The DAP-2680 Wireless 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 utilising the cutting-edge speed of 802.11ac Wave 2. The DAP-2680 delivers maximum combined wireless signal rates of up to 1750 Mbps\(^1\) and supports MU-MIMO technology that allows multiple devices to get high-bandwidth Wi-Fi signal at the same time, distributing data more efficiently. To maximise total return on investment, the DAP-2680 can be configured to optimise network performance based on any one of its multiple operation modes.

For centralised network management, administrators can use D-Link’s free Nuclias Connect software or Nuclias Connect Hub (DNH-100)\(^5\) to configure and manage multiple access points. In addition to streamlining the management process, Nuclias Connect provides network administrators with the means to verify and conduct regular maintenance checks remotely, eliminating the need to send personnel out to physically verify proper operation.

**Features**

**High-Performance Connectivity**
- IEEE 802.11ac Wave 2 wireless\(^1\)
- Up to 1750 Mbps\(^1\) speed
- MU-MIMO with beamforming
- Band steering
- Gigabit PoE-capable LAN port

**Multiple Operation Modes**
- Access Point, Wireless Distribution System (WDS), WDS with AP, Wireless Client

**Extensive Management**
- D-Link Nuclias Connect support for centralised and additional configuration options
- Web, SSL, SSH and Telnet management
- SNMP v1, v2c, v3

**Trusted Security Features**
- WPA/WPA2 Personal/Enterprise
- 64/128-bit WEP
- MAC filter and WLAN partitioning
- Local/POP3/RADIUS/PassCode/LDAP authentication for captive portal

**Convenient Installation**
- Small form factor design for easy placement
- Supports 802.3at Power over Ethernet for remote installation
- Wall and ceiling mountable\(^2\)

**D-LinkAssist Next Business Day Service, as Standard**

Your network is the backbone of your business. Keeping it running is essential, even if the unexpected happens. D-Link Assist is a rapid-response technical support service that replaces faulty equipment quickly and efficiently. Maximising your uptime and giving you the confidence that instant support is only a phone call away.

All D-Link products with 5-year or Limited Lifetime warranty come with complimentary Next Business Day Service. D-Link will send out a replacement product to you on the next business day after acceptance of a product failure. On receipt of the replacement product, you simply arrange the return of the defective product to us. Any products with a 2-year/3-year warranty can also benefit from the Next Business Day advance replacement service when the optional 3-year warranty extension has been purchased.

Find out more at eu.dlink.com/services

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1. Maximum wireless signal rates are the physical rates measured under ideal conditions.
2. Wall and ceiling mountable (requires optional kit)
Nuclias Connect is network management software that enables you to manage the network locally for dedicated privacy and security. It can be used either as an on-premises software management platform, or as a cloud solution hosted on a public cloud service.

Install the software on a local server on-site and manage up to 1,000 access points (APs), or optionally use the dedicated Nuclias Connect Hub which can manage up to 100 APs.

**Flexibility to Meet Your Needs**

Through software-based monitoring and remote management of all wireless APs on your network, Nuclias Connect offers tremendous flexibility compared to traditional hardware-based management systems. Configuration can be done remotely. Management software is customisable, and 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 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 larger one (up to 1,000 APs), while retaining a robust and centralised management system.

**Insights at a Glance**

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

**Network Security & Data Privacy**

Nuclias Connect balances the need for access convenience with the need for security. All communications over the system are encrypted, with your user data never leaving your possession. Additional security measures (such as firewalls) can also be added to your network, without undue technical difficulty.

