XIRRUS
WI-FI NETWORKS

INDOOR ACCESS POINTS

TECHNICAL BRIEF

With a powerful integrated controller, application level intelligence, zero-touch provisioning, and available cloud-based network management, Xirrus X, XR, XD series Access Points provide powerful Wi-Fi solutions for environments including classrooms, offices, hospitals, hotel rooms, and more. Xirrus Access Points are backward compatible and the latest model supports 802.11ac Wave 2 with Multi-User MIMO. Xirrus APs feature dual software programmable radios that deliver twice the number of 802.11ac radios compared to standard APs.

Configuration Specifications

	XR-500	X2	XR-600	XD2
Chassis Dimensions	7.7" Diameter, 2" H	8" Diameter, 1.82"H	7.7" Diameter, 2" H	8" Diameter, 1.82"H
Supported Standards	802.11a/b/g/n	802.11a/b/g/n/ac	802.11a/b/g/n/ac	802.11a/b/g/n/ac (Wave 2)
Total Number of Radios	2	2	2	2
Radio Type	2x2, 300Mbps	2x2, 867Mbps	XR-620: 2x2, 867Mbps XR-630: 3x3, 1.3Gbps	4x4, 1.733Gbps
MIMO Technology	SU-MIMO	SU-MIMO	SU-MIMO	MU-MIMO
Maximum Wi-Fi Bandwidth	600Mbps	1.1Gbps	XR-620: 1.7Gbps XR-630: 2.6Gbps	3.47Gbps
Wi-Fi Threat Sensor	Yes	Yes	Yes	Yes
Maximum Wi-Fi Backhaul	300Mbps	867Mbps	XR-620: 867Mbps XR-630: 1.3Gbps	1.733Gbps
Maximum Associated Devices	480	254	390	390
Wired Uplinks: 802.3ad (Aggregate traffic), broadcast, link-backup (failover), load balancing	1GbE	1GbE	2-1GbE	2-1GbE
Maximum Power Consumption	12.5W	12.5W (PoE)	25.5W (PoE+)	25.5W (PoE+)
Weight	1lb	2lbs	1.6lbs	1.8lbs

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Technical Specifications

FEATURES*	SPECIFICATIONS	
RF Management	Dynamic channel configuration Dynamic cell size configuration Monitor radio for threat assessment and mitigation 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. Re-use and increase wireless device density through tight power controls.
High Availability	Supports hot stand-by mode for mission critical areas	
Environmentally Friendly	Supports ability to turn off radios based on schedule configuration	
Wireless Protocols	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 802.1AX – 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 SSL and TLS: RC4 128-bit and RDA 1024 and 2048 bit	
Authentication	IEEE 802.1x RFC 2548 Microsoft vendor-specific RADIUS attributes 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 5281 EAP-TTLS RFC 2284 EAP-GTC RFC 4186 EAP-SIM RFC 3748 Leap Passthrough 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 • EU CE Mark • EN300 328 V1.8.1, • EN 301 893 V1.7.1 • EN 301 489-1 V1.9.2, EN 301 489-17 V2.2.1 • EN55022/EN55024 • US FCC Part 15 subparts B, C, E • FCC [47 C.F.R. 1.1307(b), 1.1310, 2.1091, 2.1093] • Canada ICES-003 • Canada RSS-247 • Canada RSS-102	Safety • UL60950-1 2nd Edition • CAN/CSA C22.2 No. 60950-1-07, 2nd Edition, 2011-12 • EN 60950-1:2006/A2:2013 • IEC 60950-1:2005/A2:2013 • EN 60950-22:2006+AC:2008 (Outdoor Untis) • UL60950-22 (Outdoor Units) • CSA C22.2 No 60950-22-07 (Outdoor Units)
Environmental Specifications	Operating Temperature: 0-55C, 0-90% humidity, non-condensing Storage Temperature: -40C to 70C	

+ Some features may not be available on X2 APs
* Available only on 802.11ac platforms

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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)	U-NII-1 – Non-DFS channels 36 40 44 48 U-NII-2A DFS channels* 52 56 60 64	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 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

* Currently not available on select models. DFS channels will be available upon regulatory certification.

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PART NUMBER	DESCRIPTION
Configured Models	
XR-520	Dual radio 2x2 MIMO 802.11n AP with up to 600Mbps of total Wi-Fi bandwidth; integrated controller with ArrayOS operating system
X2-120	Dual radio 2x2 MIMO 802.11ac AP with up to 1.1Gbps of total Wi-Fi bandwidth; integrated controller with 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
XD2-240	Dual radio 4x4 MU-MIMO 802.11ac (Wave 2) AP with up to 3.47Gbps 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 on XR-620 and XR-630
Accessories	
XP1-MSI-20	1 Port 20W PoE Injector that powers 1 AP (X2-120, XR-500). Requires order of appropriate XS-PWR-XX cord for the country where the AP will be deployed; refer to Accessories Guide for other options including managed multi-port injectors
XP1-MSI-30	1 Port 30W PoE Injector that powers 1 AP (X2-120, XR-500, XR-600, XD2-240). Requires order of appropriate XS-PWR-XX cord for the country where the AP will be deployed; refer to Accessories Guide for other options including managed multi-port injectors
Mountings	Refer to Accessories Guide for options, part numbers and detailed information

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.