D-Link®
Building Networks for People

‹ nuclias

Product Highlights

D-Link Nuclias Cloud Management

Extensive range of management functions can be performed hassle-free from anywhere through the D-Link Nuclias cloud

Versatile Hardware Options

Featuring a wide range of models featuring 10, 28, or 52 PoE and non PoE ports, and 2 or 4 GE/SFP ports configurations

Zero-Touch Deployment

Cloud-based auto-configuration allows for swift plug and play installation and eliminates the need for on-site setup

ONE YEAR
Free Cloud License

DBS-2000 Series
Nuclias Cloud-Managed Switches

Features

D-Link Nuclias Cloud Management
- Centralized cloud-based management
- Zero-touch deployment
- Intuitive web and app-based interface[2]
- Real-time at-a-glance network information
- Management of multiple sites and devices through a single pane of glass
- Over-the-air firmware updates through the cloud
- Instant alerts and notifications

Best-in-class Built for Enterprise Switches
- Energy-Efficient Ethernet (EEE)
- PoE+ support with up to 30 W per port
- Supports 802.1D Spanning Tree (STP) and 802.1w Rapid Spanning Tree (RSTP)
- 802.3ad Link Aggregation
- Loopback protection and IGMP snooping
- Access Control Lists (ACLs)

D-Link Nuclias is an innovative cloud networking solution that allows you to centrally manage your entire network from anywhere, any time through its intuitive portal interface or mobile app. Featuring a full range of cloud-managed access points and switches supported by zero-touch deployment, Nuclias enables small businesses and enterprises to quickly deploy and build a powerful and versatile global wired and wireless network.

The DBS-2000 Series Nuclias Cloud-Managed Switches are deployed as pre-managed, zero-configuration switches controlled through the D-Link Nuclias cloud[1]. They are best-in-class switches designed specifically for enterprise environments.

Centralized Management With D-Link Nuclias

Designed to be managed through the D-Link Nuclias cloud, DBS-2000 Series switches are easily set up with the help of the intuitive D-Link Nuclias browser-based or mobile app interface. Centralized cloud management allows for zero-touch provisioning, enabling businesses to quickly configure, deploy, maintain, and expand their network remotely. Configuration settings can be set up, managed, and deployed through the cloud anytime, anywhere through any web browser or the dedicated mobile app, meaning devices can be deployed at a remote location without any need for trained on-site staff. Save time by configuring switches of the same model series in bulk. Similarly, if the same set of ports of multiple switches uses the same configuration profile, this port configuration can easily be deployed and updated in bulk.

Hassle-free Administration and Versatile Deployment

Using D-Link Nuclias, businesses can now more effectively organize their entire wireless network, manage multiple switches simultaneously, and monitor live network statistics. With the user-friendly single pane of glass management console, administrators have access to an intuitive way of organizing the network into multiple sites, which simplifies management across multiple areas. With no limitation on the number of devices, businesses can easily cater to the demands of a growing network by simply adding more devices to the network. Over-the-air firmware updates can be automatically pushed to devices through the cloud.

Automated Monitoring and Alerts

Through the intuitive Nuclias dashboard, administrators can remotely view real-time information about the network and get an instant overview of key network statistics such as performance, connectivity, and network usage. Through the dashboard quickly view both switch and access point status information such as link status and number of connected devices. Easily view your switches' real-time port traffic and connection status. For switches with PoE ports, you can even see real-time power consumption statistics. Administrators can filter and customize the dashboard to display only the necessary information for a more focused experience. Be ahead of any problems with instant push notifications and alerts that can be customized to ensure that administrators can swiftly identify problems and perform immediate troubleshooting.

Enterprise Security

To ensure the safety and reliability of all sensitive traffic, all management data to and from the cloud is separated from regular data using an SSL encrypted out-of-band connection. In addition, Nuclias offers a range of industry standard authentication and authorization methods to control user access. Administrator can configure external RADIUS servers and set up IP and MAC-based access control lists to authenticate and authorize clients and create a more reliable network environment.

