D-Link
Building Networks for People

Product Highlights

Next Generation Connectivity

Features next-generation 802.11ac Wave 2 technology to deliver a reliable wireless connection at unparalleled combined speeds

Unparalleled Performance

Experience smooth and stable performance with a powerful CPU, band steering, and Airtime Fairness to ensure that every client has equal access to air time

Optimized Wireless Experience

MU-MIMO, smart antennas, and tri-band technology provide optimal wireless experience in high-density environments

DWL Series

Unified AC Wave 2 Wireless Access Points

Features

Ideal for Businesses

- Multiple virtual access points can be created from a single access point
- Flexible QoS with WMM
- Power over Ethernet enables installation in hard to reach locations
- UL2043-certified chassis (Plenum-rated SKU)

High-Performance Connectivity

- Supports 160 MHz channel for doubled capacity[1]
- Band steering for efficient traffic management
- Airtime Fairness
- 802.11k Fast Roaming[2]
- Supports Link Aggregation[3]

Trusted Wireless Security Features

- WPA/WPA2 Personal
- WPA/WPA2 Enterprise
- MAC address filtering
- Rogue AP detection

The D-Link DWL Series Unified AC Wave 2 Wireless Access Points are specially designed for small to medium businesses or enterprises, providing unparalleled bandwidth and flexibility for administrators looking to deploy a medium to large scale Wi-Fi network with manageable dual-band wireless LAN options and utilizing the cutting-edge speed of Wireless AC Wave 2. Not only can it operate in standalone mode, the D-Link Unified AC Wave 2 Wireless Access Points can also be centrally managed by D-Link Unified Wireless Controllers. Highly manageable and capable of blazing speeds, the Unified AC Wave 2 Wireless Access Points integrate seamlessly into any existing network infrastructure and can be easily scaled to meet future demands.

Greater Speed and Connectivity

The DWL Series Unified AC Wave 2 Wireless Access Points leverage the full potential of 802.11ac Wave 2 to provide unparalleled connectivity with ultra-high combined data rates. The DWL-6620APS and DWL-7620AP deliver a combined speed of up to 1,267 Mbps[4] and 2,134 Mbps[4] respectively, while the DWL-8620AP and DWL-8620APE offer an even faster combined speed of up to 2,533 Mbps[4]. In addition, the DWL Series supports Link Aggregation[3], which allows two Gigabit Ethernet ports to be linked together and act as a single port to double the available bandwidth and maximize the overall throughput of the access point.

MU-MIMO Technology

All models in the DWL Series support MU-MIMO (Multi-User Multiple Input Multiple Output), which enables the device to simultaneously communicate with multiple clients using multiple antennas. This allows the access point to utilize the spectrum more efficiently and significantly increase the network capacity. The DWL-6620APS & DWL-7620AP feature 2 x 2 MU-MIMO, while the DWL-8620AP and DWL-8620APE support 4 x 4 MU-MIMO to take full advantage of all streams to serve more wireless clients to dramatically improve wireless performance.

D-Link Smart Antenna

The DWL-6620APS features D-Link Smart antenna technology that helps to select the optimal radiation pattern for each client and uses digital beam forming to enhance the antenna gain and achieve optimal throughput. In addition, the D-Link Smart Antenna supports multiple radio patterns to dynamically adapt to different kinds of environments. Meanwhile, the fast channel and bandwidth selection features always look for the best channel with the least interference for smoother performance. With these capabilities, the DWL-6620APS ensures a reliable connection reliability and optimized wireless user experience.

Tri-Band Wi-Fi

The DWL-7620AP is equipped with tri-band wireless technology featuring one 2.4 GHz and two 5 GHz wireless bands to accommodate the increasing number of devices connecting to a single access point. By allowing older 802.11b/g/n devices to connect to the 2.4 GHz, the two 5 GHz bands can be dedicated to newer, faster wireless AC devices to enjoy seamless bandwidth-intensive applications such as HD video streaming, VoIP, and file sharing. Thanks to intelligent band steering technology, the DWL-7620AP can also efficiently load balance the clients and traffic between the three wireless bands to ensure all wireless clients have better using experience in the environment with high density.

Centrally Managed

When working in conjunction with D-Link Unified Controllers, the Unified AC Wave 2 Wireless Access Points can be centrally managed. This allows for a large number of access points to be deployed and managed easily and efficiently. Once the APs are discovered by the controller, the administrator can push the configuration to them as a group, instead of configuring each access point individually. Additionally, Radio Frequency (RF) resource management[1] allows wireless coverage to be managed centrally, providing the best coverage possible for wireless clients.

