

Stratum™ X5



Product Snapshot

The Stratum™ X5 is the first in a new series of ultra-high-performance point-to-point and Point to Multipoint radio endpoints.

The Stratum™ X5 is a 5 GHz, MIMO 4x4 point-to-point radio with greater than 1.5 Gbps throughput, and ideally suited to high capacity backhaul applications

The 4x4 MIMO radio offers two significant benefits :

- In MIMO 4x4:4 mode, a 20MHz channel will double the throughput compared to the typical MIMO 2x2:2 point-to-point systems available today.
- In MIMO 4x4:2 mode, antenna diversity enables two mirrored data streams that improve radio stability in harsh environments.

Other Features Include :

- Up to 1.58 Gbps Throughput.
- Wide Band Radio - 5.150 – 5.850 GHz
- 2.5G Ethernet with optional 10G SFP+ optical transceiver cage
- AES 128-bit encryption is upgradeable to 256-bit
- Full tilt and swivel mounting kit included.

Flexible Antenna Options

The SX5-1042A is a flexible variant that includes an integrated quad polarity panel antenna, plus software selectable connectors for external antennas.

Model SX5-1040A is a connectorized unit purpose build for external quad polarity antennas where specific antenna patterns or gain adjustments are needed.

Advanced Interference Management

Proxim ClearConnect™ combines multiple dynamic technologies and delivers the best interference management solution.

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 or other network management solutions.

Rugged Reliability

Stratum x5 uses an IP67-rated metal enclosure to ensure years of reliable service in harsh environments, including high winds, high salt, and temperature extremes.

Specifications

PRODUCT MODELS

SX5-1040A-US	Stratum X5, 5 GHz All-purpose unit (BSU single and SU), 1+ Gbps, RP-SMA - US PoE	PN: 906-00001
SX5-1042A-US	Stratum X5, 5 GHz All-purpose unit (BSU single and SU), 1+ Gbps, 19° quad pol antenna and RP-SMA - US PoE	PN: 906-00002
SX5-1040A-WD	Stratum X5, 5 GHz All-purpose unit (BSU single and SU), 1+ Gbps, RP-SMA - WD PoE	PN: 906-00003
SX5-1042A-WD	Stratum X5, 5 GHz All-purpose unit (BSU single and SU), 1+ Gbps, 19° quad pol antenna and RP-SMA - WD PoE	PN: 906-00004

LICENSES

SX5-104xA-AES256-UPG	Stratum X5, 5 GHz All-purpose unit AES 256 license upgrade	PN: 997-00062
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INTERFACES

WIRED ETHERNET	One auto MDI-X RJ45 2.5 Gbps Ethernet with PoE in One auto MDI-X RJ45 1 Gbps Ethernet with PoE out
EXTENSION WIRELESS PROTOCOL	One SFP+ port for Fiber or Copper 10 Gbps SFP module WORP® (Wireless Outdoor Router Protocol)

RADIO & TX SPECS

MIMO	2x2:2 and 4x4:4
MODULATION	OFDM BPSK-QAM1024
FREQUENCY	5.150 – 5.925 GHz (Subject to Country Regulations)
CHANNEL SIZE	20, 40 and 80 MHz (80+80 and 160 MHz via future upgrade)
TX POWER	Up to 26 dBm (dual chain) or 29 dBm (quad chain)
TX POWER CONTROL	0 - 21 dB, in 1 dB steps. Automatic TPC with configurable EIRP limit

	20 MHz	40 MHz	80 MHz
TX POWER	MCS0:	MCS0:	MCS0:
2 RF	26	26	26
4 RF	29	29	29
	MCS9:	MCS11:	MCS11:
2 RF	21	20	20
4 RF	24	23	23
RX SENSITIVITY (Per=10 ⁻⁶)	MCS0:	MCS0:	MCS0:
	-92	-90	-87
	MCS9:	MCS11:	MCS11:
	-71	-63	-59
Throughput - Dual Stream	223 Mbps	435 Mbps	755 Mbps
Throughput - Quad Stream	442 Mbps	820 Mbps	1581 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

