Anywhere

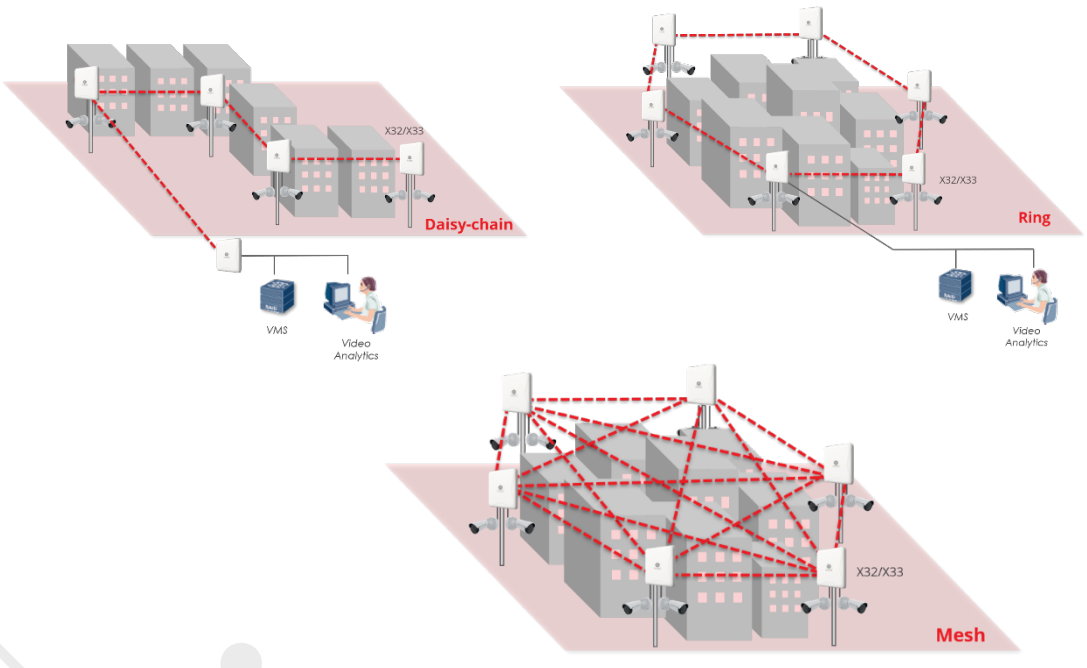
X32 Anywhere Network Node

X32 Anywhere Network Node is an industrial-grade 5 GHz dual-radio wireless backhaul unit designed for flexible and expandable deployments regardless of physical constraints. Our Connectivity Technology breaks the traditional hopping limitation of wireless networks by tackling the multi-hop bandwidth degradation, enable X32 to extend connectivity to the locations where extensive fiber optic cabling is unfeasible due to a tight timescale. With the built-in selectable hardware RF filter, X32 provides interference isolation for delivering the highest end-to-end network throughput.

Anywhere Networks' not only provides absolute security through 128-bit AES link encryption and 256-bit AES end-to-end encryption but also optimizes client traffic management with the flow-based encapsulation. Packets are encrypted and encapsulated starting from the entrance point of the mesh, through travelling the tunnels, then decapsulated and decrypted at the exit points of the mesh. The intermediate nodes act as flow switching nodes without looking into the payloads but based on the encapsulation header to route to the destination. In this approach, we provide enhanced security, capacity and greater transparency at higher level applications.

Ultra high throughput wireless surveillance backhauling applications	Over 20 hops backhauling with deployment flexibility	Industrial-grade hardware design
•Up to 1,000 Mbps throughput •802.3af PoE output port	•Selectable hardware RF filter •2×5 GHz radio	•IP 67 weatherproof •6kV surge protection

Deployment Architecture



Copyright © 2020 Anywhere Networks. All Rights Reserved.

Anywhere

X32 Anywhere Network Node

Specifications

Wireless		
Operating Frequency[1]	4.940 - 4.990 GHz 5.150 - 5.350 GHz 5.470 - 5.850 GHz	
Modulation	OFDM: BPSK, QPSK,16QAM, 64QAM,256QAM DSSS: DBPSK, DQPSK, CCK	
No. of Spatial Stream	2×2: 2 MIMO	
Channel Bandwidth[1]	20/40/80/160[2] MHz Channel	
Data Rate	173 Mbps (20MHz); 400 Mbps (40 MHz); 867 Mbps (80 MHz); 1733 Mbps (160 MHz)	
Receive Sensitivity	-87 dBm (20 MHz); -84 dBm (40 MHz); -81 dBm (80 MHz); -78 dBm (160 MHz)	
Transmit Power[1]	21 dBm (Max)	
Features	Interference mitigation by selectable RF filter, Spectrum Analyzer	
Antenna		
Connected To	Radio 0	Radio 1
Type	Built-in 5 GHz	External 5 GHz
Gain	20 dBi	Optional Antennas: 5 GHz 19 dBi 2xN-female Panel; More Options on Request
Polarization	Vertical & Horizontal	
Horizontal Beamwidth	17˚	
Vertical Beamwidth	17˚	
VSWR	1.8 (Max.)	
Front-to-back Radio	-30 dB (Min.)	
Isolation	35 dB (Min.)	
Network		
Topology	Point-to-Point (PtP), Point-to-Multipoint (PtMP), Daisy-chain, Ring, and Mesh	
Redundancy	Flow-based routing, Multiple Drop-off Point, Bonded Link	
Mobility	Mobile Mode and Static Mode	
Path Selection	Bandwidth-based metrics load balancing	
Traffic Optimization	BUM Traffic Management	
Features	End-to-End Layer 2 Transparent, VLAN 802.11Q pass-through	
Security		
Link Encryption	128-bit AES	
End-to-end Encryption	256-bit AES	
Client MAC Access Control	Whitelist[2], Blacklist	
Neighbor MAC Access Control	Whitelist, Blacklist	

