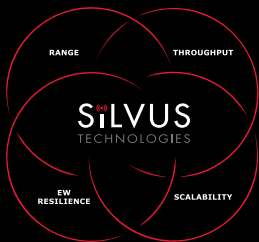# MISSION CRITICAL SOLUTIONS

STREAMCASTER: THE WORLD'S MOST ADVANCED TACTICAL MANET RADIOS

Trusted by Defense, Government, and Public Safety agencies around the world, the StreamCaster family of MANET radios provide high-fidelity video, voice and IP data communications at the speed of relevance. With optimized output power (1 to 80W effective) and up to 100 Mbps data throughput, StreamCaster MANET radios delivers class-leading performance at the tactical edge. Advanced encryption including AES256 and FIPS 140-3 Level 2 validation – the U.S. Government's latest security requirements for cryptographic modules to protect sensitive data.

Available in handheld, mounted and OEM module form factors, StreamCaster MANET radios combine operational flexibility with certified MIL-STD-810G military-grade design for deployment in the harshest environments. Industry leading frequency agility with over 30 single/dual frequency band options (300 to 6000 MHz), enables users to choose the perfect configuration to match their mission requirements.

At the heart of every StreamCaster MANET radio is Silvus' battle-proven MN-MIMO waveform that creates a self-forming and adaptive mesh network – capable of linking hundreds of nodes with unmatched range, data throughput and EW resiliency. Operationally proven to connect over 550+ nodes in single network, MN-MIMO excels in multi-path, NLOS and complex RF spectrum environments.

RANGE   THROUGHPUT

SiLVUS TECHNOLOGIES

EW RESILIENCE   SCALABILITY

BATTLE PROVEN PERFORMANCE

ATO certified, Silvus SteamCaster MANET radios (AN/PRC-169), MN-MIMO waveform and the Spectrum Dominance suite of capabilities are actively fielded across key DoD branches - enabling Joint All-Domain Command and Control (JADC2) across the full spectrum of operations.

U.S.ARMY

Integrated Tactical Network   **Integrated Battle Command System**   **Sustainment Transport System**   **Networking On-the-Move**

The appearance of U.S. Department of Defense (DoD) visual information does not imply or constitute DoD endorsement. Additional photos courtesy of Auterion, UVision USA and Mistral Inc.

LEARN MORE

Spectrum Dominance 2.0 expansive suite of capabilities are available as licenses that can be downloaded onto existing Silvus StreamCaster MANET radios via simple firmware updates. Certain capabilities are available exclusively to U.S. Government customers or subject to ITAR-control, some features are non-ITAR controlled and commercially available to all Silvus customers, providing secure and protected communications in any operational environment. For additional information or to request a demo, contact your Silvus Sales Representative.

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SiLVUS TECHNOLOGIES

www.silvustechnologies.com

SPECTRUM DOMINANCE 2.0

NEXT GENERATION EW DEFENSES
BUILT FOR THE EVOLVING BATTLESPACE

SiLVUS TECHNOLOGIES

CAPABILITIES PROFILE

OUTPACE THE THREAT. ACHIEVE RF SPECTRUM OVERMATCH.

The modern battlefield is more distributed, mobile and interconnected than ever before – with tactical networks fusing forces, sensors and decision makers at mission speed. As adversarial electronic warfare (EW) threats grow in sophistication, no single technique or defense is sufficient to operate in today's contested electromagnetic battlespace. Staying ahead requires tactical communications solutions that can sense the operational environment, adapt in real-time and deploy the optimal mix of Low Probability of Intercept / Low Probability of Detection (LPI/LPD), Anti-Jamming (AJ) resiliency and Advanced Threat Protection (ATP) techniques – dynamically and automatically.

Silvus' Spectrum Dominance was purpose-built to meet these challenges – empowering the warfighter with a powerful suite of capabilities – enabling secure communications and intelligence sharing to achieve decision dominance and RF spectrum overmatch in any environment.

ENGINEERED TO PROTECT. PROVEN TO PERFORM.

