Stratum™ X5 Quickbridge

Product Snaphot

The Stratum™ X5 Quickbridge is an ultra-high-performance point-to-point bridge in a box solution. ideal for customers who need a point-to-point wireless link up and running quickly.

The Stratum™ X5 is a 5GHz, MIMO 4x4 point-to-point radio system with greater than 1.5 Gbps throughput, and is 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 :

- Throughput >1.5 Gbps TCP and 1.8 Gbps UDP

- Wide Band Radio - 5.150 – 5.850 GHz

- 2.5 Gbps Ethernet with optional 10 Gbps 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.

Bridge in a Box

Ship as a preconfigured Quickbridge bundle: two units paired into a point to point link in a single carton.

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-WD Quickbridge	Stratum X5 Quickbridge, Pair of 5 GHz All-purpose unit (BSU single or SU), 1+ Gbps, RP-SMA - WD PoE	PN: 907-00003
SX5-1042A-WD Quickbridge	Stratum X5 Quickbridge, Pair of 5 GHz All-purpose unit (BSU single or SU), 1+ Gbps, 19° quad pol antenna and RP-SMA - WD PoE	PN: 907-00004

LICENSES

SX5-104xA-QB-AES256-UPG	Stratum X5 Quickbridge, 5 GHz link AES 256 license upgrade	PN: 997-00063

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

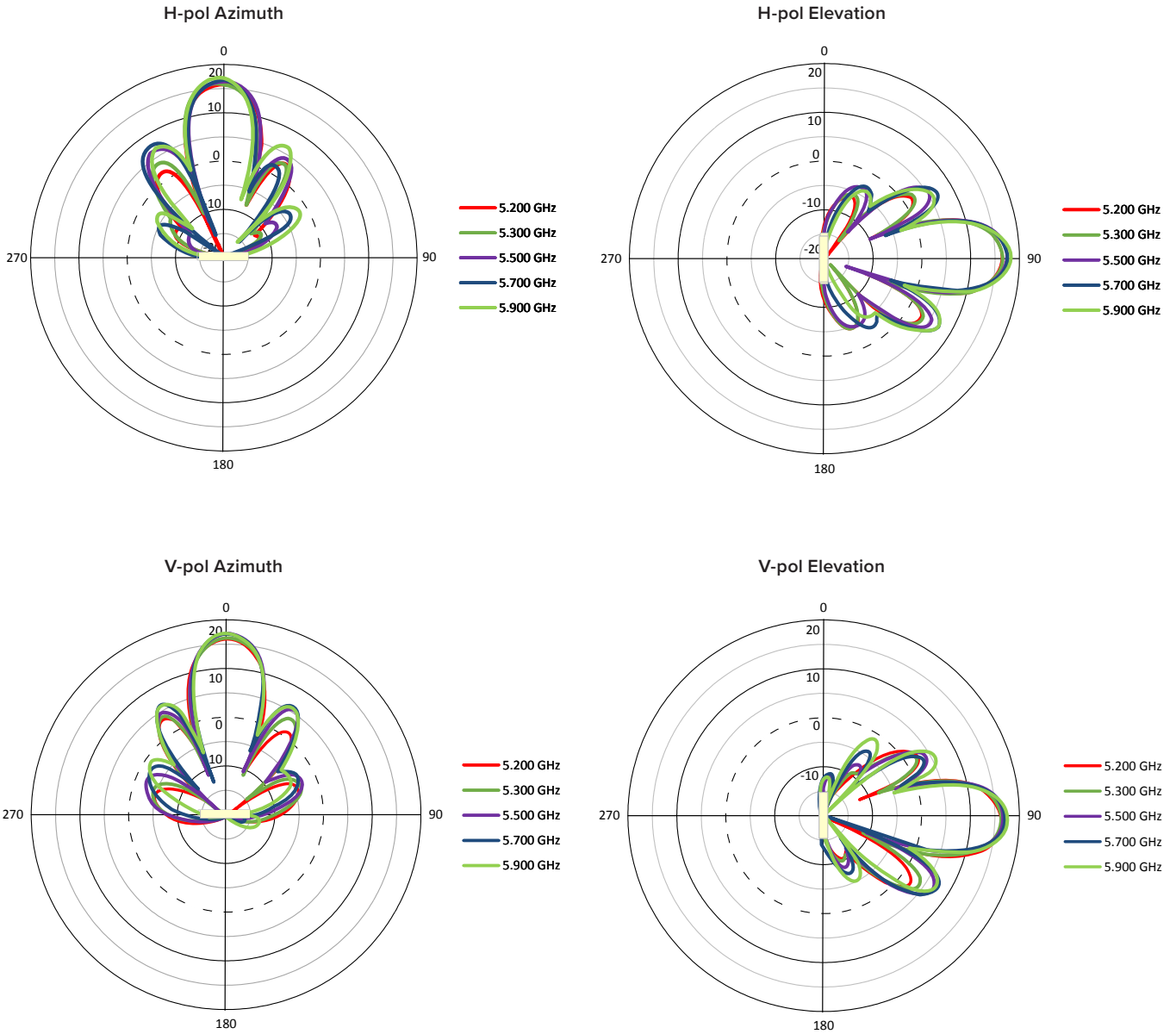|	20 MHz	40 MHz	80 MHz
TX POWER	MCS0:	MCS0:	MCS0:
2 RF	26	26	26
4 RF	29	29	29
	MCS9:	MCS11:	MCS11:
2 RF	21	20	20
4 RF	24	23	23
RX SENSITIVITY (Per=10^{-6})	MCS0:	MCS0:	MCS0:
	-92	-90	-87
	MCS9:	MCS11:	MCS11:
	-71	-63	-59
Throughput - Dual Stream	223 Mbps	435 Mbps	755 Mbps
Throughput - Quad Stream	442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

