

Stratum™ X1 - 5GHz



Product Snapshot

The Stratum X1 - 5GHz is a compact MIMO 2x2 point-to-multipoint endpoint or CPE, specifically engineered for the dependable and efficient transmission of high-resolution video and essential business data. It serves as an endpoint for the Stratum X3 Multipoint Base Station, enabling the implementation of cost-effective multipoint networks.

With its compact design and a throughput capacity of up to 500 Mbps, the Stratum X1 is perfect for applications such as street-level installations in video surveillance networks.

- Throughput up to 500 Mbps
- Wide Band Radio - 5.150 – 5.850 GHz
- AES 128-bit encryption is upgradeable to 256-bit
- 20, 40 and 80 MHz channels.
- Full tilt and swivel mounting kit included.

Advanced Interference Management

To achieve peak performance in challenging RF environments characterized by dense unlicensed radio usage and significant interference, the Stratum X1 – 5GHz utilizes our highly efficient WORM® (Wireless Outdoor Router Protocol). Proxim ClearConnect®, a crucial component of WORM®, provides effective interference management.

Security

Over the air transmission is secured via 128-bit AES encryption, with an option to upgrade to 256-bit when ultra-high security is desired.

Rugged Reliability

Stratum X1 features a robust IP67-rated metal enclosure designed to provide dependable performance over many years, even in severe conditions including strong winds, high salt exposure, and extreme temperatures.

Proxim WORM®

WORM® is a dynamic, asynchronous protocol designed to optimize the performance of outdoor wireless point-to-point and point-to-multipoint wireless links. WORM's asynchronous nature allows the uplink and downlink to adapt to network traffic demands dynamically.

In a WORP®-powered network, a base station autonomously handles on-demand bandwidth allocation and quality of service (QoS) settings based on the specific requirements of each client within the network.

Flexible and Secure Management Options

Management options include Proxim BlueConnect™; our Bluetooth-enabled mobile management application; TLS 1.3 web GUI, SSH 2.0 CLI, and SNMP v3 for ProximVision Advanced, and other network management solutions.

Learn More about
Proxim WOPR®



Learn More about
Proxim ClearConnect™



Specifications

PRODUCT MODELS

SX1-1023C-WD	Stratum X1, 5 GHz CPE, 500 Mbps, 35° dual pol antenna or RP-SMA - WD PoE	PN: 906-00026
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LICENSES

SX1-102xC-AES256-UPG	Stratum X1, 5 GHz CPE AES 256 license upgrade	PN: 997-00071
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INTERFACES

WIRED ETHERNET	One auto MDI-X RJ45 1 Gbps Ethernet with PoE in
WIRELESS PROTOCOL	WORP® (Wireless Outdoor Router Protocol)

RADIO & TX SPECS

MIMO	2x2:2
MODULATION	OFDM BPSK-QAM1024
FREQUENCY	5.150 - 5.850 GHz (Subject to Country Regulations)
CHANNEL SIZE	20, 40 and 80 MHz
TX POWER	Up to 27 dBm (dual chain)
TX POWER CONTROL	0 - 24 dB, in 1 dB steps. Automatic TPC with configurable EIRP limit