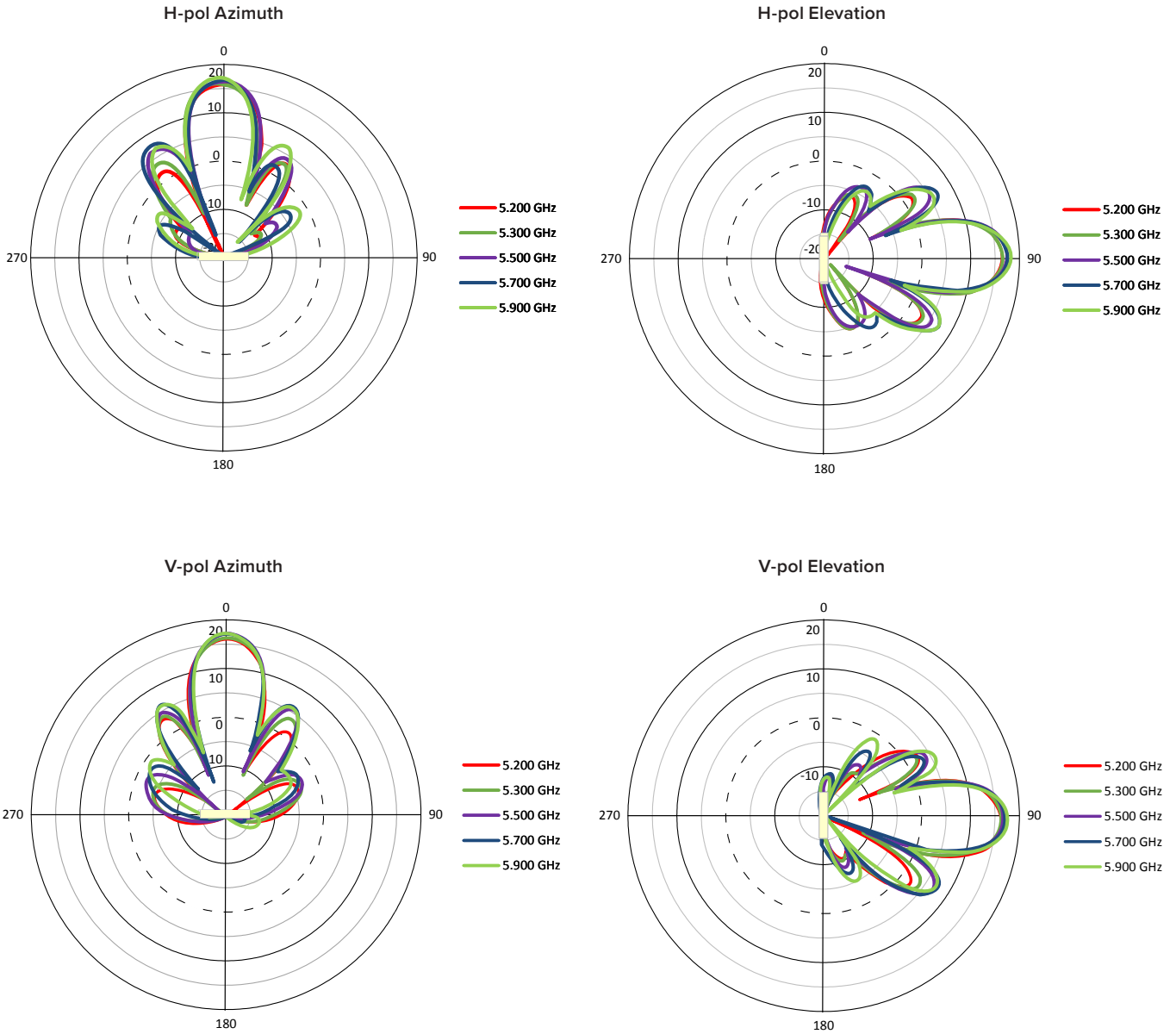
SX5-1040A

Four RP-SMA Connectors

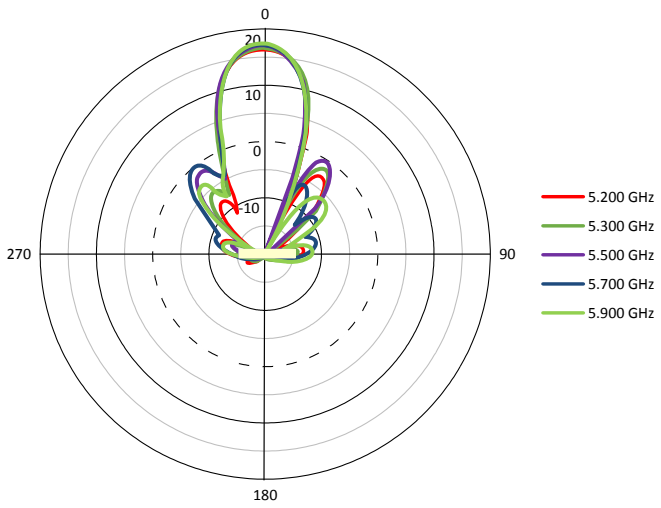
SX5-1042A

Integrated 4x4 MIMO 18 dBi Quad Polarized 19 degree Panel Antenna plus Four RP-SMA Connectors
(Software switch between integrated antenna and connectors)