Easy to Install

The DWL Series can be ceiling mounted or wall mounted to meet the needs of any wireless application. For additional flexibility, all D-Link Unified AC Wave 2 Wireless Access Points have integrated Power over Ethernet (PoE) support, allowing the devices to be installed in areas where power outlets are not readily available.

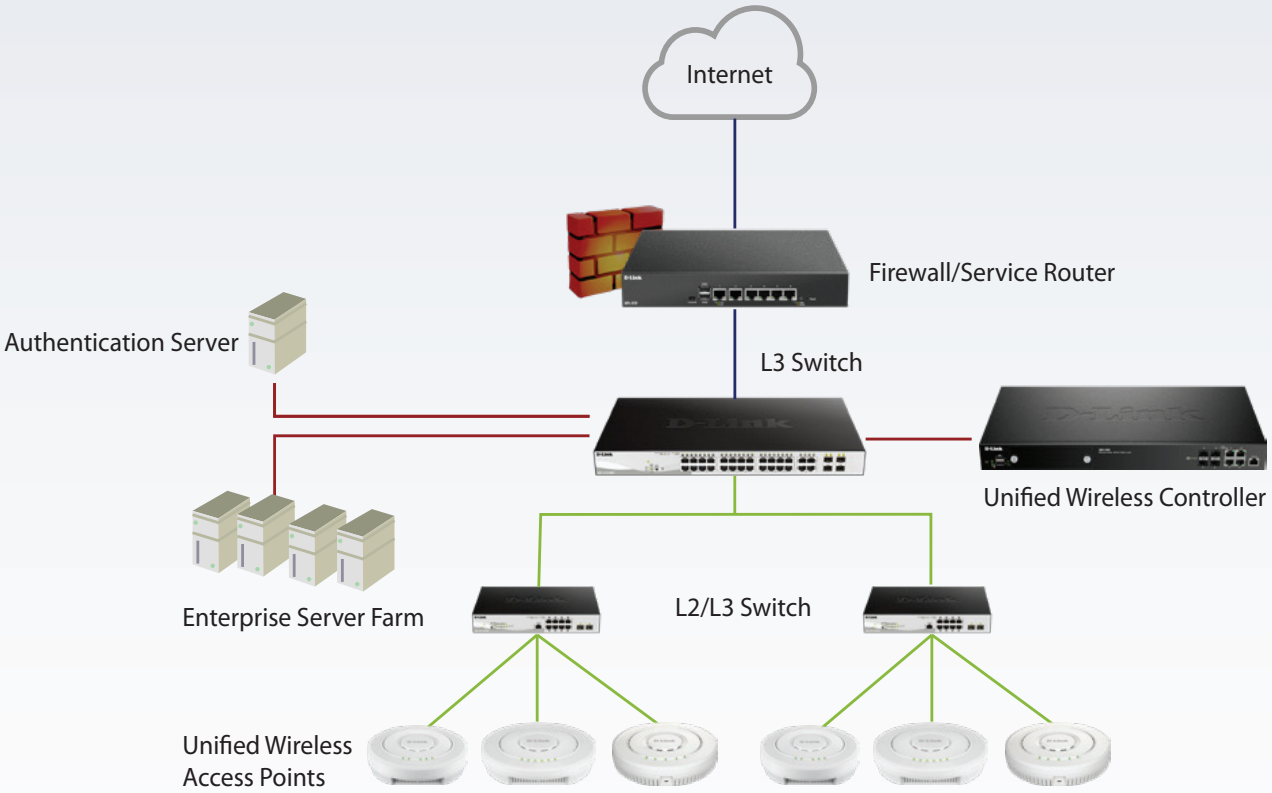
Automatic Radio Frequency (RF) Management

When access points are deployed in close proximity to each other, there may be interference between channels if RF management is not implemented. When a D-Link Unified AC Access Point senses a neighbor nearby, it will automatically select a non-interfering channel. This greatly reduces RF interference and will allow the administrator to deploy APs more densely. To further minimize interference, when a nearby AP is on the same channel, the D-Link Unified AC Wave 2 Access Point will automatically lower its transmission power[2]. When, for whatever reason, the nearby AP is no longer present, the access point will increase its transmission power to expand coverage.

