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
# XH2-240 WAVE 2 OUTDOOR ACCESS POINT

## CONFIGURATION SPECIFICATIONS

<table>
<thead>
<tr>
<th>Feature</th>
<th>XH2-240</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chassis Dimensions</td>
<td>11.75” x 8.75” x 4.0”</td>
</tr>
<tr>
<td>Supported Standards</td>
<td>802.11a/b/g/n/ac (Wave 2)</td>
</tr>
<tr>
<td>Total Number of Radios</td>
<td>1 - 2.4GHz / 5GHz - software defined radio (802.11a/b/g/n/ac Wave 2) 1 – 5GHz (802.11a/n/ac Wave 2)</td>
</tr>
<tr>
<td>Radio Type</td>
<td>4x4:4, 802.11ac Wave 2</td>
</tr>
<tr>
<td>MIMO Technology</td>
<td>MU MIMO: Up to 8 streams</td>
</tr>
<tr>
<td></td>
<td>SU MIMO: Up to 8 streams</td>
</tr>
<tr>
<td>Channel Bonding</td>
<td>Up to 160MHz</td>
</tr>
<tr>
<td>Maximum Wi-Fi Bandwidth</td>
<td>6.9Gbps</td>
</tr>
<tr>
<td>Bluetooth Technology</td>
<td>Yes, 1 RP-SMA Female</td>
</tr>
<tr>
<td>Wi-Fi Threat Sensor</td>
<td>Yes</td>
</tr>
<tr>
<td>Maximum Wi-Fi Backhaul</td>
<td>3.47Gbps</td>
</tr>
<tr>
<td>Antenna Connectors</td>
<td>8 N-Type Female (4 per radio)</td>
</tr>
<tr>
<td>Maximum Associated Devices</td>
<td>512 per AP</td>
</tr>
<tr>
<td>Max SSIDs</td>
<td>16</td>
</tr>
<tr>
<td>Max VLANs</td>
<td>64</td>
</tr>
<tr>
<td>Wired Uplinks - Support Four Modes</td>
<td>2.1 GbE (1-PoE input)</td>
</tr>
<tr>
<td></td>
<td>802.3ad (aggregate traffic), broadcast, link-backup (failover), load balancing, mirrored</td>
</tr>
<tr>
<td>Maximum Power Consumption</td>
<td>25.5W - 802.3at PoE+ compatible</td>
</tr>
<tr>
<td>Weight</td>
<td>5.5 lbs</td>
</tr>
</tbody>
</table>

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

## TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Features</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>RF Management</td>
<td>In-band per IAP spectrum analysis</td>
</tr>
<tr>
<td></td>
<td>Dynamic channel configuration</td>
</tr>
<tr>
<td></td>
<td>Dynamic cell size configuration</td>
</tr>
<tr>
<td></td>
<td>Monitor radio for threat assessment and mitigation</td>
</tr>
<tr>
<td></td>
<td>Wired and wireless packet captures (including all 802.11 headers)</td>
</tr>
<tr>
<td></td>
<td>Wired and wireless RMON / packet captures</td>
</tr>
<tr>
<td></td>
<td>Radio assurance for radio self-test and healing</td>
</tr>
<tr>
<td></td>
<td>RF monitor</td>
</tr>
<tr>
<td></td>
<td>2.4 &amp; 5GHz Honeyport control – Increase available</td>
</tr>
<tr>
<td></td>
<td>2.4 &amp; 5GHz wireless device density through management of spurious 2.4 &amp; 5GHz association traffic</td>
</tr>
<tr>
<td></td>
<td>Ultra low power mode – maximize wireless channel</td>
</tr>
<tr>
<td></td>
<td>Re-use and increase wireless device density through tight power controls</td>
</tr>
<tr>
<td>High Availability</td>
<td>Supports hot stand-by mode for mission critical areas</td>
</tr>
<tr>
<td></td>
<td>In-service AOS software upgrade process increases network availability for 24x7 operations</td>
</tr>
<tr>
<td>Environmentally Friendly</td>
<td>Supports ability to turn off radios based on schedule</td>
</tr>
<tr>
<td>Wireless Protocols</td>
<td>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, 802.1hw</td>
</tr>
<tr>
<td>Wired Protocols</td>
<td>IEEE 802.3 10BASE-T, IEEE 802.3 u 100BASE-TX, 1000BASE-T, 802.3ab 1000BASE-T</td>
</tr>
<tr>
<td></td>
<td>IEEE 802.1q – VLAN tagging</td>
</tr>
<tr>
<td></td>
<td>IEEE 802.1AX – Link aggregation</td>
</tr>
<tr>
<td></td>
<td>IEEE 802.1d – Spanning tree</td>
</tr>
<tr>
<td></td>
<td>IEEE 802.1p – Layer 2 traffic prioritization</td>
</tr>
<tr>
<td></td>
<td>IPv6 Control – Increase wireless device density through control of unnecessary IPv6 traffic on IPv4-only networks</td>
</tr>
<tr>
<td></td>
<td>DHCP option 82</td>
</tr>
</tbody>
</table>
# Technical Specifications

<table>
<thead>
<tr>
<th>Features</th>
<th>Specifications</th>
</tr>
</thead>
</table>
| 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  
RFC 2791 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 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 |
| Regulatory Compliance | CE Mark:  
• EU CE Mark  
• EN300 328 V2.11 with DFS,  
• EN 301 893 V2.11 with DFS,  
• EN 301 489-1V2.11 EN 301 489-17 V2.2.1  
• EN55022/EN55024  
• Wi-Fi Alliance (WPA2, VHT5G, Hotspot 2.0).  
• Canada: ICES-0003, ICES 210 with DFS  
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 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)  
CE Mark:  
• EU CE Mark  
• EN300 328 V2.11 with DFS,  
• EN 301 893 V2.11 with DFS,  
• EN 301 489-1V2.11 EN 301 489-17 V2.2.1  
• EN55022/EN55024  
• Wi-Fi Alliance (WPA2, VHT5G, Hotspot 2.0).  
• Canada: ICES-0003, ICES 210 with DFS  
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 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 |
| 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 |
TECHNICAL SPECIFICATIONS

Features Specifications

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 2377 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 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

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

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

LEARN MORE

For more information on Cambium Networks Xirrus including customer stories, product information, and a free trial, visit us at cambiumnetworks.com/xirrus.

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