XIRRUS
WI-FI NETWORKS

ACCESS POINTS

With a powerful integrated controller, application level intelligence, zero-touch provisioning, and available cloud-based network management, Xirrus XR-500 and XR-600 series Access Points provide a powerful Wi-Fi solution for environments including classrooms, offices, hospitals, hotel rooms, and more. Xirrus Access Points support 802.11a/b/g/n/ac standards* and feature dual software programmable radios that deliver twice the number of 802.11ac radios compared to standard APs.

Configuration Specifications

Dimensions	7.7" 9.875" X 10.125" (XR-520H)
Total Number of Radios	2
Maximum Wi-Fi Bandwidth	2.6Gbps
Wi-Fi Threat Sensor	Yes
Integrated Antennas	Up to 6
Maximum Wi-Fi Backhaul	1.3Gbps
Gigabit Ethernet Uplink Ports • Modes: 802.3ad (Aggregate traffic), broadcast, link-backup (failover), load balance	XR-520, XR-520H: 1 XR-620, XR-630: 2
Maximum Associated Devices	380
Radio Interface	2.5Gbps PCI-Express
Maximum Power Consumption	
XR-520/XR-520H	12.5W
XR-620	19W
XR-630	23.8W
Weight	
XR-520/XR-620/XR-630	1lbs
XR-520H	3lbs

* XR-500 series product supports 802.11 a/b/g/n.

ACCESS POINTS

Technical Specifications

FEATURE	SPECIFICATIONS	
RF Managment	In-band per IAP 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 & 5Ghz Honeypot Control – Increase available 2.4 & 5Ghz wireless device density through management of spurious 2.4 & 5Ghz association traffic. Ultra Low Power Mode – Maximize wireless channel re-use and increase wireless device density through tight power controls.
High Availability	Supports hot stand-by for mission critical areas	
Environmentally Friendly	Supports ability to turn off radios based on schedule configuration	
Wireless Protocols	IEEE 802.11a, 802.11ac (XR-600 Series), 802.11b, 802.11d, 802.11e, 802.11g, 802.11h, 802.11i, 802.11j, 802.11k, 802.11n, 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 802.1AX – 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	
Carrier Applications	Passpoint 2.0 Certification	
RFC Support	RFC 768 UDP RFC 791 IP 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
Encryption Types	Open, WEP, TKIP-MIC: RC4 40, 104 and 128 bits	

Authentication	IEEE 802.1x
	RFC 2548 Microsoft vendor-specific RADIUS attri¬butes
	RFC 2716 PPP EAP-TLS
	RFC 2865 RADIUS Authentication
	RFC 2866 RADIUS Accounting
	RFC 2867 Tunnel Accounting
	RFC 2869 RADIUS Extensions
	RFC 3576 Dynamic Authorizations extensions to RADIUS
	RFC 3579 RADIUS Support for EAP
	RFC 3748 EAP-PEAP
	RFC 5216 EAP-TLS
		RFC 5216 EAP-TLS
		RFC 5281 EAP-TTLS
		RFC 2284 EAP-GTC
		RFC 4186 EAP-SIM
		RFC 4186 EAP-AKA
		RFC 3748 Leap Pass through
		RFC 3748 Extensible Authentication Protocol
		Web Page Authentication
		  • WPR, Landing Page, Redirect
		  • Support for Internal WPR, Landing Page and Authentication Support for External
		  • WPR, Landing Page and Authentication Support for Xirrus Guest Access System

Regulatory Compliance	CE Mark
	Safety:
	    UL 60950-1:2003
	    EN 60950:2000
	    EMI and susceptibility (Class A)
		U.S.: FCC Part 15.107 and 15.109
		Canada: ICES-003
		Japan: VCCI
		Europe: EN 55022, EN 55024
		EN 60601-1-2
		EN 301 893 V1.61

Technical Specifications Continued...

FEATURE	SPECIFICATIONS	
Environmental Specification	Operating Temperature: 0-55˚C, 0-90% humidity, non-condensing (XR-500/XR-600) -40˚C to +55˚C rated, weather and dust sealed 0-90% humidity, non-condensing (XR-520H)	
Channel Support 2.4GHz (Channel selections are based upon country code selections)	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	
Channel Support 5GHz (Channel selections are based upon country code selections)	UNI I – Non-DFS channels 36 40 44 48 UNI I DFS channels 52 56 60 64	UNI II DFS channels 100 104 108 112 116 120 124 128 132 136 140 UNI III Non-DFS channels 149 153 157 161 165
Management Interfaces	Command line interface Web interface (http / https)	Xirrus Management System (XMS) • XMS-Cloud • XMS-Enterprise
Management	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 MIBs Integration with Splunk for accurate search and analysis of intra-organizational IT events Netflow Export v9 and IPFIX compatibility allows for IP traffic statistics collection