As a software licensable extension of Silvus' battle-proven MN-MIMO waveform, Spectrum Dominance is an ever-expanding suite of LPI/LPD, Anti-Jamming, and Advanced Threat Protection capabilities. Together, they enable StreamCaster® MANET radios to thrive in congested and contested environments – providing their operators with robust tactical communication solutions to achieve their mission objectives even under electronic attack.
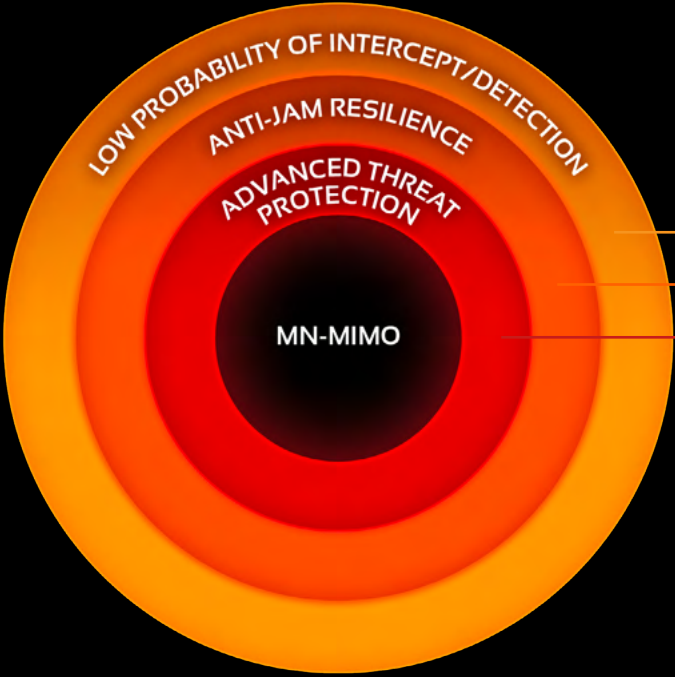
"At Silvus, innovation is mission-critical. With Spectrum Dominance 2.0, we've elevated EW resilience to a new standard – delivering the reliable performance customers expect from StreamCaster MANET radios – even when operating in contested environments."

Babak Daneshrad PhD,
Founder and CEO, Silvus Technologies

NEXT GEN EW DEFENSES BUILT FOR THE ELECTROMAGNETIC FIGHT

Spectrum Dominance 2.0 delivers the next evolution of advanced LPI/LPD, Anti-Jamming and Advanced Threat Protection capabilities that takes a layered approach to EW Defense – forcing an adversary to penetrate all layers to disrupt your communications.

Comprised of Core and Expansion Features, Spectrum Dominance 2.0 offers modular flexibility – allowing capabilities to be deployed independently or in combination to enhance mission performance and achieve RF spectrum overmatch in any operational environment.

Silvus Technologies is the only tactical MANET provider that delivers Spectrum Dominance without sacrificing range, throughput or robustness – even under electronic attack. And we're not stopping there – Silvus is investing in AI and Machine Learning to make all of the Spectrum Dominance features more powerful, autonomous and user-friendly.

LOW PROBABILITY OF INTERCEPT/DETECTION
ANTI-JAM RESILIENCE
ADVANCED THREAT PROTECTION
MN-MIMO

DISMOUNTED OPERATIONS **COVERT SURVEILLANCE** **MANNED VEHICLES** **UNMANNED SYSTEMS** **LOITERING MUNITIONS**

LAYERED PROTECTION. ZERO COMPROMISE.

LPI/LPD: DELAY OR DENY DETECTABILITY

MANET POWER CONTROL (MAN-PC)
An LPD feature, MAN-PC minimizes the RF footprint of Silvus StreamCaster MANET radios – dynamically throttling power to the minimum amount necessary to maintain network connectivity.

WAKE ON WIRELESS
Enables StreamCaster MANET radios to receive data without emitting control traffic to gather intel without revealing position. Radios in Stealth Mode can be activated via Wake on Wireless, either remotely or locally.

AJ: MITIGATE EW ATTACK

MANET INTERFERENCE CANCELLATION (MAN-IC)
StreamCaster MANET radios automatically perform real-time interference monitoring. At the onset of jamming, MAN-IC employs sophisticated spatial signal processing techniques to nullify the offending interfering signal.

MANET INTERFERENCE AVOIDANCE (MAN-IA)
StreamCaster MANET radios automatically scan and monitor the RF spectrum for interference across multiple user-defined channels. At the onset of jamming, MAN-IA moves the entire network to the cleanest frequency without user intervention.

DUAL FREQUENCY LINK
An innovative, Anti-Jamming technique for distributed operations, Dual Frequency Link enables StreamCaster MANET radios to Transmit on one frequency channel, and Receive on a different frequency channel.

ATP: WAVEFORM RESILIENCY

MANET PROTECTED WAVEFORM (MAN-PW)
When MAN-PW is enabled, the MN-MIMO waveform is hardened for increased resiliency. For additional CUI information, contact your Silvus Sales Representative.