

Where Precision and Reliability Soar!

Northwest UAV

SILVUS
TECHNOLOGIES

STREAMCASTER MANET RADIOS WIRELESS COMMUNICATIONS SYSTEMS FOR UNMANNED VEHICLES



UNMANNED SYSTEMS

C2 & Comms Relay – Connecting Multiple Operators & Platforms



DEFENSE

High Bandwidth Networking: On-the-Move, At-the-Halt, Dismounted Operations



LAW ENFORCEMENT/PUBLIC SAFETY

Tactical Bubble Mesh Network Connectivity: Sensors, Vehicles, EOD and Security Operations

THE WORLD'S MOST POWERFUL AND PORTABLE TACTICAL MANET RADIOS

Silvus StreamCaster MANET radios deliver the class-leading power, range and throughput demanded by Defense, Law Enforcement and Commercial Organizations who can't risk communications failure.

STREAMCASTER | ADVANCING THE LIMITS OF MANET RADIO TECHNOLOGY



Powered by the cutting-edge MN-MIMO waveform

SILVUS Technologies – the world’s leading developer of advanced tactical MANET communications systems, is reshaping mesh networking technology for mission-critical applications in the air, on the ground and at sea. The battle-proven StreamCaster family of MANET radios, powered by proprietary MN-MIMO waveform provide the vital communications link for Defense, Law Enforcement and Public Safety agencies worldwide and in the most challenging operational environments.

MN-MIMO WAVEFORM

- Battle-proven Proprietary Waveform Technology
- Creates Self-forming and Adaptive Mesh Networks
- Supports 550+ Nodes in a Single Network
- Unsurpassed Performance – Mobile, Long-Range, Multi-path, Non-Line-Of-Sight and complex RF Spectrum Environments
- Continuously Evolving – New Capabilities enabled via Firmware Updates

MIMO TECHNOLOGY

- TX Eigen-Beamforming – Up to 4x Effective Transmit Power and Range
- Spatial Multiplexing – Utilizes multiple antennas to transmit data at High Throughput Rates
- Space-Time Coding – Ability to transmit and receive data packets simultaneously for Enhanced Robustness
- RX Eigen-Beamforming – Optimizes radio performance while lowering RF Signature Footprint

COFDM

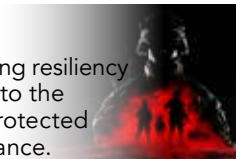
- Auto link adaptation to continually optimize throughput in Dynamic Environments
- Exceptional Multi-Path and NLOS Performance
- Enhanced Mobility for High-Speed Platforms
- 1.25/2.5/5/10/20 MHz Bandwidth Modes

Additional Features

- Rugged IP68 Construction; MIL-STD-810G
- Advanced Encryption – AES256; FIPS 140-3 Level 2
- Wide Frequency Band Range (300MHz to 6GHz)
- Industry Leading Frequency Agility – 30 Single/Dual Frequency Band Options
- Connect All Your Devices – Cameras, Sensors, PTT, EUDs
- Multiple I/O Interface Options – Ethernet, USB, R232, PTT
- COT Compatible – WINTAK, ATAK, Nett Warrior
- WiFi and GPS via external dongles
- User-customizable Multi-Position Switch for loading presets and zeroizing crypto

Spectrum Dominance

An expansive suite of LPI/LPD and Anti-Jamming resiliency capabilities, a software licensable extension to the MN-MIMO waveform. Achieve secure and protected communications without sacrificing performance.



StreamScope

Powerful network management software – embedded in every StreamCaster radio, and accessible from virtually any computer, laptop, tablet, or smartphone.



StreamLC

Push-to-Talk Software for any Android® or Windows® device connected to your StreamCaster MANET Network. Provides PTT capability for multiple operators and remote PTT capability around the world via Internet/VPN access.



Featured Accessories

- MOHOC RTS – StreamCaster Edition helmet-mounted camera
- Obscura PTZ and Obscura XP Multi-Mission cameras



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StreamCaster LITE 5200 (SL5200)

Designed for today's leading-edge unmanned systems, the SL5200 delivers the performance of StreamCaster MANET radios. Compact and powerfully versatile, it delivers Group 2 UAV-level performance in an ultra-low SWaP form factor designed for Group 1 platforms.

Providing high bandwidth bi-directional comms for C2, video, sensors and telemetry data in one self-contained module, the SL5200 is purpose-built for integration into unmanned systems operating at the tactical edge.