Advanced Wireless Features

The D-Link Unified AC Wave 2 Wireless Access Points support 802.1p Quality of Service (QoS) for enhanced throughput and better performance of time-sensitive traffic like VoIP and streaming DSCP. All D-Link Unified AC Wave 2 Wireless Access Points support Wi-Fi Multimedia (WMM), so in the event of network congestion, time-sensitive traffic can be given priority ahead of other traffic. Furthermore, when a number of access points are in close proximity to each other, an access point will refuse new association requests once its resources are fully utilized, allowing the association request to be picked up by a neighboring unit, distributing the load over multiple APs. Band steering technology enables Unified AC Wave 2 Wireless Access Points to intelligently place clients on the optimal wireless band to avoid congestion and allows for smooth streaming of video, seamless browsing, and fast downloads for mobile devices. Airtime Fairness ensures that equal airtime is given to each client, providing increased performance even if slower devices are connected. 802.11k Fast Roaming[2] is also supported, which allows the wireless client to roam seamlessly between access points.

L2/L3 network implementation in medium to large enterprise environments



D-Link Smart Antenna's dynamic pattern to mitigate co-channel interference

SU-MIMO vs MU-MIMO multi-client communication

Tri-band dedicated radios for improved wireless performance and load sharing

Band 2 (5 GHz)
Up to 1733 Mbps
For file transfer and video conferencing

Band 1 (2.4 GHz)
Up to 800 Mbps
For legacy 802.11b/g/n devices

Band 3 (5 GHz)
Up to 1733 Mbps
For HD media streaming

D-Link®
Building Networks for People

Unified AC Wave 2 Wireless Access Points

Technical Specifications

General

Model Name	• DWL-6620APS	• DWL-7620AP	• DWL-8620AP	• DWL-8620APE
Hardware Version	• A1			
Wireless Interface	• IEEE 802.11b/g/n 2.4 GHz wireless • IEEE 802.11/a/n/ac Wave 2 5 GHz wireless			
MIMO	• 2 x 2	• 2 x 2	• 4 x 4	• 4 x 4
Data Rate[4]	• 2.4 GHz - Up to 400 Mbps • 5 GHz - Up to 867 Mbps	• 2.4 GHz - Up to 400 Mbps • 5 GHz (1) - Up to 867 Mbps • 5 GHz (2) - Up to 867 Mbps	• 2.4 GHz - Up to 800 Mbps • 5 GHz - Up to 1733 Mbps	• 2.4 GHz - Up to 800 Mbps • 5 GHz - Up to 1733 Mbps
Antenna	• Internal smart antennas • 2.4 GHz: Up to 4 dBi (variable) • 5 GHz: Up to 6 dBi (variable)	• Internal omnidirectional antennas • 2.4 GHz: 3 dBi • 5 GHz: 4 dBi	• Internal omnidirectional antennas • 2.4 GHz: 3 dBi • 5 GHz: 4 dBi	• External omnidirectional antennas • 2.4 GHz: 3 dBi • 5 GHz: 4 dBi
Operating Frequency	• 2400 to 2483.5 MHz • 5150 to 5850 MHz			
Operating Channels	• 1 to 13 channels for 2.4 GHz band (per country code) • 36 to 165 channels for 5 GHz band (per country code)			
Ethernet Interface	• 2 x 10/100/1000BASE-T LAN port			
Console Port	• RJ-45			

Functionality

Advanced Features	• Auto Channel selection • 802.1p Quality of Service (QoS) • Wireless Mulimedia (WMM) • Wireless Distribution System (WDS) • Band steering • Airtime Fairness • Link Aggregation[3] • IEEE 802.11k Fast Roaming

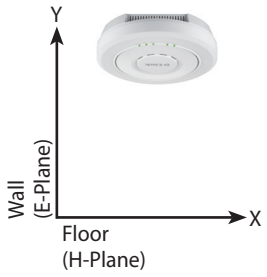
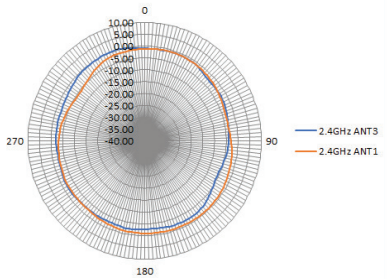
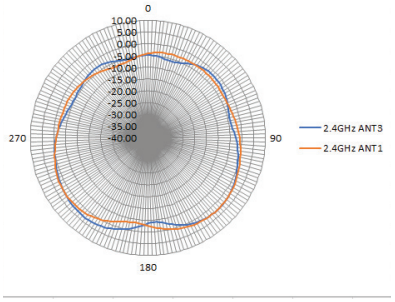
Management

Operating Mode	• Standalone mode • Managed mode - Centrally managed by D-Link Wireless Controller
Management Interfaces	• Web-based User Interface (Web UI) • Telnet/SSH • Command Line Interface (CLI) • SNMP v1/v2c/v3