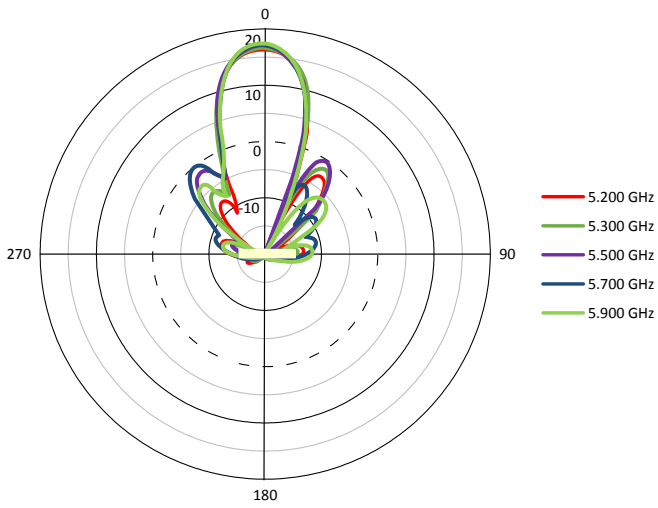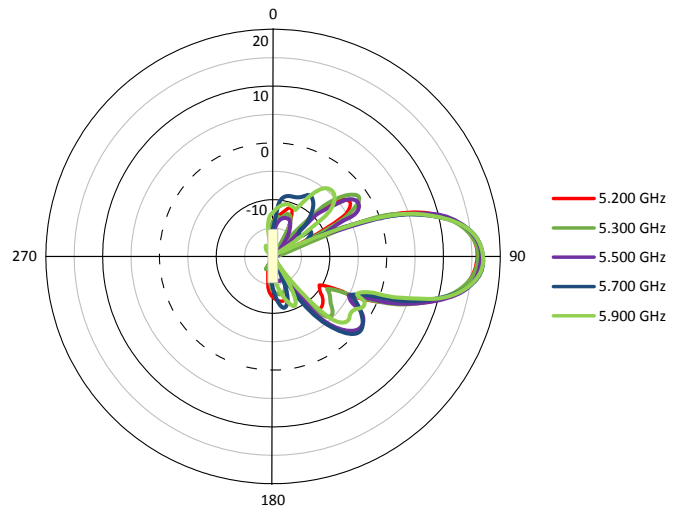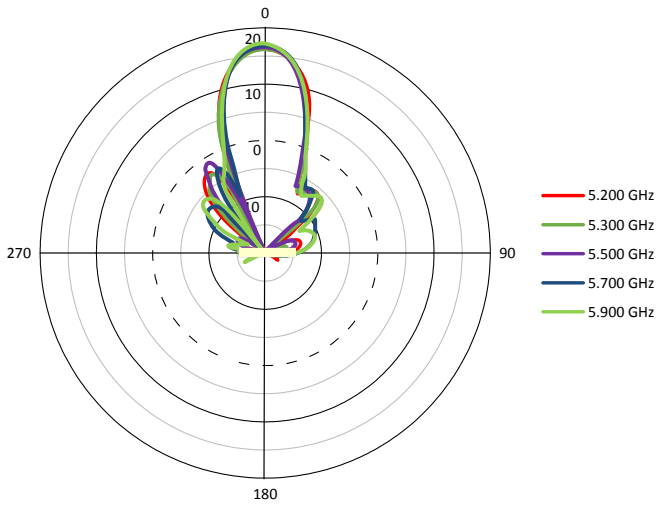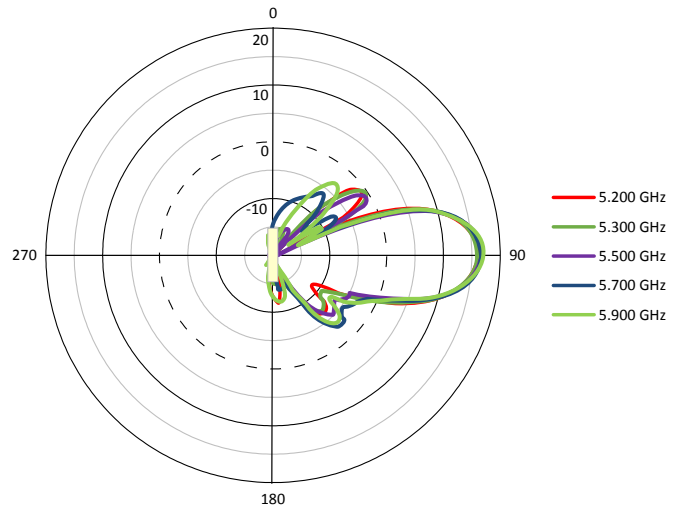|	
SX5-1040A	Four RP-SMA Connectors
SX5-1042A	Integrated 4x4 MIMO 18 dBi Quad Polarized 19 degree Panel Antenna plus Four RP-SMA Connectors (Software switch between integrated antenna and connectors)

ANTENNA PATTERNS (Sector Mode)

H-pol Azimuth

H-pol Elevation

V-pol Azimuth

V-pol Elevation

+45-pol Azimuth

Legend:
- 5.200 GHz
- 5.300 GHz
- 5.500 GHz
- 5.700 GHz
- 5.900 GHz

+45-pol Elevation

Legend:
- 5.200 GHz
- 5.300 GHz
- 5.500 GHz
- 5.700 GHz
- 5.900 GHz

-45-pol Azimuth

Legend:
- 5.200 GHz
- 5.300 GHz
- 5.500 GHz
- 5.700 GHz
- 5.900 GHz

-45-pol Elevation

Legend:
- 5.200 GHz
- 5.300 GHz
- 5.500 GHz
- 5.700 GHz
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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

	14 to 17 W max in MIMO 2x2 mode
	22 to 25 W max 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 (Shipping Carton - 2 Units or 1 QB link)**	**DIMENSIONS UNPACKAGED**	**WEIGHT (Shipping Carton - 2 Units or 1 QB link)**	**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

	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

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 2 (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 UNII2 (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 (Pending)
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 (Pending)

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

One Stratum X5 Quickbridge package includes twice the above content. The two units are paired together into a Point to Point link.

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.