SL5200 FEATURES

- Up to 2 Watts Output Power (4W effective, thanks to TX Eigen Beamforming)
- Up 100 Mbps Data Throughput
- Battle Proven MN-MIMO Waveform: 550+ Node Scalability
- Single/Dual Band Frequency Options (L, S, L&S)
- I/O Interfaces: Ethernet, USB, RS232
- Advanced Encryption: AES256; FIPS 140-3
- Weight: 52 g (with Shields)



StreamCaster LITE 4200 (SL4200)

SL4200 bends the cost curve without sacrificing performance. This 2x2 MIMO radio is powered by Silvus' proprietary MN-MIMO waveform – available in low-SWaP Handheld and OEM module form factors.

Blue UAS Framework and Green UAS Certified – NDAA and DoD cybersecurity compliant, and is approved for use in conjunction with Blue UAS platforms.



SL4200 FEATURES

- Up to 1 Watt Output Power (2W effective, thanks to TX Eigen Beamforming)
- Up to 20 Mbps Data Rate
- Single Band (L,S, C)
- I/O Interfaces: USB, RS232
- Encryption: AES256
- Weight: 105 g (OEM Module); 295 g (Handheld)



StreamCaster 4200 Enhanced Plus (SC4200EP)

SC4200EP is a 2x2 MIMO radio, delivering best-in-class MANET radio performance and connectivity at the tactical edge. Low SWaP profile makes it ideal for use in portable and embedded applications. Available in Ruggedized Handheld or externally powered Brick versions, in addition to Drop-In Module and OEM Module form factors for integration into unmanned systems.

Blue UAS Framework Certified – NDAA and DoD cybersecurity compliant. Approved for use in conjunction with Blue UAS platforms.



SC4200EP FEATURES

- Up to 10 Watts Output Power (20W effective, thanks to TX Eigen Beamforming)
- Up to 100 Mbps Data Rate
- Single/Dual Band Frequency Options (300MHz – 6GHz)
- I/O Interfaces: Ethernet, USB, RS232, PTT
- Advanced Encryption: AES256; FIPS 140-3 Level 2
- Weight: 137 g (OEM Module); 260 g (Drop-In Module); 425 g (Handheld)



StreamCaster 4400 Enhanced (SC4400E)

SC4400E delivers the power of 4x4 MIMO in a ruggedized software-defined MANET radio. Purpose-built for maximum performance in fixed infrastructure, vehicular, long range and airborne applications. Available in Ruggedized externally powered and OEM module form factors.

SC4400E FEATURES

- Up to 20 Watts Output Power (80W effective, thanks to TX Eigen Beamforming)
- Up to 100 Mbps Data Rate
- Single/Dual Band Frequency Options (300MHz – 6GHz)
- I/O Interfaces: Ethernet, USB, RS232, PTT
- Advanced Encryption: AES256; FIPS 140-3 Level 2
- Weight: 288 g (OEM Module); 861 g (Ruggedized)



STREAMCASTER PRISM | NETWORKING SOLUTIONS

The StreamCaster PRISM family of modular integrated antenna radio systems provide long-range sectorized coverage across wide areas of operations. Rapidly deployable with toolless setup and ruggedized construction provides operational flexibility. Deploy a single sector on masts to create a long-range UAV ground

control station, or multiple sectors can be permanently installed to create a strategic communications infrastructure.

StreamCaster 4400 Enhanced (SC4400E) 4X4 MIMO Radio

StreamCaster PRISM combines the performance of StreamCaster MANET radios with high-gain, dual polarity sector antennas to deliver up to 360° of coverage for air and ground applications. Features: Up to 20 watts output power (80W effective radiated power, thanks to TX Eigen Beamforming), single/dual band (300MHz – 6GHz), up to 100 Mbps data rate.

Dual Polarity Integrated Sector Antennas

ANTENNA	dBi GAIN	BEAMWIDTH	
		HORIZONTAL	VERTICAL
L-Band	12	120°	10°
S-Band	12-15	90° to 120°	8° to 12°
C-Band	12-16	90° to 120°	8° to 12°
S/C-Band	11 / 12	90°	9° / 11°

StreamCaster PRISM – Deployment Kit

Includes everything you need to assemble, install and rapidly deploy.



**For Questions on Silvus Product Prices, Capabilities,
Custom Integration, Training & Support contact David Jackson
503.434-6845 x185 customerservice@nwuav.com**



11160 SW Durham Lane, Suite 1 | McMinnville, OR 97128
Office: 503.434.6845 | Fax: 503.217.6080 | www.nwuav.com



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