Management	
User Interface	Anywhere Node Manager (A-NM) for A-OS
Support	Remote Firmware Upgrade, SNMP v1/v2c[2], MIB support[2]
Hardware	
No. of Radio	2×5 GHz Radio
Network Interface	1xGE & PoE Input Port; 1xGE & PoE Output Port (802.3af)
LED	PWR; ETH0; ETH1; PD; RADIO 0; RADIO 1
Power Supply	Proprietary High Power PoE Injector (60W)
Power Consumption	34 W (Max.)
Antenna Movement	±30° Up/Down-tilt
MTBF	350,000 hours (50˚C)
Physical Characteristics	
Dimensions	305×305×111 mm (w/ Bracket, w/o Mounting)
Weight	3.5 kg (Net w/o Mounting); 4.5 kg (Net w/ Mounting);
Mounting	Pole (ø30 to ø60 mm) and Wall Mounting
Environmental	
Temperature	-40˚C to 65˚C (Operating)
Humidity	5% to 95 % Non-condensing
Elevations	86 to 106 kPa
Wind Loading	256 km/h (Max.)
Weatherproof	IP67, 6 kV Common Mode Surge Protection
Certification	
FCC, CE, RCM, OFCA	
Standard Warranty	
First year free limited hardware warranty and firmware upgrade. The 1/3/5-year extended warranties are available under specific purchase terms and conditions.	
Ordering Information	
Part Number	GE.AP-X320-00
Description	X32 Anywhere Network Node

[1]operating frequency, transmit power and channel bandwidth vary by country/region settings
[2]available in the future updates

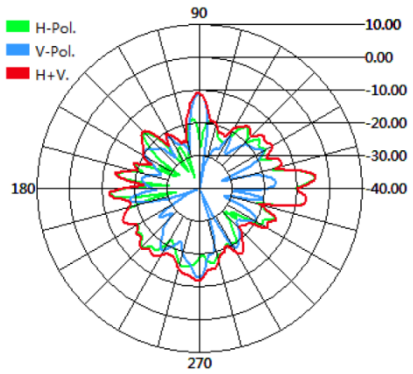
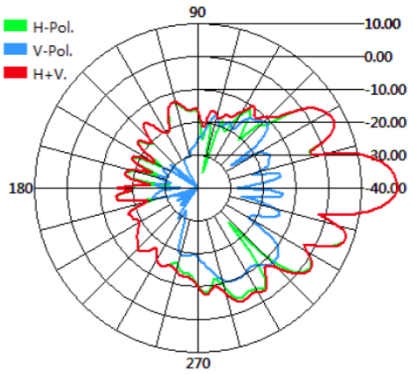
Version: 24 Jul 2020

Copyright © 2020 Anywhere Networks. All Rights Reserved.

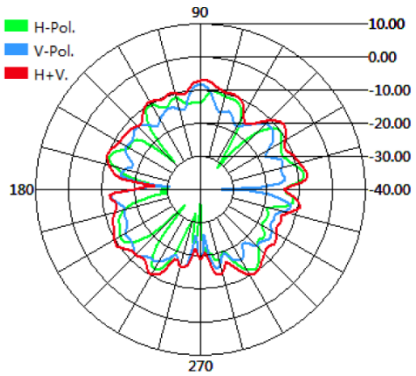
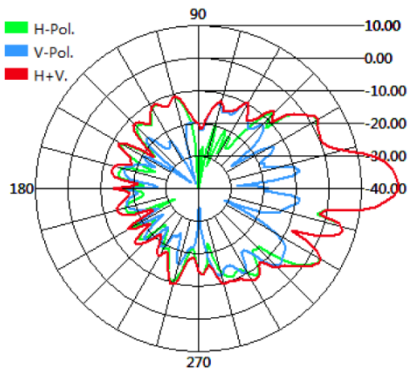
Anywhere

