

Limited  
Lifetime  
Warranty

# NUCLIAS CONNECT AC1750 WAVE 2 DUAL BAND POE ACCESS POINT

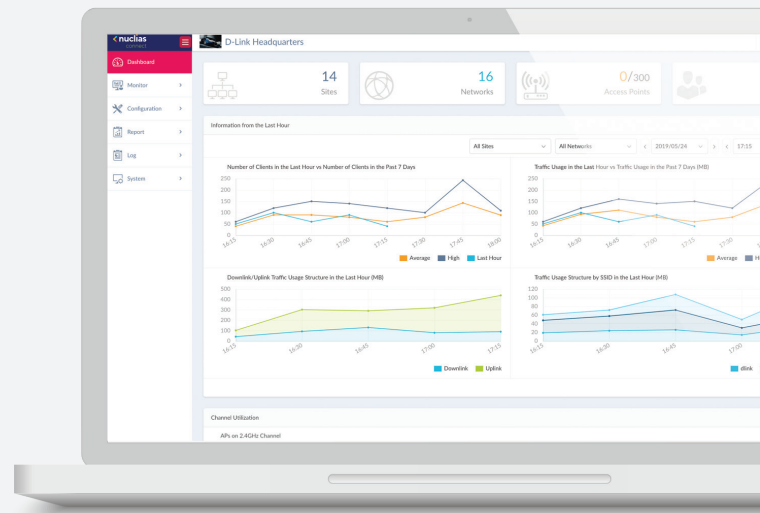
DAP-2680



 **nuclias**  
connect

## Nuclias Connect Overview

Welcome to Nuclias Connect, D-Link's centralized management solution for Small-to-Medium-Sized Business (SMB) networks. Nuclias Connect makes it easier to analyze, automate, configure, optimize, scale, and secure your network — delivering the convenience of an Enterprise-wide management solution, at an SMB price.



▲ Intuitive Dashboard Interface

## Solution Features

- » Free-to-Download Nuclias Connect Management Software
- » License-Free Access Points
- » Backwards-Compatibility
- » Intuitive Interface
- » Inexpensive Hardware Controller\*
- » Traffic Reporting and Analytics
- » Remote Configuration and Batch Configuration.
- » Multi-Tenant and Role-Based Administration
- » Searchable and Auditable Event and Change Logs
- » 802.1x<sup>1</sup> and RADIUS Server, POP3, LDAP
- » Multilingual Support
- » Front-Desk Ticket Management
- » Authentication and Payment Gateway (Paypal) Integration via Customizable Captive Portal

## Solution Benefits

### 1 / Network-Wide Management

Free to download on Windows server (or Linux via Docker), the Nuclias Connect software currently supports a dozen new and legacy D-Link Access Point (AP) models, and is capable of managing up to one thousand APs without the need for additional licensing charges. Coupled with a local lite management Smartphone app and an inexpensive optional hardware controller (The Hub\*), Nuclias Connect is even suitable for remote locations where a dedicated PC or server might be impractical.

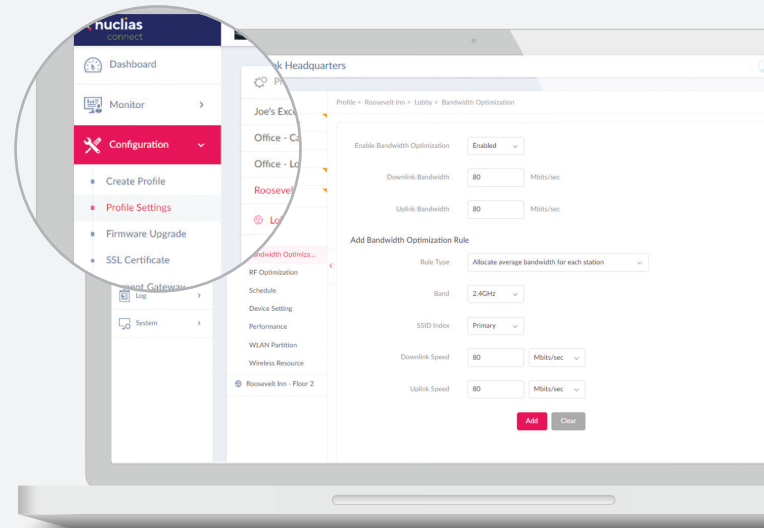
*\*Please contact your local D-Link office for availability*