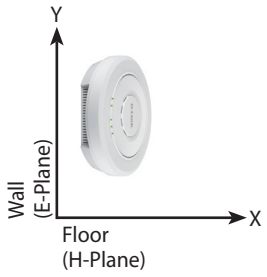
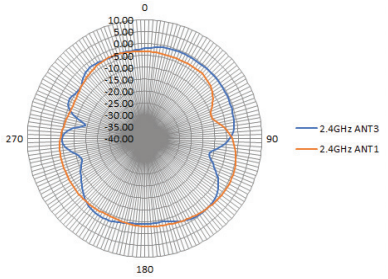
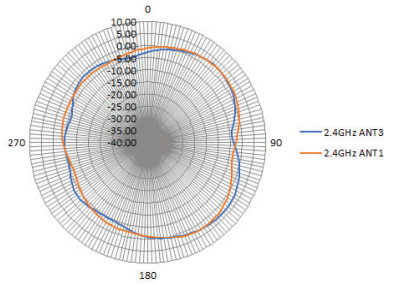
Security				
Model Name	**• DWL-6620APS**	**• DWL-7620AP**	**• DWL-8620AP**	**• DWL-8620APE**
SSID Security	• Up to 32 SSIDs, 16 per radio • 802.1Q VLAN • Station Isolation			
Wireless Security	• WPA/WPA2 Personal/ Enterprise • AES • TKIP			
Detection & Prevention	• Rogue and Valid AP Classification			
Authentication	• MAC Address Filtering			
Physical				
Dimensions	• 220 x 55.45 mm (8.66 x 2.18 in)	• 205 x 39 mm (8.07 x 1.54 in)	• 220 x 47 mm (8.66 x 1.97 in)	• 220 x 47 mm (8.66 x 1.97 in)
Weight	• 0.61 kg (1.35 lbs) w/o bracket • 0.66 kg (1.46 lbs) w bracket	• 0.57 kg (1.26 lbs) w/o bracket • 0.62 kg (1.37 lbs) w bracket	• 0.79 kg (1.75 lbs) w/o bracket • 0.84 kg (1.85 lbs) w bracket	• 0.92 kg (2.03 lbs) w/o bracket • 0.97 kg (2.14 lbs) w bracket
Power Supply	• External power adapter: 12 V DC 2 A • Supports 802.3at PoE PD on LAN 1 Port	• External power adapter: 12 V DC 2.5 A • Supports 802.3at PoE PD on LAN 1 Port	• External power adapter: 12 V DC 2.5 A • Supports 802.3at PoE PD on LAN 1 Port	• External power adapter: 12 V DC 2.5 A • Supports 802.3at PoE PD on LAN 1 Port
Power over Ethernet	• IEEE 802.3at			
Maximum Power Consumption	• 16.32 W	• 20 W	• 24.24 W	• 24.24 W
Enclosure	• Bottom cover – plastic • Top cover – plastic • UL2043-certified chassis	• Bottom cover – plastic • Top cover – plastic • UL2043-certified chassis	• Bottom cover – plastic • Top cover – plastic • UL2043-certified chassis	• Bottom cover – plastic • Top cover – plastic
Temperature	• Operating: 0 to 40 °C (32 to 104 °F) • Storage: -20 to 65 °C (-4 to 149 °F)			
Humidity	• Operating: 10% to 90% non-condensing • Storage: 5% to 95% non-condensing			
MTBF	• 925,606 hours	• 753,019 hours	• 463,255 hours	• 460,185 hours
Certifications	• CE • EN55032, EN55024, EN61000-3-2, EN61000-3-3, EN60601-1-2 (Medical electrical equipment), EN301489-1, EN301489-17, EN300328, EN301893 • FCC • IC • cUL+UL • CB • RCM • NCC • BSMI • UL2043	• CE • EN55032, EN55024, EN61000-3-2, EN61000-3-3, EN60601-1-2 (Medical electrical equipment), EN301489-1, EN301489-17, EN300328, EN301893 • FCC • IC • cUL+UL • CB • RCM • NCC • BSMI • UL2043	• CE • EN55032, EN55024, EN61000-3-2, EN61000-3-3, EN60601-1-2 (Medical electrical equipment), EN301489-1, EN301489-17, EN300328, EN301893 • FCC • IC • cUL+UL • CB • RCM • NCC • BSMI • UL2043	• CE • EN55032, EN55024, EN61000-3-2, EN61000-3-3, EN60601-1-2 (Medical electrical equipment), EN301489-1, EN301489-17, EN300328, EN301893 • FCC • IC • cUL+UL • CB • RCM • NCC • BSMI

Radio Patterns: DWL-6620APS (Omnidirectional Mode)[5]

