D-Link

NUCLIAS CONNECT
SOLUTION

nuclias
connect

Nuclias Connect

Nuclias Connect is a management solution which makes wireless networks easier to manage, easier to configure, and easier to expand. It empowers network administrators through its centralized control, configuration, and customization capabilities, while minimizing their onsite workload.

Nuclias Connect analytics provide an understanding of network and its usage, that is robust and intuitive, while minimizing your upfront investment through its legacy HW compatibility. It can be used either as an on-premises software management platform, with a hardware controller, or as a cloud solution hosted on a private cloud service for remote access.

Supports multi-site management so network administrators can set different configurations and authority levels for head and regional offices. APs can be pre-configured before being dispatched to regional offices.

Enables service providers to send pre-configured APs to their customers and remotely manage customers' wireless network access and security.

Manage wireless network traffic by configuring separate internal networks for different subnets including easily creating guest networks with customisable login pages.

Easy to scale the network as new access points are automatically discovered allowing them to be quickly managed and deployed.

Automatically manages RF output for multiple APs, optimizing the number of available wireless channels and coverage. This results in reduced channel interference and provides faster total throughput and connection reliability.

Saves power and improves security with the wireless scheduler feature that switches off wireless connectivity when not needed.

Key Features

Upto Up to 1,500 Access Points and Switches Management	Inexpensive Hardware Controller
Free-to-Download Management Software	Traffic Reporting & Analytics
Backwards-Compatibility	Remote Config. & Batch Config.
Intuitive Interface	Multi-Tenant & Role-Based Administration

Searchable Event Log and Change Log

Authentication via Customizable Captive Portal, 802.1.x and RADIUS Server, POP3, LDAP, AD

Multilingual Support

Payment Gateway (Paypal) Integration and Front-Desk Ticket Management

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Nuclias Connect Apps

Monitor and manage your network remotely on an iOS or Android device.

Easy Reporting

Nuclias Connect Management

Model	DNC-100	DNH-100
Max. Managed Devices	1,500	100
Application / Use Case	Large Scale Networks	Small-to-Medium Networks
Supported Devices	Access Points and Switches*	Access Points and Switches*
Deployment & Compatible Hardware	On-Premises & Virtual Server on Cloud 1U Rack Mount Server Appliance 2 x Gigabit Ethernet USB, 512GB/1TB Storage Windows / Linux OS	On-Premises 1U Rack Mount Appliance 1 x Gigabit Ethernet 1 x USB 3.0 1 x Micro SD Storage (64GB SDD)
Single Sign on	Yes	Yes
App for Management	IOS and Android Mobile Phone	IOS and Android Mobile Phone
Supported Apps	Nuclias Connect Apps	Nuclias Connect Apps

*DAP Series Access Points and Selected Series of Switches

Technical Specifications

Network Management	
Maximum Number of Managed Access Points and Switches Per Controller	• 1,500 (DNC-100) • 100 (DNH-100)
Compatible Access Points and Switches	• DAP Series 802.11n, 802.11ac, 802.11ax & 802.11be Access Points • DGS-1100, DGS-1210 & DXS-1210 Series Switches
WLAN Management Features	• AP grouping • Multi-tenancy • Visualized topology • NAT pass-through • Setup wizard • AP discovery (layer 2 and layer 3) • Reporting system

Wireless Features	

AP Management Configuration	• AP Profile
	  SSID – Name, Multiple SSID, Wireless, Security, User Auth
	  802.1Q VLAN, VLAN Group, PVID configuration & SSID Mapping
	• Firmware over the Air (FOTA)
	• Scheduling of Firmware update & Configuration update

