



STREAMCASTER® 4400 XTREME

AS TOUGH AS THE MISSION

The SC4400X delivers the proven performance of the StreamCaster 4400 MANET radio in an ultra-ruggedized, corrosion-resistant form factor. With up to 20 Watts of output power and 100 Mbps data throughput and powered by Silvus' battle-proven MN-MIMO waveform – the SC4400X enables mission-critical connectivity in the world's harshest environments.

Key Features

Ultra-Rugged Enclosure: Constructed from sea-grade aluminum with MIL-A-8625-F Type III hard anodizing and locking marine grade I/O connector for superior corrosion resistance

Enhanced Thermal Protection: Optimized enclosure with enhanced thermal characteristics improve passive cooling and thermal performance during sustained high-power operations

Flexible Power Input: 9-50 VDC input range supports diverse deployment platforms

Visual Status Feedback: Integrated LED provides at-a-glance operational status

Mechanical Compatibility: Matches SC4400 mounting pattern for seamless integration with existing systems and accessories

STREAMCASTER 4400 XTREME

Thermally Optimized Design | Corrosion-Resistant Connectors | Powerful Performance

Type 3, Hard Anodizing for Maximum Toughness



Corrosion-Resistant Antenna Ports

LED Status Light

Single Locking — Marine Grade Connector

SPECIFICATIONS

GENERAL

| MODEL NUMBER | NATIVE TX POWER | EFFECTIVE TX POWER |
|--------------|-----------------|------------------------------------|
| | User Adjustable | w/ Beamforming |
| SC4410X | 1mW – 1W | Up to 4W |
| SC4480X | 1mW – 8W | Up to 32W |
| SC44K0X | 1mW – 20W | Up to 80W |
| | | |
| WAVEFORM | N | Mobile Networked MIMO (MN-MIMO) |
| | | |
| ENICRYPTION | | DESSA (Standard) AES256 (Optional) |

DATA RATE Up to 100Mbps (Adaptive)

MIMO TECHNIQUES
Spatial Multiplexing, Space-Time Coding,
TX/RX Eigen Beamforming

PUSH-TO-TALK VOICE G.711/G.722/Opus Codec

LATENCY 7ms average (20MHz BW)

SENSITIVITY -102dBm @ 5MHz BW

-108dBm @ 1.25MHz BW (optional)

FREQUENCY BANDS Bands from 300MHz to 6GHz available

CHANNEL BANDWIDTH (MHZ) 20/10/5 (2.5/1.25 Optional)

SCALABILITY 550+ Nodes

SPECTRUM DOMINANCE 2.0 MANET Spectrum Analyzer (MAN-SA)
LPI/LPD & ANTI-JAM MANET Power Control (MAN-PC)*
CAPABILITIES MANET Protected Waveform (MAN-PW)*

MANET Interference Cancellation (MAN-IC)*
MANET Interference Avoidance (MAN-IA)

FIPS 140-3 Level 2

Wake On Wireless Dual Frequency Link

MECHANICAL

OPERATING TEMPERATURE -40° to +85° C

IP RATING IP67

DIMENSIONS* 139.7 mm x 135.35 mm x 59.69 mm

WEIGHT 1285 grams

MATERIAL Sea Grade Al 5083; Type 3 hard anodizing

POWER

INPUT VOLTAGE 9-50 VDC

POWER CONSUMPTION 8W-25W @ 1W TX Power 8W-45W @ 8W TX Power 8W-105W @ 20W TX Power

INTERFACES

 RF
 4x TNC(f)

 N(f) Optional

PRIMARY Marine-grade 37-pin Circular Connector: lx Ethernet; lx RS232

IX Ethernet; IX IS232
IX USB2.0 Host; Ix USB2.0 OTG
Push-to-Talk; Multi-position Switch
BDA Control; DC Input

STATUS INDICATOR Bi-Color LED

FREQUENCY BAND OPTIONS

(all bands listed in MHz; dual band configurations available)

| <u>BAND</u> | CODE | <u>RANGE</u> | <u>BAND</u> | CODE | <u>RANGE</u> |
|-------------|------|--------------|---------------|------|--------------|
| UHF | 034 | 300 - 380 | BROADCAST | 206 | 2025 - 2110 |
| | 042 | 400 - 450 | S | 225 | 2200 - 2300 |
| | 068 | 663 - 698 | | 235 | 2200 - 2500 |
| 900 MHz ISM | 091 | 902 - 928 | 2.4 GHz ISM | 245 | 2400 - 2500 |
| L | 137 | 1350 - 1390 | С | 467 | 4400 - 4940 |
| | 139 | 1350 - 1440 | | 470 | 4400 - 5000 |
| | 147 | 1452 - 1492 | | 485 | 4700 - 5000 |
| | 150 | 1492 - 1525 | PUBLIC SAFETY | 512 | 4940 - 5300 |
| | 179 | 1790 - 1805 | 5 GHz ISM | 520 | 5150 - 5250 |
| | 182 | 1790 - 1850 | | 580 | 5725 - 5875 |
| | | | | | |







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^{*} Without RF Connectors