### Deployment Scenarios



## 2 / Flexibility to Meet Your Needs

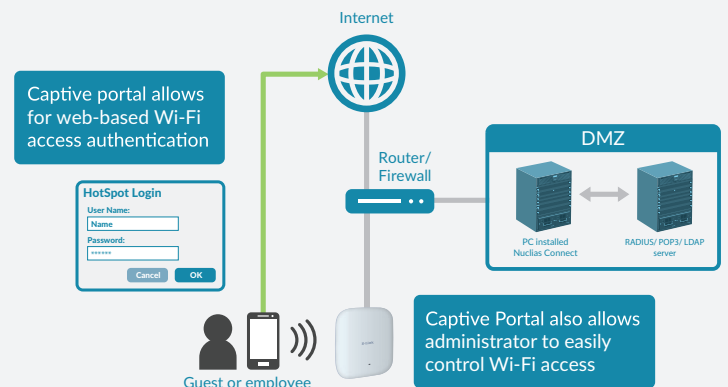
Through software-based monitoring and remote management of all wireless Access Points (APs) on your network, Nuclias Connect offers tremendous flexibility compared to traditional hardware-based management systems. Configuration can be done remotely and management software is customizable. Nuclias Connect enables control and analytics of a broad or fine granularity, presentable in a variety of formats. Additionally, admins can provide and manage a variety of distributed deployments, including the option to configure settings and customize admin accounts in a specific manner for each deployment. Nuclias Connect gives you the financial and technical flexibility to expand from a small network to a large one (up to 1,000 APs), while retaining a robust and centralized management system.



▲ Network-Wide Configuration

## 3 / Easy Administration

Nuclias Connect supports multi-tenancy, so network admins can grant localized management authority for local networks. In addition, because APs can support eight SSIDs per radio, administrators have the option of using one SSID to create a guest network for visitors. Nuclias Connect allows for multiple user authentications and also makes it possible to configure specific access controls for each SSID, giving admins the option of configuring separate internal networks for different subnets. This means that more advanced Value-Added Services, such as Captive Portal or Wi-Fi Hotspot, can be used to help manage wireless network traffic.



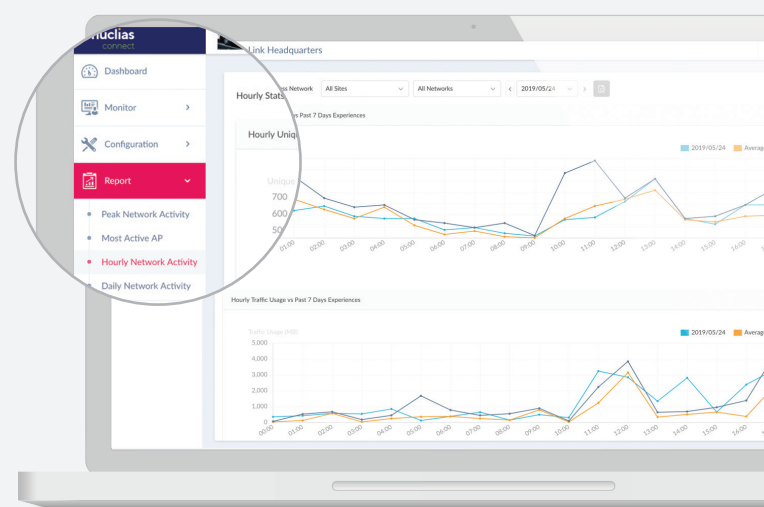
▲ Captive Portal with Customizable Login Page

## 4 / Insights at a Glance

Gain an extensive understanding of your network through usage analytics and status reports which can be viewed easily at a glance. Insights derived from traffic data can create business value. Traffic can be viewed across the entire network or to the level of a single AP.

## 5 / Network Security and Data Privacy

Nuclias Connect balances the need for access convenience with the need for security. All communications over the system are encrypted (WPA2/WPA3<sup>1</sup>), with your user data never leaving your possession. Additional security measures (such as firewalls) can also be added to your network, with no unneeded technical difficulty.



▲ Statistics - Hourly Network Activity

## Product Introduction

The DAP-2680 Nuclias Connect AC1750 Wave 2 Dual Band PoE Access Point is designed to support small-to-medium business or enterprise environments by providing network administrators with secure and manageable dual-band wireless LAN options, and utilizing the cutting-edge speed of Wireless AC.