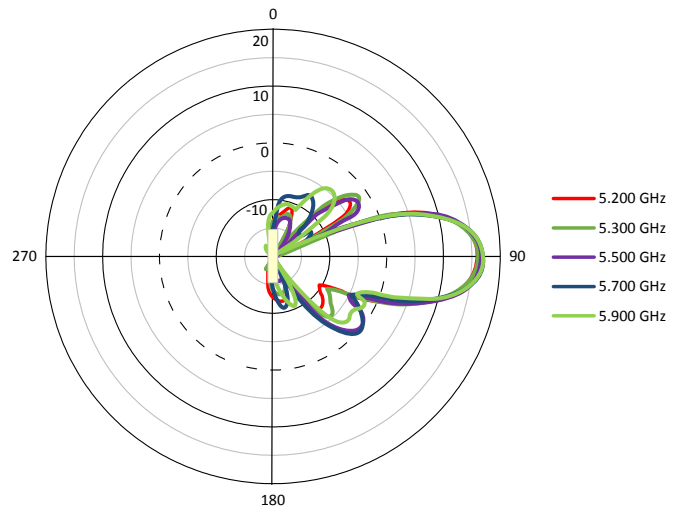
ANTENNA PATTERNS (Sector Mode)



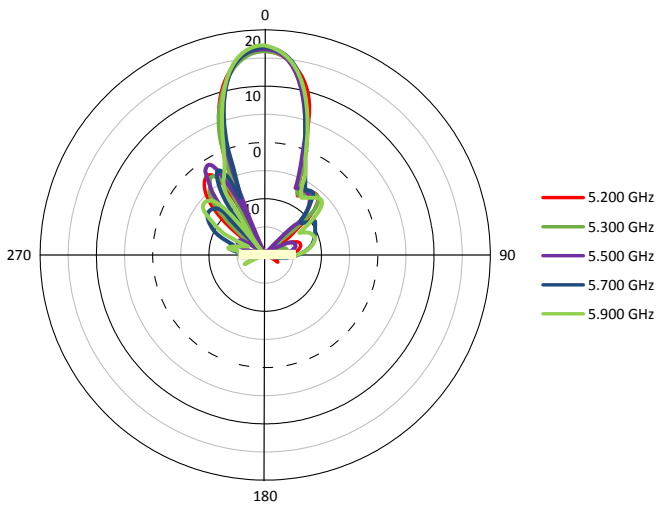
+45-pol Azimuth



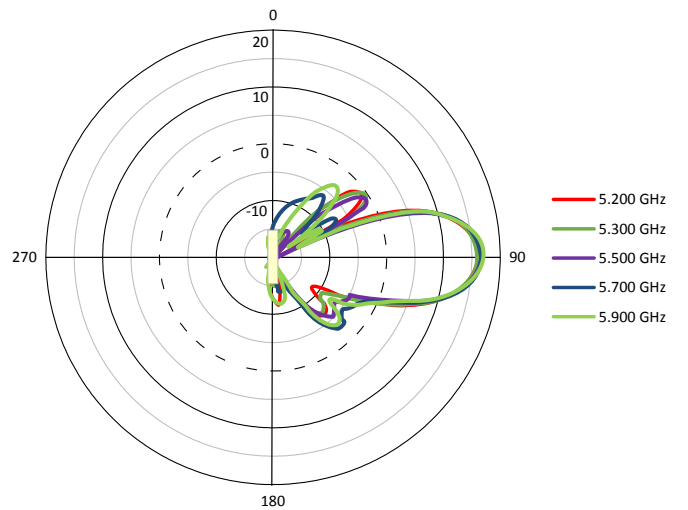
+45-pol Elevation



-45-pol Azimuth



-45-pol Elevation



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)

NETWORK

MODES	Bridging, (Routing to be added by future firmware update)
IP STACK	IPv4 and IPv6 simultaneously
VLAN	802.1Q: Management VLAN. Transparent, Access, Trunk and Mixed mode. QinQ double tagging

POWER

802.3at/bt compliant

POWER CONSUMPTION

25 W typical in MIMO 4x4 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 PACKAGED	DIMENSIONS UNPACKAGED	WEIGHT (PACKAGED)	WEIGHT (UNPACKAGED)
SX5-1040A	388 x 346 x 428 mm 15.27 x 13.62 x 16.85 in	250 x 220 x 62 mm 9.84 x 8.66 x 2.44 in	10.0 Kg 22.04 lbs	1.6 Kg 3.53 lbs
SX5-1042A	415 x 415 x 485 mm 16.34 x 16.34 x 16.85 in	371 x 371 x 97 mm 14.60 x 14.60 x 3.82 in	13.8 kg 30.42 lbs	3.0 kg 6.61 lbs

SAFETY STANDARDS (Pending)

IEC 62368-1:2014 & 60950-22:2016
CAN/CSA C22.2 No 62368-1:14 & No 60950-22:17
EN 62368-1:2014 + A11:2017 & 60950-22:2017

CERTIFICATIONS (Pending)

USA	FCC part 15B class A (EMC), part 15C (Bluetooth) and part 15E (5 GHz radio)
CANADA	RSS-247 issue 2, RSS-102 issue 5, ICES-003 issue 7
EUROPE	RED & 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 SX5-1040A unit with four RP-SMA connectors
or One Stratum SX5-1042A with integrated antenna plus four RP-SMA connectors
- Three (SX5-1040A) or Five (SX5-1042A) RP-SMA weather proofing caps
- Two 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.

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