

# XA4-240 Wi-Fi 5 Indoor Access Point

802.11ac Wave 2 High-Density Quad Radio AP with External Antennas

#### QUICK LOOK:

- High-density design purpose-built for large venue deployments
- External antennas to support deployment-specific coverage requirements
- Software-defined radios support 4X
   the 5GHz capacity per AP
- EasyPass simplifies connectivity for Guest/BYOD/IoT



The Xirrus XA4 High-Density Access Point (AP) with external antenna connectors is the highest capacity, plenum-rated Wi-Fi AP on the market and delivers massive scalability to meet the demands of today's mobile users. This indoor high-density AP features a powerful multi-core integrated controller, application-level intelligence, automated provisioning, and cloud or on-premises management.

The XA4-240 high-density AP provides the flexibility to connect various types of external antennas for unique coverages. This AP is ideal for providing robust wireless connectivity in locations such as convention centers, airports, train stations, bus stations, warehouses, and manufacturing facilities.

#### **SOFTWARE-DEFINED FLEXIBILITY**

Packed with performance, the XA4-240 quad radio AP supports software-defined radios (SDRs) to deliver up to 4 times the 5 GHz Wi-Fi capacity compared to competitive APs. Instantly boost performance with the click of a mouse to adapt to changing client devices and optimize the user experience.



#### **EASY TO MANAGE**

Combined with the Xirrus Management System (XMS), the XA4-240 series AP delivers complete visibility and control of the Wi-Fi network, including users, devices, applications, network traffic and the RF environment - all from a single console. Designed for simple deployment, zero-touch configuration gets your network up and running in just minutes.

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### **Access Point Specifications**

Radios	4 total: 3 - 5 GHz , 1 - 2.4 GHz / 5 GHz software programmable 4x4 11ac 3.47 Gbps MU-MIMO: 16 streams
Wi-Fi	802.11 a/b/g/n/ac Wave 2
Channel Bonding	Up to 160 MHz
Maximum Wi-Fi Bandwidth	13.88 Gbps
Wi-Fi Threat Sensor	Yes
Antennas	16 RP-SMA female connectors
Maximum Associated Devices	960

Maximum Power

TRAFFIC), BROADCAST, LINK-BACKUP (FAILOVER), LOAD BALANCE

Wired Uplinks -SUPPORT FOUR MODES 802,3AD (AGGREGATE

46 W

Consumption

Dimensions

33.02 cm (13 in)

1 - 2.5 GbE, 1 - GbE

**Weight** 2.49 kg (5.5 lbs)

Operating

0°C to 50°C (32°F to 122°F)

Temperature

5-90% humidity, non-condensing

Storage Temperature -40°C to 70°C (-40°F to 158°F)

## **Network Specifications**

RF	
Management	

In-band spectrum analysis

Dynamic channel configuration

Dynamic cell size configuration

Monitor radio for threat assessment and mitigation wired and wireless packet captures (including all 802.11 headers)

Wired and wireless RMON / packet captures

Radio assurance for radio self-test and healing

RF monitor

2.4 & 5 GHz Honeypot control – Increase available

 $2.4\ \&\ 5\ GHz$  wireless device density through management of spurious  $2.4\ \&\ 5\ GHz$  association traffic

Ultralow power mode – maximize wireless channel

Re-use and increase wireless device density through tight power controls

<sup>\*</sup> AP requires a future software release to support 160 MHz bonding



# Network Specifications cont'd

High Availability	Supports hot standby mode for mission critical areas
	In-service AOS software upgrade process increases network availability for 24x7 operations
Environmentally Friendly	Supports ability to turn off radios based on schedule
IPv6 Support (IN CLI ONLY)	IPv4 and IPv6 dual stack client support
	IPv6-only network
	Increase wireless device density through control of unnecessary IPv6 traffic over IPv4-only networks
	IPv6 functions: IP addressing, DNS, filters, application control, syslog, SNMP management, SSH, Telnet, FTP, DHCP
RFC Support	RFC 768 UDP
	RFC791IP
	RFC 2460 IPV6 (Bridging only)
	RFC 792 ICMP
	RFC 793 TCP
	RFC 826 ARP
	RFC 1122 Requirements for Internet hosts – communication layers
	RFC 1542 BOOTP
	RFC 2131 DHCP

