



OUTDOOR ACCESS POINTS

Deliver ubiquitous Wi-Fi even in the most challenging of the environments. Purpose built for outdoors, these APs are sealed in a hardened case to protect from dust, wind and rain. Cold and heat aren't a problem either, because these APs are rated operate from -20° C to 55° C (-4° F to 131 F). These APs are ideally suited for outdoor campus areas, concert fields, racetracks, and other high-density outdoor applications. Maximize the Wi-Fi coverage with a choice of external antennas to meet your specific requirements.

CONFIGURATION SPECIFICATIONS

	XR-2000H	XH2
Chassis Dimensions	11.4" X 11.8" X 4.2"	7.7" X 9.875" X 10.125"
Supported Standards	802.11a/b/g/n	802.11a/b/g/n/ac
Total Number of Radios	4	2
Radio Type	2x2, 300Mbps	2x2, 867Mbps
MIMO Technology	SU-MIMO	SU-MIMO
Maximum Wi-Fi Bandwidth	1.2Mbps	1.7Gbps
Dedicated Wi-Fi Threat Sensor	Yes	Yes
Maximum Wi-Fi Backhaul	900Mbps	867Mbps
Maximum Associated Devices	960 per AP	512 per AP
Antenna Connectors	8 RP-TNC	4 N-type
Wired Uplinks 802.3ad (Aggregate traffic), broadcast, link-backup (failover), load balance	2-1GbE	2-1GbE
Maximum Power Consumption	30W	25.5W (PoE+)
Weight	9lbs	6lbs

* Max power is limited by local regulations.



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TECHNICAL SPECIFICATIONS

Features	Specifications
RF Management	<ul style="list-style-type: none"> • 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
	<ul style="list-style-type: none"> • 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 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • RFC 768 UDP • RFC 791 IP • RFC 2460 IPV6 (Bridging only) • RFC 792 ICMP • RFC 793 TCP
	<ul style="list-style-type: none"> • RFC 826 ARP • RFC 1122 Requirements for internet hosts – communication layers • RFC 1542 BOOTP • RFC 2131 DHCP
Security	<p>WPA IEEE 802.11i WPA2, RSN RFC 1321 MD5 Message-digest algorithm RFC 2246 TLS protocol version 1.0</p>
	<p>RFC 3280 Internet X.509 PKI certificate and CRL profile RFC 4347 Datagram transport layer security RFC 4346 TLS protocol version 1.1</p>
Encryption Types	Open, WEP, TKIP-MIC: RC4 40, 104 and 128 bits
Authentication	<p>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</p>
	<p>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</p>



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Regulatory Compliance	CE Mark Safety: <ul style="list-style-type: none"> • UL 60950-1:2003 • EN 60950:2000 • EMI and susceptibility (Class A) 	<ul style="list-style-type: none"> • 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 V1.6.1
Environmental Specifications	Operating Temperature: -20C to +55C, 0-90% humidity, non-condensing	
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) <ul style="list-style-type: none"> • XMS-Cloud • XMS-Enterprise
Management	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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-2425H	Hardened four radio 2x2 MIMO 802.11n AP with external antennas; supports up to 1.2Gbps of total Wi-Fi bandwidth; integrated controller and ArrayOS Operating System
XH2-120	Hardened dual radio 2x2 MIMO 802.11ac AP with external antennas; supports up to 1.7Gbps 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
ACCESSORIES	
ANT-OMNI-1x1-XX	Omni directional 1x1 antennas; refer to External Antenna Guide for detailed specifications and cables
ANT-XXX-2x2-XX	Omni, 15, 30, 60, 90 degree 2x2 antennas; refer to External Antenna Guide for detailed specifications and cables
XP1-MSI-20	1 Port 20W PoE Injector that powers 1 AP (XR-520H, XH2-120). 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 (XR-520H, XR-2425H, XH2-120) . 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

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