

# STREAMCASTER 4200+ DROP-IN MODULE BANSHEE EDGE NETWORKS SYSTEMS INTEGRATION CASE STUDY



## SILVUS AND FENIX GROUP

### Collaborating to Advance the Capabilities of the Warfighter Empowering Battlefield Intelligence At The Edge

For Fenix Group, a Nokia Federal Solutions Company, operating at speed and scale is an imperative. Supporting the warfighter with intuitive, easy-to-use network communications and edge computing solutions that bridge disparate technologies while unifying communications in a single device – the Banshee Edge Networks deliver force multiplier capabilities at the tactical edge.

### CHALLENGE: Choosing a Mission-Ready MANET Radio Solution

Fenix Group needed a secure and reliable MANET radio solution that could seamlessly integrate into their '3GPP Network in a Box' Banshee Tactical and Mobile Radio, providing powerful mesh networking capabilities on the battlefield.

### SOLUTION: StreamCaster SC4200+ Drop-In Module, Purpose-Built for Embedded Applications

Designed to enable plug-and-play integration into a wide variety of subsystems, Silvus engineered the StreamCaster SC4200+ Drop-In Module to feature all of the performance expected from its class-leading SC4200 2x2 MIMO radio in a low SWaP form-factor.

### RESULT: Seamless Integration, No Design Engineering, Fast Turn-Around to Meet Customer Order



*Due to the module's compatibility with a common form factor, we were able to seamlessly swap the Silvus radio into Banshee to fulfill a quick turn-around order for the military. Beyond form factor compatibility, the SC4200+ DIM software-defined radio with frequency band flexibility eliminated the need for hardware modifications. The U.S. military provided excellent feedback regarding the integrated Silvus radio. This embedded solution enabled Banshee to interconnect multiple systems, thereby scaling tactical wireless networks to thousands of potential users.*



Dave Peterson  
Founder, CEO  
Fenix Group

#### PARTNER



FENIX GROUP, INC.

#### APPLICATIONS



DEFENSE

#### SOLUTIONS



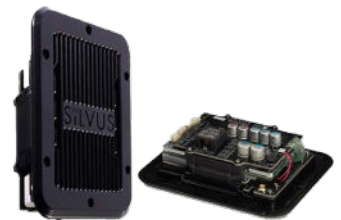
BANSHEE  
TACTICAL RADIO  
(BTR)



BANSHEE  
MOBILE RADIO  
(BMR)

#### LEARN MORE

[www.fenixgroupinc.com](http://www.fenixgroupinc.com)



STREAMCASTER SC4200+  
DROP-IN MODULE

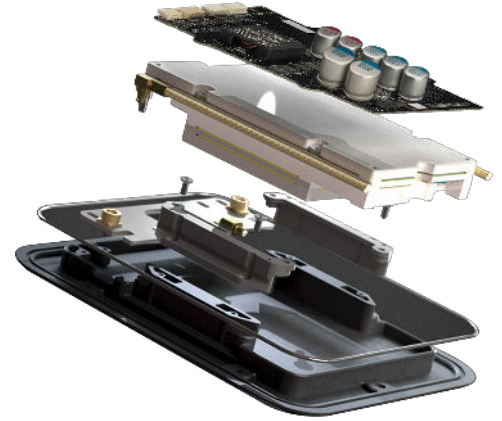
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## STREAMCASTER SC4200+ DROP-IN MODULE

### Powerfully Simple Performance

Silvus continues to drive product innovation, expanding its StreamCaster MANET radio product portfolio to meet the emerging needs of customers. Equipped with a familiar mechanical footprint, hole pattern, and JST connectors, the SC4200+ Drop-In Module provides plug-and-play compatibility with a variety of subsystems currently on the market. Featuring an RF breakout board that connects the radio to antennas via two SMA connectors, and a custom-designed breakout board that provides RS232, USB OTG and Ethernet connectors, the SC4200+ Drop-In Module provides integrators with I/O access flexibility.



## SPECIFICATIONS

WAVEFORM	MN-MIMO
OUTPUT POWER	1mW – 10W variable (up to 20W effective w/TX Beamforming)
DATA RATE	Up to 100Mbps (Adaptive)
ENCRYPTION	AES256; FIPS 140-3 Level 2
FREQUENCY BANDS	300MHz – 6GHz Single/Dual Band
DIMENSIONS	77x110x85mm
WEIGHT	260g



*The SC4200+ Drop-In Module's design approach provides system integrators with the ability to quickly and easily achieve advanced MANET radio performance at extended range, high bandwidth throughput and scalability, while reducing integration time and development requirements. This enables partners to take full advantage of the capabilities that Silvus' MN-MIMO waveform provides, while ensuring native interoperability with StreamCaster MANET radios that are being widely fielded by the U.S. Department of Defense and allied defense forces around the world."*



Jimi Henderson  
Vice President of Sales  
Silvus Technologies

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## BANSHEE TACTICAL RADIO (BTR)

### Man-Portable LTE and MANET Edge Network

The Banshee Tactical Radio is a complete '3GPP Network in a Box' that leverages commercial and Silvus MANET radio mesh networking technologies, enabling secure and reliable communications that complements traditional platforms. Featuring onboard TAK, secure encryption and onboard Mobile Edge Compute, the BTR offers a decentralized, stealthy private LTE network. The BTR's interoperability, low-cost licensing, and ease of use make it an invaluable asset, providing up to 1 km radius coverage per node.



FENIX GROUP, INC.



## BANSHEE MOBILE RADIO (BMR)

### Mobile or Static LTE and MANET Edge Network

The Banshee Mobile Radio is a complete '3GPP Network in a Box' featuring onboard Edge Compute Platform, integrated StreamCaster MANET radio module and more to provide secure and reliable communications. The BMR allows the warfighter to hide in plain sight over a private LTE network, offers bandwidth scalability and supports applications such as TAK. The BMR's decentralized, self-healing Silvus backhaul mesh network ensures connectivity up to a 7 km radius per node.



## PARTNERING FOR THE FUTURE

As the U.S. Government and rest of world moves to 5G & "next G", Nokia Federal & Fenix Group are pioneering networks that sense, think and act by leveraging our work across mobile, fixed and cloud networks.

By leveraging Nokia's world-class 5G engineering focus, next generation Banshee radios will come embedded Silvus StreamCaster MANET radios as their standard backhaul mesh network.