**Key Features**

- Free-to-Download Management Software
- Inexpensive Hardware Controller
- Searchable Event Log and Change Log
- License-Free Centralised Management
- Traffic Reporting & Analytics
- Authentication via Customisable Captive Portal, 802.1x and RADIUS Server, POP3, LDAP, AD
- Backwards-Compatibility
- Remote Config. & Batch Config.
- Multilingual Support
- Intuitive Interface
- Multi-Tenant & Role-Based Administration
- Payment Gateway (Paypal) Integration and Front-Desk Ticket Management
- Backwards-Compatibility
- Multi-Tenant & Role-Based Administration
## Technical Specifications

### General

<table>
<thead>
<tr>
<th>Device Interfaces</th>
<th>• IEEE 802.11a/b/g/n/ac Wave 2 wireless interface</th>
<th>• 1 x Gigabit PoE-capable LAN port</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standards</td>
<td>• IEEE 802.11a/b/g/n/ac¹</td>
<td>• IEEE 802.3az Energy-Efficient Ethernet (EEE)</td>
</tr>
<tr>
<td></td>
<td>• IEEE 802.3i/u/ab</td>
<td>• IEEE 802.3at Power over Ethernet</td>
</tr>
<tr>
<td>Antennas</td>
<td>• 3 x internal dual-band antennas</td>
<td>• 3.6 dBi at 2.4 GHz, 4.2 dBi at 5 GHz</td>
</tr>
<tr>
<td>Operating Frequency²</td>
<td>• 2.4 GHz band: 2.4 to 2.4835 GHz</td>
<td>• 5 GHz band: 5.15 to 5.35 GHz, 5.47 to 5.85 GHz</td>
</tr>
<tr>
<td>Maximum Output Power</td>
<td>• 26.5 dBm for 2.4 GHz</td>
<td>• 26.5 dBm for 5 GHz</td>
</tr>
<tr>
<td>Data Signal Rate</td>
<td>• 2.4 GHz: Up to 450 Mbps¹</td>
<td>• 5 GHz: Up to 1300 Mbps¹</td>
</tr>
</tbody>
</table>

### Functionality

| Security            | • WPA-Personal                           | • SSID broadcast disable            |
|                     | • WPA-Enterprise                         | • MAC address access control        |
|                     | • WPA2-Personal                          | • Network Access Protection (NAP)   |
|                     | • WPA2-Enterprise                        | • Internal RADIUS server            |
|                     | • WEP 64/128-bit encryption              | • Traffic control                   |
| Operating Modes     | • Access Point (AP)                      | • SNMP v1/v2/v3                    |
|                     | • WDS with AP                            | • Nuclias Connect Software          |
|                     | • WDS/Bridge (No AP Broadcast)           | • Nuclias Connect Hub²             |
| Network Management  | • Telnet                                 | • Traffic control                   |
|                     | • Secure Telnet (SSH)                    | • SNMP v1/v2/v3                    |
|                     | • Web (HTTP)                             | • Nuclias Connect Software          |
|                     | • Secure Socket Layer (SSL)              | • Nuclias Connect Hub²             |
| LEDs                | • Power/status                           | • Traffic control                   |

### Physical

| Dimensions | • 190 x 190 x 44.8 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 (not included) | • 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                               |
## D-Link DAP-2680
### Wireless AC1750 Wave 2 Dual-Band PoE Access Point

<table>
<thead>
<tr>
<th>Certifications</th>
<th>• FCC</th>
<th>• CE</th>
<th>• UL</th>
</tr>
</thead>
</table>

## Antenna Pattern

### Orientation

<table>
<thead>
<tr>
<th>2.4 GHz Ceiling Mounted</th>
<th>H-Plane</th>
<th>E-Plane</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="H-Plane Diagram" /></td>
<td><img src="image2.png" alt="2.4G H-Plane" /></td>
<td><img src="image3.png" alt="2.4G E-Plane" /></td>
</tr>
<tr>
<td>2.4 GHz Wall Mounted</td>
<td>H-Plane</td>
<td>E-Plane</td>
</tr>
<tr>
<td><img src="image4.png" alt="H-Plane Diagram" /></td>
<td><img src="image5.png" alt="2.4G H-Plane" /></td>
<td><img src="image6.png" alt="2.4G E-Plane" /></td>
</tr>
<tr>
<td>5 GHz Ceiling Mounted</td>
<td>H-Plane</td>
<td>E-Plane</td>
</tr>
<tr>
<td><img src="image7.png" alt="H-Plane Diagram" /></td>
<td><img src="image8.png" alt="5G H-Plane" /></td>
<td><img src="image9.png" alt="5G E-Plane" /></td>
</tr>
<tr>
<td>5 GHz Wall Mounted</td>
<td>H-Plane</td>
<td>E-Plane</td>
</tr>
<tr>
<td><img src="image10.png" alt="H-Plane Diagram" /></td>
<td><img src="image11.png" alt="5G H-Plane" /></td>
<td><img src="image12.png" alt="5G E-Plane" /></td>
</tr>
</tbody>
</table>
## Nuclias Connect Network Management Features