## Wireless Performance

- » New-generation IEEE 802.11ac Wave 2 wireless
- » High-speed 1750 Mbps throughput
- » Dedicated Gigabit LAN port for a wired connection
- » Powerful Wi-Fi Multimedia™ Quality of Service (QoS)
- » Load balancing to optimize performance between Access Points

## Trusted Security

- » WPA/WPA2 Personal/Enterprise encryption
- » 64/128 bit WEP
- » MAC-based access filtering and WLAN partitioning
- » Captive Portal with industry-standard authentication
- » VLAN support for network segmentation

## Extensive Management

- » Powerful management, monitoring, and troubleshooting functionality with Nuclias Connect
- » Flexible access through web (HTTP), SSL, SSH, and Telnet
- » Multiple operation modes including Access Point, Wireless Distribution System (WDS), WDS with Access Point, and Wireless Client
- » Wireless scheduling to manage access point activity

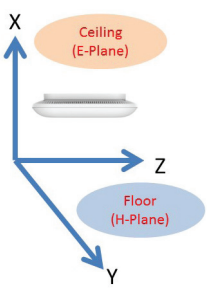
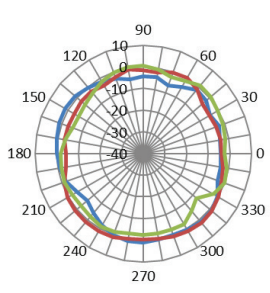
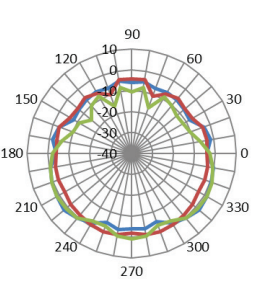
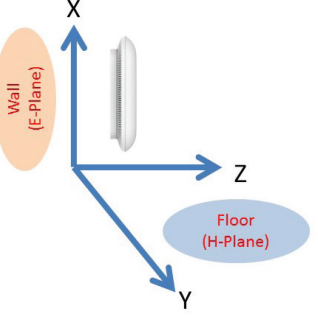
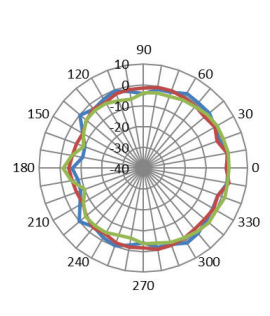
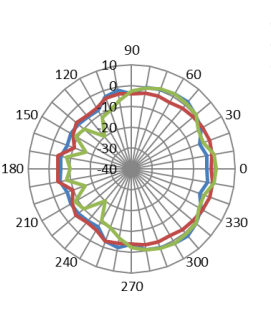
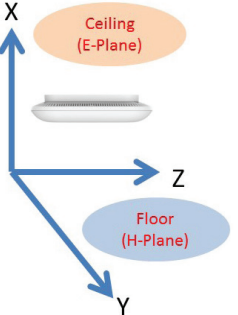
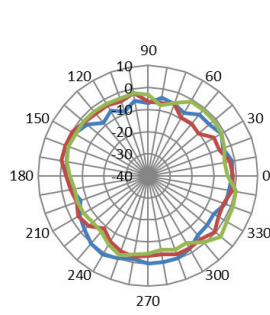
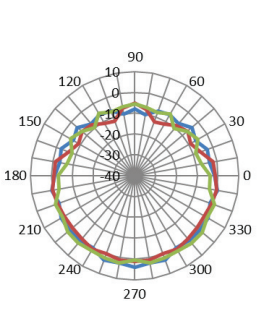
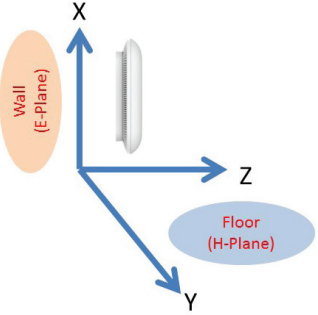
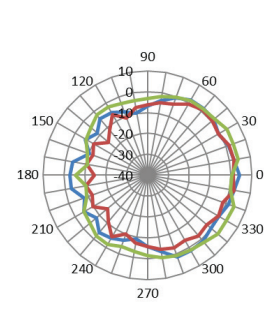
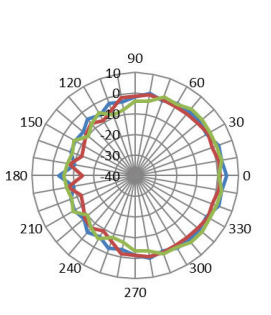
## Versatile Installation

- » Powered by IEEE 802.3at Power over Ethernet for remote installation
- » Small form-factor for easy placement
- » Multiple installation options including wall and ceiling mounting