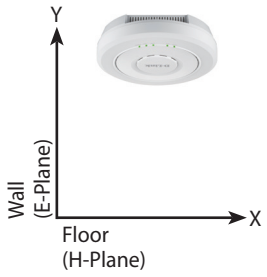
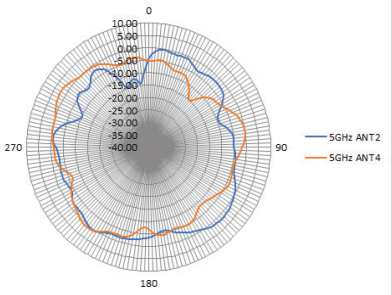
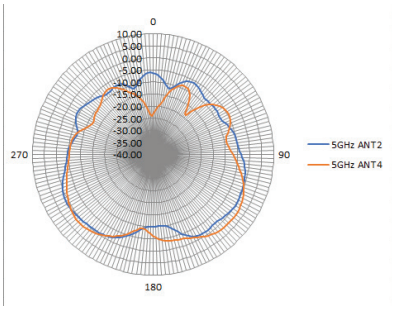
2.4 GHz Antenna Ceiling Mounted

Orientation	H-Plane	E-Plane
		

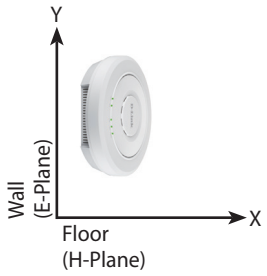
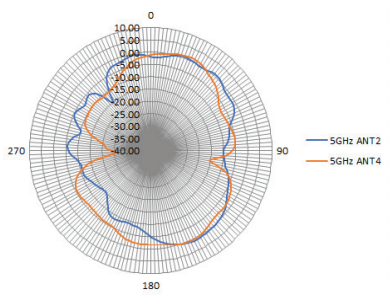
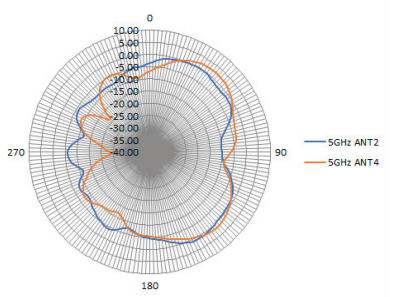
2.4 GHz Antenna Wall Mounted

Orientation	• H-Plane	• E-Plane
		

5 GHz Antenna Ceiling Mounted

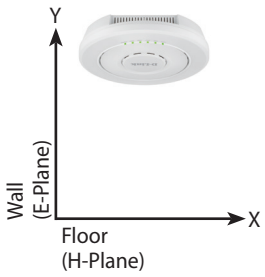
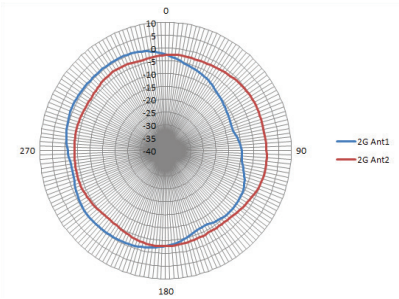
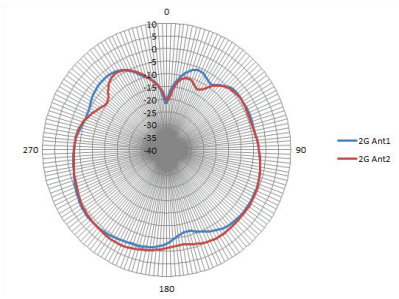
Orientation	H-Plane	E-Plane
		

5 GHz Antenna Wall Mounted

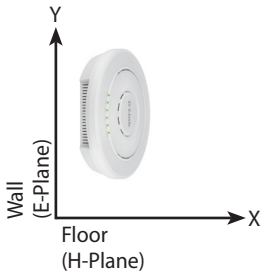
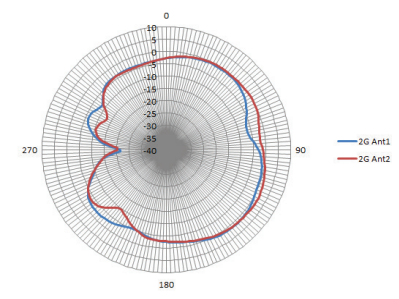
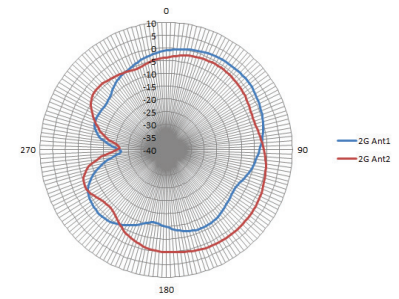
Orientation	H-Plane	E-Plane
		