Security	WPA
	IEEE 802.11i WPA2, RSN
	RFC 1321 MD5 Message-digest algorithm
	RFC 2246 TLS protocol version 1.0
	RFC 3280 Internet X.509 PKI certificate and CRL profile
	RFC 4347 Datagram transport layer security
	RFC 4346 TLS protocol version 1.1
<b>Encryption Types</b>	Open, WEP, TKIP-MIC: RC4 40, 104 and 128 bits
Channel Support 2.4 GHz (BASED UPON COUNTRY CODE SELECTIONS)	1,2,3,4,5,6,7,8,9,10,11,12,13,14
Channel	U-NII-1 – Non-DFS channels 36 40 44 48
Support 5 GHz (BASED UPON	U-NII-2A DFS channels* 52 56 60 64
COUNTRY CODE SELECTIONS)	U-NII-2C DFS channels* 100 104 108 112 116 120 124 128 132 136 140 144

U-NII-3 Non-DFS channels 149 153 157 161 165



### Management

Management
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SNMP v1, v2c, v3

RFC 854 Telnet

RFC 1155 Management information for TCP/IP Based Internets

RFC 1156 MIB

RFC 1157 SNMP

RFC 1212 Concise MIB definitions

RFC 1213 SNMP MIB II

RFC 1215 A Convention for defining traps for use with the SNMP

RFC 1350 TFTP

RFC 1643 Ethernet MIB

RFC 2030 Simple Network Time Protocol SNTP

RFC 2578 Structure of management information version 2 (SMIv2)

RFC 2579 Textual conventions for SMIv2

RFC 2616 HTTP 1.1

RFC 2665 Definitions of managed objects for the Ethernet-like interface types

RFC 2674 Definitions of managed objects for bridges with traffic classes, multicast filtering and virtual LAN extensions

RFC 2819 Remote network monitoring management information base

RFC 2863 The Interface Group MIB

RFC 3164 BSD Syslog Protocol

RFC 3414 User-based Security Model (USM) for version 3 of the Simple Network Management Protocol (SNMPv3)

RFC 3416 Version 2 of the Protocol Operations for the Simple Network Management Protocol (SNMP)

RFC 3417 Transport mappings for the Simple Network Management Protocol (SNMP)

RFC 3418 Management Information Base (MIB) for the Simple Network Management Protocol (SNMP)

RFC 3584 Coexistence between version 1, version 2, and version 3 of the Internet-standard network management framework

RFC 3636 Definitions of managed objects for IEEE Xirrus Private

Integration with Splunk for accurate search and analysis of intraorganizational IT events

Netflow Export v9 and IPFIX compatibility allows for IP traffic statistics collection



## Receive Sensitivity<sup>1</sup>

2.4 GHz	XA4-240
802.11b	
1 Mbps	-95
11 Mbps	-88
802.11g	
6 Mbps	-93
54 Mbps	-75
802.11n HT20	
MSC0	-91
MSC7	-72
802.11n HT40	
MSC0	-88
MSC7	-69

Single radio chain	
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802.11a 6 Mbps 89 54 Mbps -74 802.11n HT20 MSC0 -90 MSC7 -71 802.11n HT40 MSC0 -87 MSC7 -68 802.11ac VHT20 MSC9 -66 802.11ac VHT40 MSC9 -61 802.11ac VHT80 MSC9 -84 MSC9 -58 802.11ac VHT160 MSC9 -58 802.11ac VHT160 MSC9 -58	5 GHz	XA4-240
54 Mbps       -74         802.11n HT20       -90         MSC7       -71         802.11n HT40       -87         MSC0       -87         MSC7       -68         802.11ac VHT20       -90         MSC9       -66         802.11ac VHT40       -87         MSC9       -61         802.11ac VHT80       -84         MSC9       -58         802.11ac VHT160       MSC0         MSC0       -84         MSC0       -58	802.11a	
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MSCO	MSC9	-58
	802.11ac VHT160	
MSC9	MSC0	
	MSC9	