RF Management and Control Configuration	• Auto Output Power Control • Auto Channel • Channel Width - 20/40/80/160 MHz
Multiple SSIDs per Radio (AP) Configuration	• 8 per Radio • 16 for Dual band (2.4GHz and 5GHz) & 24 for Tri band (2.4GHz, 5GHz & 6GHz)
Advanced Wireless Features Configuration	• Band steering • L2 seamless roaming / Fast Roaming • Support for 11k/v/r • Bandwidth / Rate Limiting – Unicast and Multicast • Airtime fairness • IGMP Snooping
Monitoring	• Dashboard • Network Overview - Network Sites, Access Points, Wireless Client, Network Traffic • AP/Wireless Clients – Network / Site, IP & MAC Address, Auth Type, RSSI, SSID • Network Topology, AP model, Channel, firmware Ver, Auth type • Floor plan • Logs – SNMP Traps, Syslog, System Event Log, Device Log, Audit log • E-Mail Alert Notification – Device Online, Offline, Restart, Profile Update
Security Configuration	• WEP 64/128-bit, WPA/WPA2/WPA3™ Personal (PSK)/ Enterprise (EAP) & 192-bit Security, Enhanced Open, TKIP, SSL/TLS • 802.1x and RADIUS Authentication • Rouge AP Detection • L2 / Client Isolation • MAC Filtering & IP Filtering ACL

User Authentication	
Guest Portal	• Captive portal
Authentication Method Configuration	• Local • POP3 • RADIUS • LDAP • Voucher • Facebook & Google login
Hotspot Features Configuration	• 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
System Management	
Management Interface	Web-based user interface (HTTPS)
Order Information	
Part Number	Description
DNC-100	Nuclias Connect Controller – Upto 1,500 Devices Management
DNH-100	Nuclias Connect Controller – Upto 100 Devices Management

Nuclias Connect Access Points – Wi-Fi 6 / 6E / 7

Model	DAP-E9560*	DAP-X5480*	DAP-X3060OU	DAP-X3060	DAP-X2850	DAP-X2810
Product Image						
General						
Environment	Indoor	Indoor	Outdoor	Indoor	Indoor (HD)	Indoor
OFDMA	✓	✓	✓	✓	✓	✓
IEEE Standard	802.11 a/b/g/n/ac/ax/be	802.11 a/b/g/n/ac/ax	802.11 a/b/g/n/ac/ax	802.11 a/b/g/n/ac/ax	802.11 a/b/g/n/ac/ax	802.11 a/b/g/n/ac/ax
2.4GHz Speed	720 Mbps	574 Mbps	574 Mbps	574 Mbps	1147 Mbps	574 Mbps
5GHz Speed	2880 Mbps	2402 Mbps	2402 Mbps	2402 Mbps	2402 Mbps	1201 Mbps
6GHz Speed	5760 Mbps	2402 Mbps	–	–	–	–
Functionality						
Number of SSIDs	24 (8 per radio)	24 (8 per radio)	16 (8 per radio)	16 (8 per radio)	16 (8 per radio)	16 (8 per radio)
PoE						
PoE Standard	802.3bt	802.3at	802.3at	802.3at	802.3at	802.3at
Physical						
Ethernet Interface	1 x 10 GbE 1 x GbE	1 x 2.5 GbE 1 x GbE	1 x 2.5 GbE	1 x 2.5 GbE	1 x 2.5 GbE 1 x GbE	1 x GbE
Console port	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45
Technical Specification						
Maximum Output Power	2.4GHz: 23dBm 5GHz: 21dBm 6GHz: 21dBm	2.4GHz: 23dBm 5GHz: 21dBm 6GHz: 21dBm	2.4GHz: 23dBm 5GHz: 22dBm	2.4GHz: 23dBm 5GHz: 22dBm	2.4GHz: 28dBm 5GHz: 25.5dBm	2.4GHz: 23dBm 5GHz: 26dBm
Antennas	2x2 Internal Omni-Directional	2x2 Internal Omni-Directional	2x2 Internal Omni-Directional	2x2 Internal Omni-Directional	4x4 Internal Omni-Directional	2x2 Internal Omni-Directional
Antenna Gain	2.4GHz: 4 dBi 5GHz: 5 dBi 6GHz: 5 dBi	2.4GHz: 4 dBi 5GHz: 5 dBi 6GHz: 5 dBi	2.4GHz: 5 dBi 5GHz: 7.3 dBi	2.4GHz: 3 dBi 5GHz: 3 dBi	2.4GHz: 3.5 dBi 5GHz: 5.5 dBi	2.4GHz: 3.2 dBi 5GHz: 4.3 dBi
Mounting Type	Ceiling/Wall/Desktop	Ceiling/Wall/Desktop	Pole/Wall	Ceiling/Wall/Desktop	Ceiling/Wall/Desktop	Ceiling/Wall/Desktop
Security Lock	Yes	Yes	Yes	Yes	Yes	Yes
Operating Temperature	0°C to 40°C	0°C to 40°C	-30°C to 60°C	0°C to 40°C	0°C to 40°C	0°C to 40°C
IP Rating			IP68			
Management	Nuclias Connect	Nuclias Connect	Nuclias Connect	Nuclias Connect	Nuclias Connect	Nuclias Connect