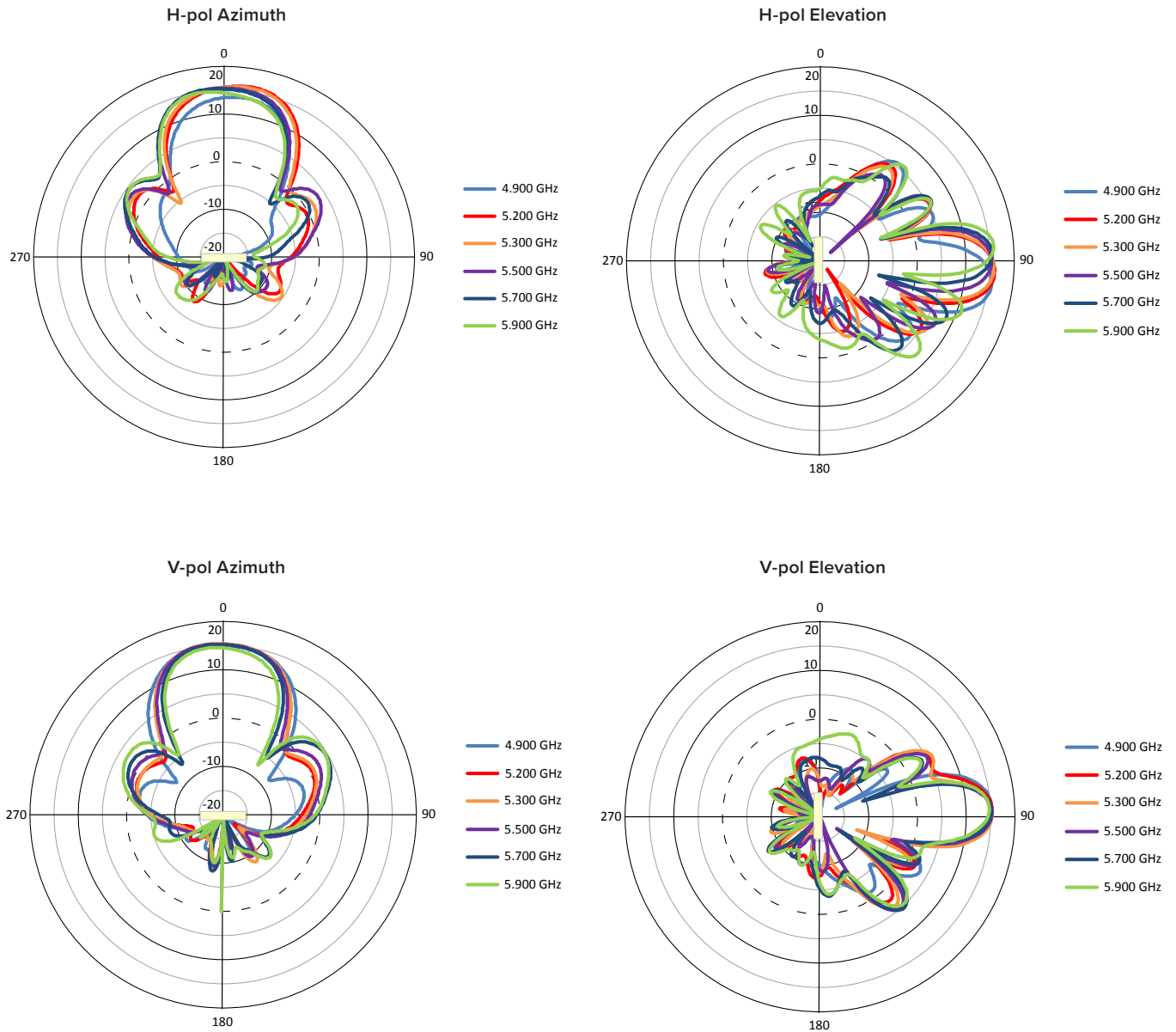
	20 MHz	40 MHz	80 MHz
TX POWER	MCS0:	MCS0:	MCS0:
2 RF	27	27	27
	MCS11:	MCS11:	MCS11:
2 RF	18	18	18
RX SENSITIVITY (Per=10-6)	MCS0:	MCS0:	MCS0:
	-92	-90	-86
	MCS11:	MCS11:	MCS11:
	-61	-59	-55
Throughput - Dual Stream	223 Mbps	435 Mbps	500 Mbps
OTHER	Dynamic Channel Selection (DCS) based on interference detection		
	Dynamic Frequency Selection (DFS) based on radar signature		
	Automatic Transmit Power Control (ATPC) with EIRP limit support		

ANTENNA

SX1-1023C

Integrated 2x2 MIMO 15 dBi dual Polarized 35 degree Panel Antenna plus two RP-SMA Connectors
(Software switch between integrated antenna and connectors)

ANTENNA PATTERNS



MANAGEMENT

BLUETOOTH LOW ENERGY	Proxim BlueConnect™
REMOTE	Telnet and SSH 2.0, Web GUI and TLS 1.3, TFTP, SNMP v1/v2c/v3
OTHER	Syslog, SNTP and local time, Spectrum analyzer
MULTI-LANGUAGE SUPPORT	Web Interface available in English, French, Spanish and Chinese