### **Standards**

Wi-Fi
<b>Protocols</b>

IEEE 802.11a, 802.11ac, 802.11b, 802.11d, 802.11e, 802.11g, 802.11h, 802.11i, 802.11j, 802.11k, 802.11n, 802.11u, 802.11w

### Wired Protocols

IEEE 802.3 10BASE-T, IEEE 802.3.u 100BASE-TX , 1000BASE-T, 802.3ab 1000BASE-T

IEEE 802.1q – VLAN tagging

IEEE 802.3ad - Link aggregation

IEEE 802.1d – Spanning tree

IEEE 802.1p — Layer 2 traffic prioritization

IPv6 Control – Increase wireless device density through control of unnecessary IPv6 traffic on IPv4-only networks

DHCP option 82



Ordering Information	
Configured Models	
XA4-240	Plenum-rated High-Density AP with external antenna connectors, consisting of four 3.47 Gbps capable 802.11ac (Wave 2) 4x4 MU-MIMO radios with integrated controller
Accessories	
ANT-IN-DIRXX-4X4-RPSMA	30° and 60° 4x4 antenna for both 2.4 and 5 GHz frequency bands with RP–SMA connectors; Refer to External Antenna Guide for detailed specification
XP1-MSI-75	1 Port 75 W PoE injector for XA4-240. Requires order of appropriate XS-PWR-XX cord for the country where the AP will be deployed
Mounting Brackets	Refer to Accessories Guide for options, part numbers and detailed information
Cambium XMS and S	upport
XMSC-SUB-2R-1	XMS-Cloud 1-year subscription: 2-radio AP with EasyPass Guest Self-Registration and Guest Ambassador modules and Cambium Care Advanced Support
XMSC-SUB-2R-3	XMS-Cloud 3-year subscription: 2-radio AP with EasyPass Guest Self-Registration and Guest Ambassador modules and Cambium Care Advanced Support
XMSC-SUB-2R-5	XMS-Cloud 5-year subscription: 2-radio AP with EasyPass Guest Self-Registration and Guest Ambassador modules and Cambium Care Advanced Support
EASY-SUB-2R-1	EasyPass 1-year subscription for a 2-radio AP operating with XMS-Cloud or XMS-Enterprise
EASY-SUB-2R-3	EasyPass 3-year subscription for a 2-radio AP operating with XMS-Cloud or XMS-Enterprise
EASY-SUB-2R-5	EasyPass 5-year subscription for a 2-radio AP operating with XMS-Cloud or XMS-Enterprise
CCADV-SUP-XA4-240-1	Cambium Care Advanced, 1-year support for one XA4-240 Wireless AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW
CCADV-SUP-XA4-240-3	Cambium Care Advanced, 3-year support for one XA4-240 Wireless AP. 24x7 TAC upport, SW updates, and NBD advance replacement for HW
CCADV-SUP-XA4-240-5	Cambium Care Advanced, 5-year support for one XA4-240 Wireless AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW
CCPRO-SUP-XA4-240-1	Cambium Care Pro, 1-year support for one XA4-240 AP. 24x7 TAC support, SW updates
CCPRO-SUP-XA4-240-3	Cambium Care Pro, 3-year support for one XA4-240 AP. 24x7 TAC support, SW updates

#### **ABOUT CAMBIUM NETWORKS**

CCPRO-SUP-XA4-240-5

Cambium Networks empowers millions of people with wireless connectivity worldwide. Its wireless portfolio is used by commercial and government network operators as well as broadband service providers to connect people, places and things. With a single network architecture spanning fixed wireless and Wi-Fi, Cambium Networks enables operators to achieve maximum performance with minimal spectrum. End-to-end cloud management transforms networks into dynamic environments that evolve to meet changing needs with minimal physical human intervention. Cambium Networks empowers a growing ecosystem of partners who design and deliver gigabit wireless solutions that just work.

Cambium Care Pro, 5-year support for one XA4-240 AP. 24x7 TAC support, SW updates

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