ACCESS POINTS

Receive Sensitivity

RATE	2.4GHZ RX Sensitivity (DBM)	5GHZ RX Sensitivity (DBM)
802.11a		
6Mbps		-92
9Mbps		-92
12Mbps		-91
18Mbps		-90
24Mbps		-87
36Mbps		-83
48Mbps		-79
54Mbps		-78
802.11b		
1Mbps	-91	
2Mbps	-91	
5.5Mbps	-93	
11Mbps	-93	
802.11g		
6Mbps	-93	
9Mbps	-93	
12Mbps	-92	
18Mbps	-91	
24Mbps	-90	
36Mbps	-88	
48Mbps	-83	
54Mbps	-80	
802.11n HT20		
MCS 0	-93	-93
MCS 1	-93	-90
MCS 2	-92	-88
MCS 3	-88	-85
MCS 4	-86	-81
MCS 5	-82	-77
MCS 6	-80	-76
MCS 7	-79	-75
MCS 8	-95	-93
MCS 9	-92	-90
MCS 10	-89	-88
MCS 11	-87	-85
MCS 12	-83	-81
MCS 13	-79	-77
MCS 14	-78	-76
MCS 15	-76	-75
MCS 16	-92	-93
MCS 17	-91	-90
MCS 18	-89	-88
MCS 19	-86	-85
MCS 20	-82	-81
MCS 21	-78	-77
MCS 22	-77	-76
MCS 23	-76	-75

RATE	2.4GHZ RX Sensitivity (DBM)	5GHZ RX Sensitivity (DBM)
802.11n HT40		
MCS 0	-93	-91
MCS 1	-92	-88
MCS 2	-90	-86
MCS 3	-87	-83
MCS 4	-84	-79
MCS 5	-80	-75
MCS 6	-78	-74
MCS 7	-77	-73
MCS 8	-92	-90
MCS 9	-89	-87
MCS 10	-87	-85
MCS 11	-84	-82
MCS 12	-81	-78
MCS 13	-77	-74
MCS 14	-75	-73
MCS 15	-74	-72
MCS 16	-91	-90
MCS 17	-88	-87
MCS 18	-86	-85
MCS 19	-83	-82
MCS 20	-79	-78
MCS 21	-75	-74
MCS 22	-74	-73
MCS 23	-73	-72
802.11ac VHT20		
MCS 0		-82
MCS 1		-79
MCS 2		-77
MCS 3		-74
MCS 4		-70
MCS 5		-66
MCS 6		-65
MCS 7		-64
MCS 8		-59
MCS 9		-57
802.11ac VHT40		
MCS 0		-88
MCS 1		-85
MCS 2		-83
MCS 3		-80
MCS 4		-76
MCS 5		-72
MCS 6		-71
MCS 7		-69
MCS 8		-67
MCS 9		-66
802.11ac VHT80		
MCS 0		-86
MCS 1		-83
MCS 2		-81
MCS 3		-78
MCS 4		-74
MCS 5		-70
MCS 6		-69
MCS 7		-68
MCS 8		-66
MCS 9		-64

RATE	2.4GHZ RX Sensitivity (DBM)	5GHZ RX Sensitivity (DBM)
802.11ac VHT80		
MCS 0	-86	
MCS 1	-83	
MCS 2	-81	
MCS 3	-78	
MCS 4	-74	
MCS 5	-70	
MCS 6	-69	
MCS 7	-68	
MCS 8	-66	
MCS 9	-64	

ACCESS POINTS

PART NUMBER	DESCRIPTION
Configured Models	
XR-520	Dual radio 2x2 MIMO 802.11n AP with up to 600 Mbps of total Wi-Fi bandwidth; integrated controller with ArrayOS operating system
XR-520H	Hardened dual radio 2x2 MIMO 802.11n AP with external antennas; supports up to 600 Mbps of total Wi-Fi bandwidth; integrated controller with ArrayOS operating system
XR-620	Dual radio 2x2 MIMO 802.11ac AP with up to 1.7Gbps of total Wi-Fi bandwidth; integrated controller with ArrayOS operating system
XR-630	Dual radio 3x3 MIMO 802.11ac AP with up to 2.6Gbps of total Wi-Fi bandwidth; integrated controller with ArrayOS operating system
Software Licenses	
AOS-APPCON	Application Control license enabling Deep Packet Inspection (DPI) on 1 radio
AOS-11AC	License to enable 802.11ac operation on 1 radio

About Xirrus

To organizations that depend on wireless access to transform their business, Xirrus is the wireless network solution provider that provides the world's most powerful, scalable, and trusted solutions. Through product invention and system design, commitment to customer success, and the industry's best price performance, Xirrus gives you confidence that your wireless network performs under even the most demanding circumstances. Headquartered in Thousand Oaks, CA, Xirrus is a privately held company and designs and manufactures its family of products.