7 GHz**)
MIMO	Up to 2×4 (2 Tx / 4 Rx)
Channel bandwidth	5–160 MHz
Output power	Up to 27 dBm
Throughput	Up to 1 Gbps
Networking	Mesh, P2MP, P2P
Interference mitigation	Sensing-based DFS & IAS
Encryption	AES-128 / AES-256*

SIZE & POWER

	SWARMIX PRO	SWARMIX TACTICAL
Dimensions	91 × 38.6 × 13 mm	135 × 80 × 40 mm
Weight	72 g	550 g (without battery)
Power consumption	13–14 W	14–15 W
Input voltage	7–26 VDC	12–24 VDC
Battery	Host-powered	PRC-148 / PRC-152 (optional)

ENVIRONMENTAL

Operating temp.	-20 °C to +60 °C
Storage temp.	-40 °C to +100 °C

INTERFACES

Ethernet	1 × 1000BASE-T (Gigabit)
USB	1 × USB 3, 1 × USB 2
UART	Debug, control, data
GPIOs	Yes
Antennas	Up to 4 (2×4 MIMO)
Management	Web GUI / API

ICE SECURED AUTONOMOUS COMMUNICATIONS SUITE

LICENSED CYBER AND EW PROTECTION

- Primary (Standard Protection)
- Professional (Premium EW Protection)*

KEY EW AND ANTI-JAMMING FEATURES

- OS and firmware hardening protects the CPU, operating system, and embedded software.
- Advanced DFS/IAS provides adaptive interference sensing and full-band spectrum avoidance.
- ComSec delivers multi-layer cryptographic protection for command and mission data.
- Authenticated links prevent man-in-the-middle attacks and unauthorized takeover.
- Adjacent-network coexistence maintains stable operation near other systems.
- Unique keyed identification ensures only trusted nodes connect.

OS3® CYBERSECURITY SOFTWARE KEY FEATURES*

HOST SECURITY

Secured Logger	Embedded logging module with self-protection
File System Encryption	Sensitive data secured against tampering and access
Process Monitoring	Detects anomalies and initiates corrective actions
Root Access Monitoring	Prevents unauthorized system changes
System Hardening	Reduces OS vulnerabilities against attack

NETWORK SECURITY

Stateful Firewall	Controls traffic, allowing only authorized communications
Secure Communication Protocols	Protects in-transit data from tampering
Protocol Enforcement	Eliminates attacks from manipulated protocols

APPLICATION SECURITY

Application Behavior Enforcement	Blocks unauthorized manipulation of system operations
Behavior Monitoring	Detects deviations and breaches in application processes

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* Optional feature, enabled by an add-on software license.
** Extended frequency support up to 7 GHz is under development.