* Roadmap and will be available in selected countries

Technical Specification	
AP Management	• AP Profile SSID – Name, Multiple SSID, Wireless, Security, User Auth VLAN – VLAN configuration & SSID Mapping • WEB/CLI
RF Management and Control	• Auto Output Power Control • Access point modes: AP/WDS-Bridge/WDS with AP/Wireless client • Auto Channel, Channel Width - 20/40/80/160 MHz
Multiple SSIDs per Radio (AP)	• 8 per Radio • 16 for Dual band (2.4GHz and 5GHz) & 24 for Tri band (2.4GHz, 5GHz & 6GHz)
Advanced Wireless Features	• Band steering • L2 seamless roaming / Fast Roaming • Support for 11k/v/r, IPv4 & IPv6. • Bandwidth / Rate Limiting – Unicast and Multicast, QoS, Traffic priority • Airtime fairness, Load Balancing and Localized Throttling • DHCP Server, SNMPV1/V2/V3 IGMP Snooping
Security	• WEP 64/128-bit, WPA/WPA2/WPA3™ Personal/Enterprise & 192-bit Security, PEAPV1/EAP-GTC, Enhanced Open, WPA-EAP, TKIP • 802.1x and RADIUS Authentication • Rouge AP Detection • L2 / Client Isolation • ACL-MAC Filtering & IP Filtering
Wi-Fi 6 Features Compliance	• A-MPDU with A-MSDU • OFDMA – DL and UL • M-BSSID • 2x2 / 4x4 MU-MIMO (on 2.4GHz & 5 GHz Spectrum) • Operating Mode • Target Wake Time (TWT) • Wi-Fi Agile Multiband
User Authentication	
Guest Portal	• Captive portal
Authentication Method	• Local • LDAP • POP3 • Voucher • RADIUS • Facebook & Google login
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

Ordering Information	
Part Number	Description
DAP-X2810/UDL	Nuclias Connect AX1800 Wi-Fi 6 Dual-Band PoE Access Point
DAP-X2850/UDL	Nuclias Connect AX3600 Wi-Fi 6 Dual-Band PoE Access Point
DAP-X3060	Nuclias Connect AX3000 Wi-Fi 6 Dual Band PoE Access Point
DAP-X3060OU	Nuclias Connect AX3000 Wi-Fi 6 Dual Band Outdoor PoE Access Point
DAP-X5480	Nuclias Connect AX5400 Wi-Fi 6E Tri-Band PoE Access Point
DAP-E9560	Nuclias Connect BE11000 Wi-Fi 7 Tri-Band PoE Access Point
DAP-E9560OU	Nuclias Connect BE11000 Wi-Fi 7 Tri-Band Outdoor PoE Access Point
DAP-E19000	Nuclias Connect BE19000 Wi-Fi 7 Tri-Band PoE Access Point