Antenna Patterns for Built-in 5GHz 20dBi 2×2 Panel Antenna

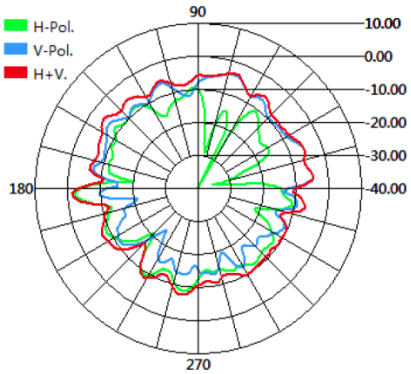
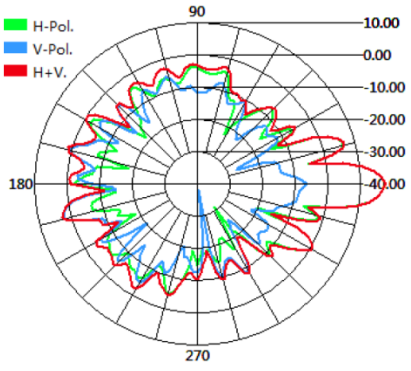
Vertical Polarization, 5.15 GHz

XY-plane	XZ-plane
	

Vertical Polarization, 5.50 GHz

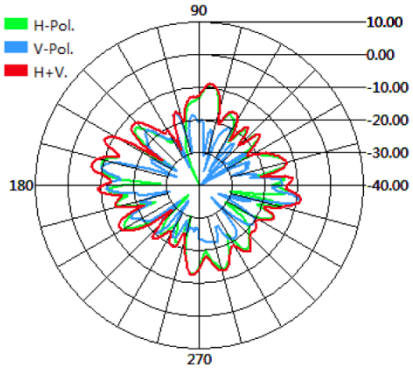
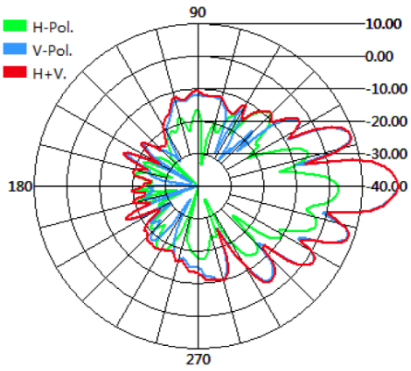
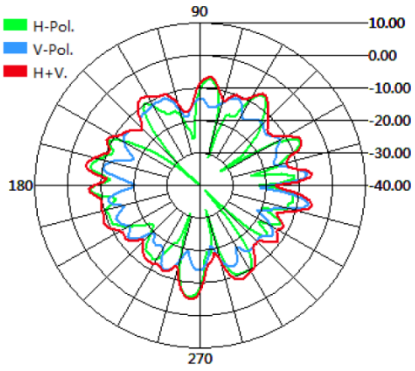
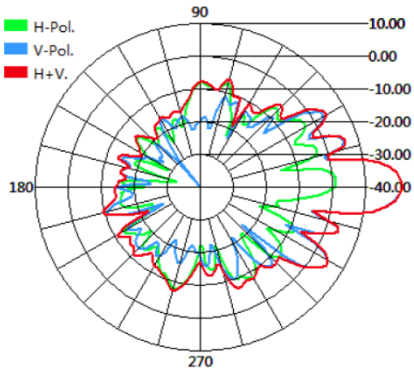
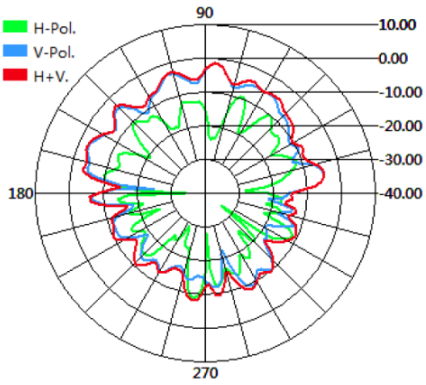
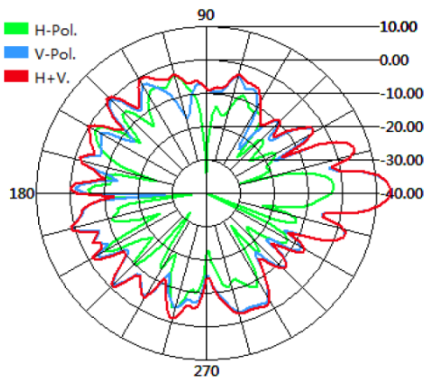
XY-plane	XZ-plane
	

Vertical Polarization, 5.85 GHz

XY-plane	XZ-plane
	

Copyright © 2020 Anywhere Networks. All Rights Reserved.

Anywhere

Horizontal Polarization, 5.15 GHz	
XY-plane	XZ-plane
	
Horizontal Polarization, 5.50 GHz	
XY-plane	XZ-plane
	
Horizontal Polarization, 5.85 GHz	
XY-plane	XZ-plane
	

Anywhere Networks reserves the rights to change, modify, transfer or otherwise revise the publication and the product specification without notice. All scaling metrics outlined in this document are maximum supported values. The scale may vary depending on the deployment scenario and features enabled. Visit www.anywherenetworks.com or contact sales@anywherenetworks.com for more details.

Version: 24 Jul 2020

Copyright © 2020 Anywhere Networks. All Rights Reserved.