



XH2-240 WAVE 2 OUTDOOR ACCESS POINT

The XH2-240 is a high-performance Wi-Fi access point designed for ruggedized and outdoor environments. It delivers ubiquitous mobile access with Wi-Fi capacity up to 6.9Gbps and supports the latest multi-user MIMO technology with up to 8 simultaneous client communications. Cold and heat aren't a problem either, because the AP is rated for operation from -40°C to 55°C (-40°F to 131°F). Designed with a powerful integrated controller, layer 7 application visibility and simple user access with EasyPass, the XH2-240 provides a seamless Wi-Fi solution for outdoor or extreme environments, including campuses, transportation hubs, concert fields, refrigeration/chiller rooms, and more.

KEY BENEFITS

EXTREME DURABILITY — Xirrus XH2 access points are hardened for operation against all types of weather elements and grueling environmental conditions, plus they are sealed to protect against moisture and contaminants. Designed with an IP67 rating, the XH2 can withstand extreme temperatures, rain, humidity, and dust as well as harsh manufacturing environments, thereby delivering the same reliable Wi-Fi service as indoors.

HIGH PERFORMANCE — The XH2 delivers high performance Wi-Fi access with up to 6.9Gbps 802.11ac Wave 2 capacity to meet high performance demands. Software-defined radio technology provides the flexibility to set both radios to 5GHz for maximum performance. A range of directional antennas enable coverage that can be highly customized for different location needs.

SIMPLIFIED ACCESS MANAGEMENT — Xirrus EasyPass Access Services provides simple, secure Wi-Fi access for employees, self-provisioned guests, BYOD onboarding and IoT devices. EasyPass integrates with the Xirrus Management System (XMS) for a single console solution to administer and manage the wireless network.



AT A GLANCE

- High performance 802.11ac Wave 2 AP
- Operates in extreme environmental conditions
- 2x the user/device density of other outdoor solutions
- Flexible coverage options using external antennas
- Manage from the cloud or on premises

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CONFIGURATION SPECIFICATIONS

	XH2-240
Chassis Dimensions	11.75" x 8.75" x 4.0"
Supported Standards	802.11a/b/g/n/ac (Wave 2)
Total Number of Radios	1 - 2.4GHz / 5GHz - software defined radio (802.11a/b/g/n/ac Wave 2) 1 - 5GHz (802.11a/n/ac Wave 2)
Radio Type	4x4:4, 802.11ac Wave 2
MIMO Technology	MU MIMO: Up to 8 streams SU MIMO: Up to 8 streams
Channel Bonding	Up to 160MHz*
Maximum Wi-Fi Bandwidth	6.9Gbps
Bluetooth Technology	Yes, 1 RP-SMA Female
Wi-Fi Threat Sensor	Yes
Maximum Wi-Fi Backhaul	3.47Gbps
Antenna Connectors	8 N-Type Female (4 per radio)
Maximum Associated Devices	512 per AP
Max SSIDs	16
Max VLANs	64
Wired Uplinks - Support Four Modes 802.3ad (aggregate traffic), broadcast, link-backup (failover), load balancing, mirrored	2-1 GbE (1-PoE input)
Maximum Power Consumption	25.5W - 802.3at PoE+ compatible
Weight	5.5 lbs

* AP requires a future software release to support 160MHz bonding

TECHNICAL SPECIFICATIONS

Features	Specifications		
RF Management	<table border="0"> <tr> <td style="vertical-align: top;"> 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 </td> <td style="vertical-align: top;"> 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 </td> </tr> </table>	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
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High Availability	Supports hot stand-by 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		
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 802.3u 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		

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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
Encryption Types	Open, WEP, TKIP-MIC: RC4 40, 104 and 128 bits	
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 EasyPass Access services for employee SSO, BYOD, IoT and guest access
Regulatory Compliance	CE Mark: <ul style="list-style-type: none"> • EU CE Mark • EN300 328 V2.1.1 with DFS, • EN 301 893 V2.1.1 with DFS, • EN 301 489-1 V2.1.1 EN 301 489-17 V2.2.1 • EN55022/EN55024 • Wi-Fi Alliance (WPA2, VHT5G, Hotspot 2.0). • US FCC Part 15 subparts B,C,E with DFS (new rules) • Canada: ICES-0003, ICES 210 with DFS 	Safety: <ul style="list-style-type: none"> • 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 units) • UL60950-22 (outdoor units) • CSA C22.2 No 60950-22-07 (outdoor units) • EN60601-1-2 (RF exposure) EU Directive 2002/95/EC (RoHS) EU Directive 1907/2006/EC (REACH)
Environmental Specifications	Operating temperature: -40°C to +55°C Storage temperature: -40°C to +70°C	Humidity: 10-90% (non-condensing) NEMA enclosure type 4x compliant
Environmental Certification	IP 67	
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	

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TECHNICAL SPECIFICATIONS

Features	Specifications
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 • 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

* DFS channels will be available upon regulatory certification

Part Number	Description
XH2-240	Hardened dual radio 4x4 MU MIMO 802.11ac Wave 2 AP with external antennas; supports up to 6.9Gbps of total Wi-Fi bandwidth; integrated controller with AOS operating system

SOFTWARE LICENSES

AOS-APPCON	Application control license enabling deep packet inspection (DPI) on 1 radio
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ACCESSORIES

ANT-OMNI-1x1-XX	Omni directional 1x1 antennas
ANT-DIR30-4X4-01	30-degree 4x4 panel antenna with N-Type female connectors
ANT-DIR60-4X4-01	60-degree 4x4 panel antenna with N-Type female connectors
XP1-MSI-30	1 Port 30W PoE Injector. Requires order of appropriate PWR-CORD-XXX cord for the country where the AP will be deployed
Antenna and Cable Details	Refer to Antenna Guide for detailed specifications and cables

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