SECURITY

ENCRYPTION	AES 128 (AES 256 via license upgrade)
AUTHENTICATION	Internal MAC Address Control List, Radius based Authentication (with VLAN and QoS provisioning)

QoS

ASYMMETRIC BANDWIDTH CONTROL	Asymmetric UL/DL committed and maximum information rate per service flow
PACKET CLASSIFICATION CAPABILITIES	802.1p priority and IPTOS
SCHEDULING	Best Effort, Real Time Polling Services

NETWORK

MODES	Bridging, Routing
IP STACK	IPv4 and IPv6 simultaneously
VLAN	802.1Q: Management VLAN. Transparent, Access, Trunk and Mixed mode. QinQ double tagging
GATEWAY FEATURES	DHCP Server & relay, NAT with Std ALGs, PPPoE end point with Proxy DNS

POWER

802.3at compliant

POWER CONSUMPTION

14 to 17 W max in MIMO 2x2 mode

ENVIRONMENTAL SPECS	OPERATING TEMPERATURE	STORAGE TEMPERATURE	HUMIDITY - IP RATING	WIND LOADING
	-40° to 60°C	-50° to 70°C	100% relative humidity	180 km/h (112.5 mph)
	-40° to 140° Fahrenheit	-58° to 158° Fahrenheit	IP67	
PHYSICAL SPECS	DIMENSIONS (Shipping Carton)	DIMENSIONS UNPACKAGED	WEIGHT (Shipping Carton)	WEIGHT (UNPACKAGED)
SX1-1023C	310 x 226 x 98 mm (12.2 x 8.9 x 3.85 in)	170 x 217 x 56 mm (6.7 x 8.55 x 2.2 in)	2.85 kg (6.28 lbs)	1.24 kg (2.73 lbs)

SAFETY STANDARDS

IEC 62368-1:2018
EN IEC 62368-1:2020+A11:2020
BS EN IEC 62368-1:2020+A11:2020
UL 62368-1:2019, CSA C22.2 No. 62368-1:19

CERTIFICATIONS (Pending)

USA	EMC/EMI: CFR47, FCC part 15, Subpart B (class A) Bluetooth: FCC Part 15 Subpart C 15.247,15.205, 15.207 & 15.209 UNII 1 and 3: FCC part 15, Subpart C 15.247, 15.205, 15.207 & 15.209, Subpart E 15.407 UNII 2A and 2C: FCC part 15, subpart E 15.407, 15.247, 15.205, 15.207 & 15.209 (Pending)
CANADA	EMC/EMI: ICES-003 issue 7:2020 (class A) Bluetooth: RSS-247 issue 3 & RSS Gen Issue 5 UNII 3: RSS-247 issue 3 & RSS Gen Issue 5 UNII 2A and 2C: RSS-247 issue 3 & RSS Gen Issue 5 (Pending)
EUROPE	EMC/EMI: EN 55032:2015+A1:2020, EN 55035:2017+A11:2020 RED: EN 301 489-1, EN 301 489-17, EN 301 489-19, EN 300 328, EN 301 893, EN 302 502, EN 303 413
UK	EMC/EMI: BS EN 55032:2015+A1:2020, BS EN 55035:2017+A11:2020 UKCA: EN 301 489-1, EN 301 489-17, EN 301 489-19, EN 300 328, EN 301 893, EN 302 502, EN 303 413

PACKAGE CONTENTS

- One Stratum SX1-1023C unit with two RP-SMA connectors
- Three RP-SMA weather proofing caps
- One M25 weather proofing cable glands
- One power injectors and country specific power cords
- One full axis mounting kits
- One Grounding kits
- One Quick Installation Guides

MTBF & WARRANTY

>450 000 hours, 2-year warranty, ServPak Extended Support available.

ABOUT PROXIM WIRELESS :

Proxim Wireless is a global leader in advanced wireless broadband and WiFi solutions that deliver high performance and high availability communications.

Celebrating 40 years of pioneering wireless solutions, Proxim is recognized for unparalleled reliability, superior performance, and drive for innovation.