## Technical Specifications

| General                          |                                                                                                                        |                                                                                                                   |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Device Interfaces                | 1 x IEEE 802.11a/b/g/n/ac Wave 2 wireless <sup>2</sup>                                                                 | 1 x Gigabit LAN (supports PoE)                                                                                    |
| Standards                        | IEEE 802.11a/b/g/n/ac <sup>2</sup><br>IEEE 802.3i/u/ab                                                                 | IEEE 802.3az Energy-Efficient Ethernet (EEE)<br>IEEE 802.3at Power over Ethernet                                  |
| Antennas                         | 3 x internal dual-band <ul style="list-style-type: none"><li>• 3.6 dBi at 2.4 GHz</li><li>• 4.2 dBi at 5 GHz</li></ul> |                                                                                                                   |
| Operating Frequency <sup>3</sup> | 2.4 GHz band: 2.4 to 2.4835 GHz                                                                                        | 5 GHz band: 5.15 to 5.35 GHz, 5.47 to 5.85 GHz                                                                    |
| Maximum Output Power             | 2.4 GHz band: 26.5 dBm                                                                                                 | 5 GHz band: 26.5 dBm                                                                                              |
| Data Signal Rate                 | 2.4 GHz band: Up to 450 Mbps <sup>2</sup>                                                                              | 5 GHz band: Up to 1300 Mbps <sup>2</sup>                                                                          |
| Functionality                    |                                                                                                                        |                                                                                                                   |
| Security                         | WPA-Personal<br>WPA-Enterprise<br>WPA2-Personal<br>WPA2-Enterprise<br>WEP 64/128-bit encryption                        | SSID broadcast disable<br>MAC address access control<br>Network Access Protection (NAP)<br>Internal RADIUS server |
| Network Management               | D-Link Nuclias Connect<br>Telnet<br>Secure Telnet (SSH)<br>Web (HTTP)                                                  | Secure Socket Layer (SSL)<br>Traffic control<br>SNMP v1/v2c/v3                                                    |
| LEDs                             | Power/status                                                                                                           |                                                                                                                   |
| Physical                         |                                                                                                                        |                                                                                                                   |
| Dimensions                       | 190 x 190 x44.8 mm (7.48 x 7.48 x 1.76 in)                                                                             |                                                                                                                   |
| Weight                           | 580 g (1.28 lbs) without mounting base                                                                                 | 636.5 g (1.40 lbs) with mounting base                                                                             |
| Power Supply                     | External power adapter: 12 V/2 A                                                                                       | IEEE 802.3at PoE                                                                                                  |
| Maximum Power Consumption        | 17.53 W                                                                                                                |                                                                                                                   |
| 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                                                                                 |
| Meantime Between Failure (MTBF)  | > 30,000 hours                                                                                                         |                                                                                                                   |
| Certifications                   | FCC<br>CE <sup>4</sup>                                                                                                 | UL<br>Wi-Fi® Certified                                                                                            |

# Antenna Pattern

| Orientation                                                                                                         | H-Plane                                                                             | E-Plane                                                                               |
|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>2.4 GHz Ceiling Mounted</b><br> |    |    |
| <b>2.4 GHz Wall Mounted</b><br>   |   |   |
| <b>5 GHz Ceiling Mounted</b><br> |  |  |
| <b>5 GHz Wall Mounted</b><br>    |  |  |

| Warranty Information |                                                          |  |
|----------------------|----------------------------------------------------------|--|
| Warranty             | Limited Lifetime Warranty <sup>1</sup>                   |  |
| Order Information    |                                                          |  |
| Part Number          | Description                                              |  |
| DAP-2680             | Nuclias Connect AC1750 Wave 2 Dual Band PoE Access Point |  |

<sup>1</sup> Will be supported in future versions.

<sup>2</sup> Maximum wireless signal rate derived from IEEE standard 802.11 and 802.11ac specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials, construction, and network overhead may lower actual data throughput rate. Environmental factors will adversely affect wireless signal range.

<sup>3</sup> Please note that operating frequency ranges vary depending on the regulations of individual countries and jurisdictions. The DAP-26680 may not support the 5.25 - 5.35 GHz and 5.47 - 5.725 GHz frequency ranges in certain regions.

<sup>4</sup> For the EU region, this product is compliant with CE regulations and operates within the following frequency ranges: 2.4 - 2.4835 GHz, 5.150 - 5.250 GHz, 5.250 - 5.350 GHz, and 5.470 - 5.750 GHz.

<sup>5</sup> Limited lifetime warranty is available in the USA only. The warranty is void when not purchased from an authorized US D-Link reseller. Please visit [us.dlink.com](http://us.dlink.com) for a list of authorized US resellers.

Updated 09/16/19

## For more information

U.S.A. | 17595 Mt. Herrmann Street | Fountain Valley, CA 92708 | 800.326.1688 | [dlink.com](http://dlink.com)

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