<table>
<thead>
<tr>
<th>WLAN Management</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum APs per Installation</td>
<td>1,000 (large scale installations)</td>
</tr>
</tbody>
</table>

### WLAN Management Features
- AP grouping
- Multi-tenancy
- Visualized topology
- NAT pass-through
- Setup wizard
- AP discovery (layer 2 and layer 3)
- Report system

### User Authentication
- Guest Portal: Captive portal
- Authentication Method:
  - Local
  - POP3
  - RADIUS
  - LDAP
  - Voucher

### Hotspot Features
- Built-in support for voucher-based authentication
- Built-in hotspot manager for voucher creation and guest management
- Rate limiting and bandwidth control for guest and hotspot portal

### Wireless Features
- **RF Management and Control**
  - Auto Output Power Control
  - Auto Channel
  - Self-healing around failed APs

- **Multiple SSIDs per Radio(AP)**
  - 8

- **Advanced Wireless Features**
  - Band steering
  - L2 roaming
  - Bandwidth optimisation
  - Airtime fairness

### System Management
- **Management Interface**
  - Web-based user interface (HTTPS)

- **Minimum System Requirements**
  - Computer running Microsoft Windows 10 or server 2016 (64 bit)

- **Scheduling**
  - Firmware update
  - Configuration update

### Supported Devices
- **Indoor Wireless N Access Points**
  - DAP-2230 (Single-Band N300, F/W ver. 2.0)
  - DAP-2310 (Single-Band N300, F/W ver. 2.0)

- **Indoor Wireless AC Access Points**
  - DAP-2360 (Single-Band N300, F/W ver. 2.0)
  - DAP-2610 (Dual-Band Wave 2 AC1300, F/W ver. 2.0)
  - DAP-2660 (Dual-Band AC1200, F/W ver. 2.0)
  - DAP-2662 (Dual-Band Wave 2 AC1200, WiFi4EU-ready)
  - DAP-2695 (Dual-Band AC1750, F/W ver. 2.0)

- **Outdoor Access Points**
  - DAP-3315 (Single-Band N300, F/W ver. 2.0)
  - DAP-3362 (Dual-Band AC1200, F/W ver. 2.0)
  - DAP-3366 (Dual-Band Wave 2 AC1200, WiFi4EU-ready)

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1. 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 and construction, and network overhead, lower actual data throughput rate. Environmental factors may adversely affect wireless signal range.

2. This unit is designed for indoor environments, you might violate local regulatory requirements by deploying this unit in outdoor environments.

3. Please note that operating frequency ranges vary depending on the regulations of individual countries and jurisdictions. The DAP-2680 may not support the 5.25 - 5.35 GHz and 5.47 - 5.725 GHz frequency ranges in certain regions.

4. 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.


6. Number of wireless access points supported depends on the specification of the computer on which DNC is installed. To support 1000 APs, a computer with at least an Intel Core i7 with 16 GB RAM and 4 TB hard drive, and 20 Mbps uplink bandwidth is recommended. To support 100 APs, a computer with at least an Intel Core i5 3.2GHz with 8 GB RAM and 2 TB hard drive, and 10 Mbps uplink bandwidth is recommended.

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For more information: [www.dlink.com](http://www.dlink.com)