Xirrus XR-520
Wireless Access Point

Introducing the Xirrus XR-520

The XR-520 Access Point represents a new class of low cost, zero touch AP within the Xirrus wireless portfolio. With a powerful integrated controller, application-level intelligence, automated provisioning, and cloud management (optional), the XR-520 delivers a flexible complement to Xirrus' line of modular XR Arrays.

The XR-520 is the ideal solution for providing robust wireless connectivity in areas of low-to-medium user density. Example use cases include hotel rooms, dormitories, hospital rooms, health clinics, office spaces, retail areas and similar.

At A Glance

- Dual radio 300Mbps (2x2 MIMO) 802.11n AP
- One software programmable radio enabling dual 5GHz operation
- Integrated omni-directional, internal antennas
- Supports up to 240 users
- Runs Xirrus' industry leading, distributed controller ArrayOS
- On-premise and cloud-based management system options

Key Benefits

Application Control

Firewall, apply QoS, and manage 900+ application types under 15 categories using Layer 7 Deep Packet Inspection (DPI) and other contextual application detection techniques.

2.4GHz Optimization

Extended radio power control range enables reduced 2.4GHz cell size coverage to optimize channel reuse in dense scenarios and improve user capacity. Honeypot Mode helps increase available wireless device density through management of spurious association traffic.

5GHz Optimization

With its 2.4GHz and 5GHz radios (one software programmable to either), the XR-520 will help you easily make the transition to a 5GHz centric network, when you are ready.

Bonjour Director Support

Extend Apple Bonjour protocols across Layer 3 boundaries for simple setup and configuration of commonly used shared Apple services such as Airplay and Airprint.

Bring Your Own Device

Integration with Xirrus Access Manager (XAM) allows guests and employees alike to use non-corporate configured wireless devices while the XR-520 enforces appropriate access policies.

Value Driven

For all of its advanced features, the XR-520 is still very cost competitive.

Discreet Aesthetics

At just 7.7" in diameter, the XR-520 is designed to be compact and aesthetically pleasing.

XIRRUS®
High Performance Wireless Networks

Optrics Engineering

Configuration Specifications

	XR-520
Chassis Size	7.7"
Total Radios	2
Radio Type	One 300Mbps Software Programmable (2.4GHz or 5GHz) and one 5GHz
Maximum Wi-Fi Bandwidth	600Mbps
Number of Integrated Antennas	4
Max Wi-Fi Backhaul	300Mbps
Gigabit Ethernet Uplink Ports	1
Maximum Associated Users	240 (120 per radio)
Radio Interface	PCI
Maximum Power Consumption (absolute max when running both radios at continuous transmit)	12.5W

Technical Specifications

FEATURE	SPECIFICATIONS
CPU	300MHz Cavium CN5020 Processor with 2 MIPS-64 Cores
Installed Memory	512MB
RF Management	In-band per radio Spectrum Analysis Dynamic channel configuration Dynamic cell size configuration Wired and wireless packet captures (including 802.11 headers) Radio assurance for radio self test and healing RF monitor 2.4 & 5.0GHz Honeypot Control – Increase available 2.4 and 5GHz wireless device density through management of spurious 2.4 & 5.0GHz association traffic Ultra Low Power Mode – Maximize wireless channel re-use and increase wireless device density through tight power controls
Wireless Protocols	IEEE 802.11a, 802.11b, 802.11d, 802.11e, 802.11g, 802.11h, 802.11i, 802.11j, 802.11n
Wired Protocols	IEEE 802.3 10-BASE-T, IEEE 802.3u 100BASE-TX, 1000BASE-T, IEEE 802.3ab 1000BASE-T IEEE 802.1q – VLAN Tagging 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
Carrier Applications	Passpoint 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-bit SSL v3.0 and TLS v1.0: RC4 128-bit and RDA 1024 and 2048-bit

XIRRUS®
High Performance Wireless Networks

Optrics Engineering

XR Receive Sensitivity

802.11b		802.11g		802.11a		802.11n HT20 (20MHz)	Rx Sensitivity (dBm)		802.11n HT40 (40MHz)	Rx Sensitivity (dBm)	
Data Rate (Mbps)	Rx Sensitivity (dBm)	Data Rate (Mbps)	Rx Sensitivity (dBm)	Data Rate (Mbps)	Rx Sensitivity (dBm)	MCS Index	2.4GHz	5GHz	MCS Index	2.4GHz	5GHz
1	-94	6	-95	6	-92	0	-95	-93	0	-93	-92
2.2	-92	9	-95	9	-92	1	-94	-90	1	-92	-91
5.5	-91	12	-95	12	-92	2	-92	-88	2	-90	-88
11	-91	18	-93	18	-86	3	-88	-84	3	-87	-85
		24	-90	24	-85	4	-86	-81	4	-84	-79
		36	-86	36	-82	5	-82	-77	5	-80	-75
		48	-83	48	-78	6	-80	-75	6	-78	-73
		54	-80	54	-77	7	-79	-73	7	-77	-72
						8	-95	-90	8	-92	-88
						9	-92	-87	9	-89	-85
						10	-89	-84	10	-87	-83
						11	-87	-82	11	-84	-80
						12	-83	-78	12	-81	-77
						13	-79	-74	13	-77	-72
						14	-78	-72	14	-75	-71
						15	-76	-71	15	-74	-70

Ordering Information

PART NUMBER	DESCRIPTION
Configured Models	
XR-520	XR Wireless Array with 2 300Mbps 802.11n radios, integrated controller, and ArrayOS Operating System
Software Licenses	
AOS-APPCON	Application Control license enabling Deep Packet Inspection (DPI) for application visibility and control
Accessories	
Power Injector XP1-MSI-20	Optional 20 Watt power injector for use with XR-520. Note the XR-520 is 802.3af PoE compatible.
If you want to hang your XR-520 from the ceiling	
XE-500-MOUNT	Accessory kit for ceiling mount
If you want to hang your XR-520 from right angle arm projecting from the wall	
XE-500-WALL	Accessory kit for wall mount
If you want to mount your XR-520 on an electrical box on the wall (the top face of the XE-520 would be parallel with the wall)	
XE-500-MOUNT + XE-500-JBOX	Accessory kit for wall mount

Support & Maintenance

Xirrus is committed to the success of our customers and provides warranties and support options to best fit your needs. Xirrus XR-520 Wireless Arrays ship with a Limited Lifetime Hardware Warranty. For further information on the Xirrus hardware warranties, software support and premium support offerings visit:

http://www.xirrus.com/support/

About Xirrus

To organizations who 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. Xirrus is a privately held company headquartered in Thousand Oaks, CA.

XIRRUS®
High Performance Wireless Networks

Optrics Engineering