Radio Patterns: DWL-7620AP

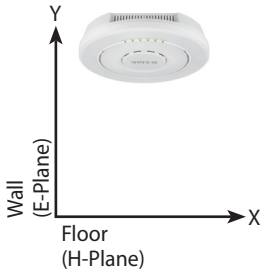
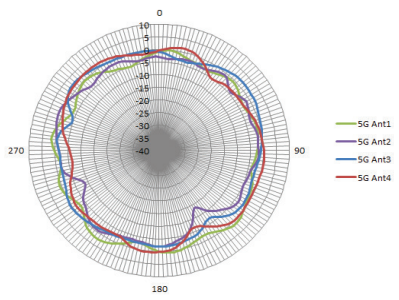
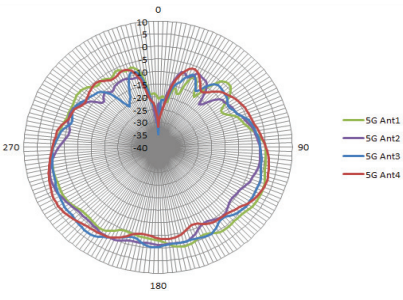
2.4 GHz Antenna Ceiling Mounted

Orientation	H-Plane	E-Plane
		

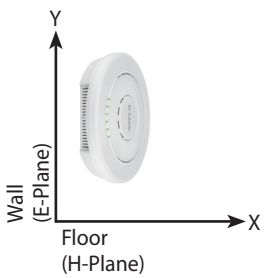
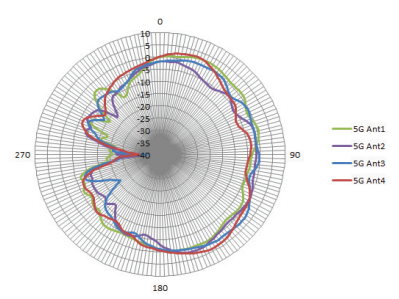
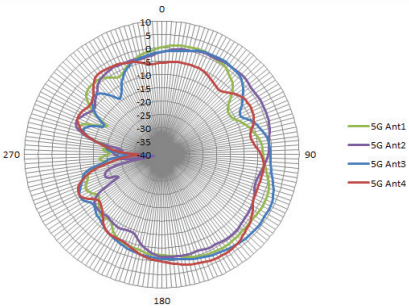
2.4 GHz Antenna Wall Mounted

Orientation	H-Plane	E-Plane
		

5 GHz Antenna Ceiling Mounted

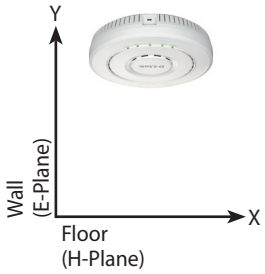
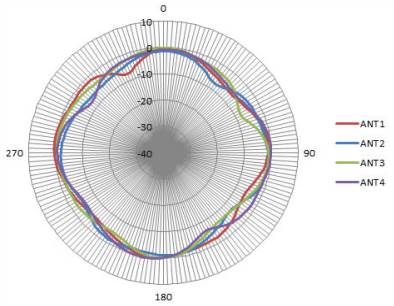
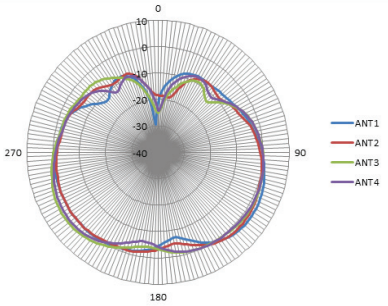
Orientation	H-Plane	E-Plane
		

5 GHz Antenna Wall Mounted

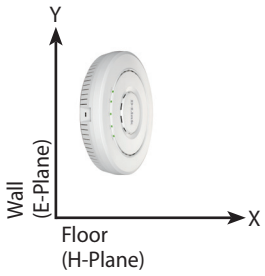
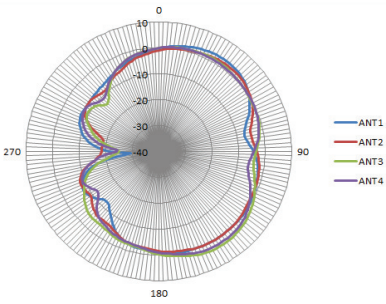
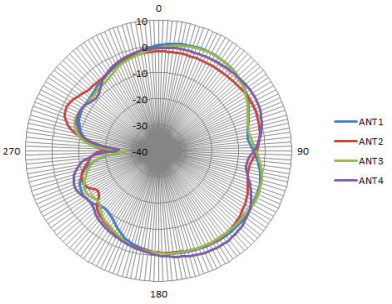
Orientation	• H-Plane	• E-Plane
		

Radio Patterns: DWL-8620AP

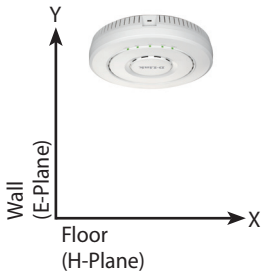
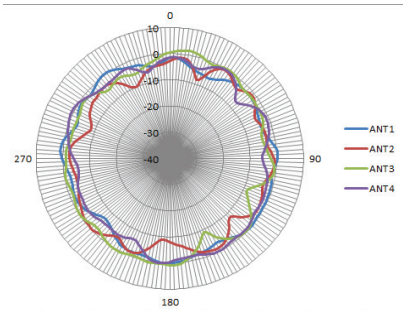
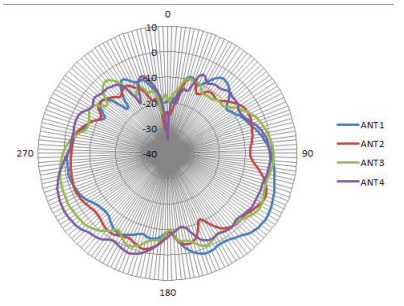
2.4 GHz Antenna Ceiling Mounted

Orientation	H-Plane	E-Plane
		

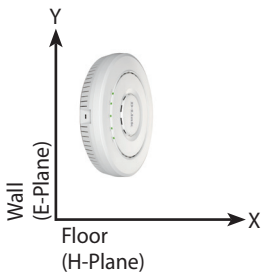
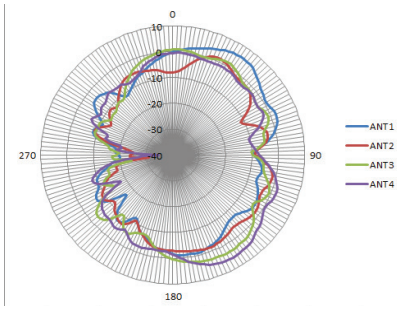
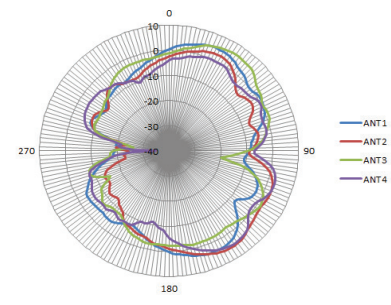
2.4 GHz Antenna Wall Mounted

Orientation	H-Plane	E-Plane
		

5 GHz Antenna Ceiling Mounted

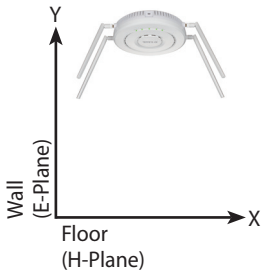
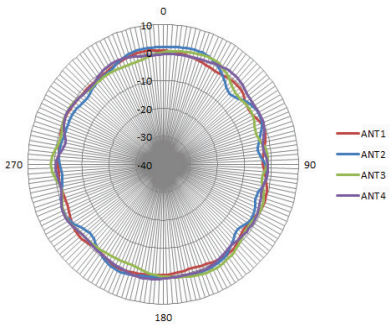
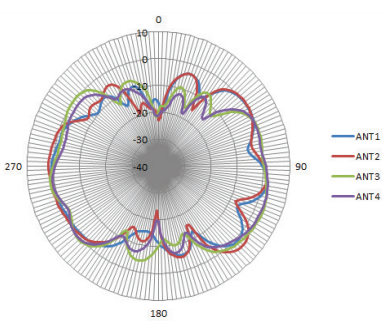
Orientation	H-Plane	E-Plane
		

5 GHz Antenna Wall Mounted

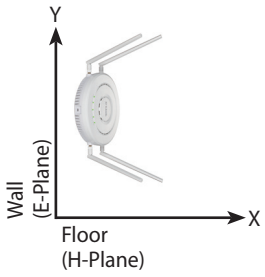
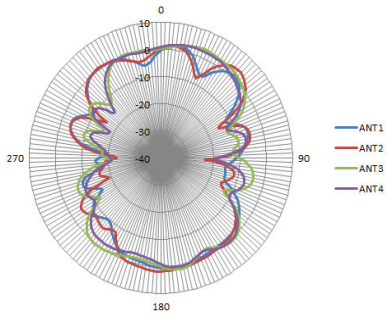
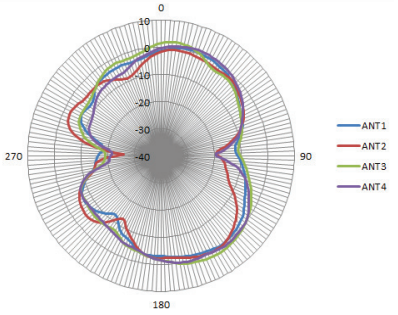
Orientation	H-Plane	E-Plane
		

Radio Patterns: DWL-8620APE

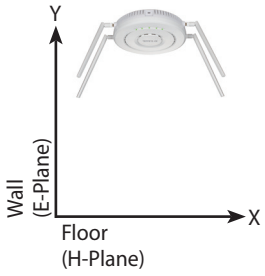
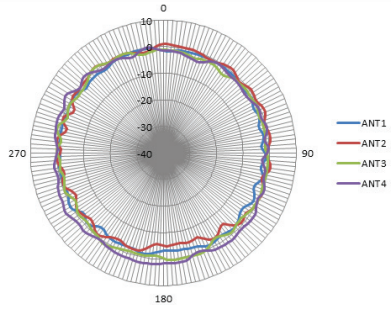
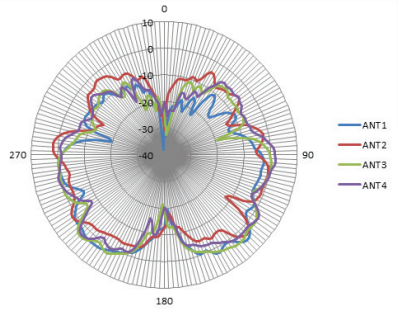
2.4 GHz Antenna Ceiling Mounted

Orientation	H-Plane	E-Plane
		

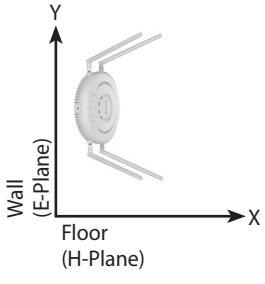
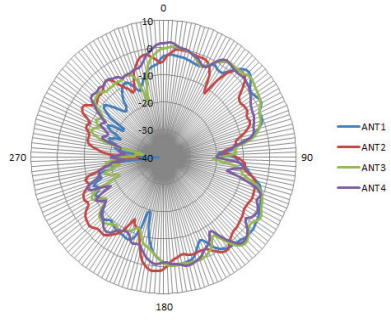
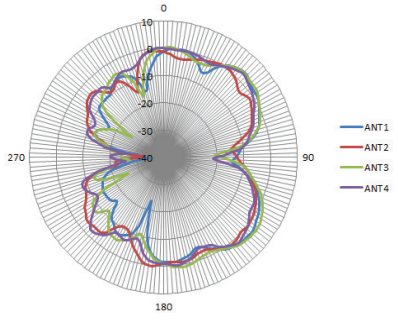
2.4 GHz Antenna Wall Mounted

Orientation	• H-Plane	• E-Plane
		

5 GHz Antenna Ceiling Mounted

Orientation	H-Plane	E-Plane
		

5 GHz Antenna Wall Mounted

Orientation	H-Plane	E-Plane
		

Unified AC Wave 2 Wireless Access Points

Order Information	
Part Number	*Description*
DWL-6620APS	• Dual-Band 802.11n/ac Wave 2 Unified Wireless Access Point
DWL-7620AP	• Tri-Band 802.11n/ac Wave 2 Unified Wireless Access Point
DWL-8620AP	• Dual-Band 802.11n/ac Wave 2 Unified Wireless Access Point
DWL-8620APE	• Dual-Band 802.11n/ac Wave 2 Unified Wireless Access Point

1 Only supported on the DWL-8620AP and the DWL-8620APE.
2 This feature is available when Unified AP is used in conjunction with D-Link's line of Unified Wireless Controllers.
3 The LACP (Link Aggregation Control Protocol) is only supported on the DWL-8620AP & the DWL-8620APE. The DWL-6620APS & the DWL-7620AP only support static Link Aggregation (LAG).
4 Maximum wireless signal rate derived from IEEE standard 802.11n and 802.11ac specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental factors will adversely affect wireless signal range.
5 The 2 x 2 smart antenna supports up to 81 sets of radio patterns. The omni-directional mode is one such pattern.

Updated 05/25/18

Specifications are subject to change without notice. D-Link is a registered trademark of D-Link Corporation and its overseas subsidiaries. All other trademarks belong to their respective owners.
©2018 D-Link Corporation. All rights reserved. E&OE.

D-Link®
Building Networks for People