Example Topology
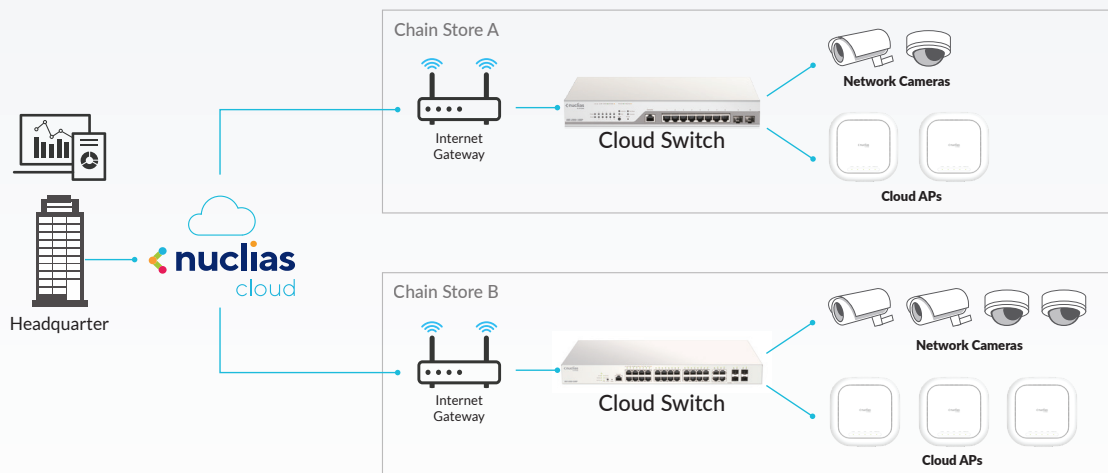
Technical Specifications

General	DBS-2000-10MP	DBS-2000-28	DBS-2000-28MP	DBS-2000-28P	DBS-2000-52	DBS-2000-52MP
Hardware Version	• A1					
Number of Ports	• 8 x 10/100/1000 Mbps PoE • 2 x SFP 100/1000 Mbps	• 24 x 10/100/1000 Mbps • 4 x Combo 1000 Mbps/SFP	• 24 x 10/100/1000 Mbps PoE • 4 x Combo 1000 Mbps/SFP	• 24 x 10/100/1000 Mbps PoE • 4 x Combo 1000 Mbps/SFP	• 48 x 10/100/1000 Mbps • 4 x Combo 1000 Mbps/SFP	• 48 x 10/100/1000 Mbps PoE • 4 x Combo 1000 Mbps/SFP
Port Functions	• IEEE 802.3 compliant • IEEE 802.3u/802.3z compliant • IEEE 802.3ab compliant • IEEE 802.3af/802.3at compliant • IEEE 802.3x Flow Control			• Supports manual/auto MDI/MDIX configuration • Supports half/full-duplex operation • IEEE 802.3az compliant		
Performance						
Switching Capacity	• 20 Gbps	• 56 Gbps	• 56 Gbps	• 56 Gbps	• 104 Gbps	• 104 Gbps
Maximum Forwarding Rate	• 14.88 Mpps	• 41.7 Mpps	• 41.7 Mpps	• 41.7 Mpps	• 77.4 Mpps	• 77.4 Mpps
MAC Address Table Size	• 8K Entries	• 8K Entries	• 8K Entries	• 8K Entries	• 16K Entries	• 16K Entries
Packet Buffer	• 4.1 Mbits	• 4.1 Mbits	• 4.1 Mbits	• 4.1 Mbits	• 12 Mbits	• 12 Mbits
Flash Memory	• 32 MB					

PoE

PoE Standard	• IEEE 802.3at • IEEE 802.3af	• n/a	• IEEE 802.3at • IEEE 802.3af	• IEEE 802.3at • IEEE 802.3af	• n/a	• IEEE 802.3at • IEEE 802.3af
PoE Capable Ports	• Ports 1 to 8	• n/a	• Ports 1 to 24	• Ports 1 to 24	• n/a	• Ports 1 to 48
PoE Power Budget	• 130 W • 30 W max. per port	• n/a	• 370 W • 30 W max. per port	• 193 W • 30 W max. per port	• n/a	• 370 W • 30 W max. per port

Power Consumption

Standby Mode	• 4.3 W / 100 V • 5.2 W / 240 V	• 6.49 W / 100 V • 6.55 W / 240 V	• 18.5 W / 100 V • 17.1 W / 240 V	• 19.6 W / 100 V • 16.6 W / 240 V	• 13.7 W / 100 V • 13.9 W / 240 V	• 32 W / 100 V • 31.6 W / 240 V
Maximum Power Consumption	• 152.3 W (PoE on) • 9.4 W (PoE off)	• 17.32 W	• 446.1 W (PoE on) • 29.8 W (PoE off)	• 263.9 W (PoE on) • 30.6 W (PoE off)	• 34.85 W	• 478.9 W (PoE on) • 54.4 W (PoE off)

Physical

Power Input	• 100 to 240 V AC • 50/60 Hz internal power supply					
MTBF	• 1,274,005 hours	• 992,594 hours	• 277,967 hours	• 469,262 hours	• 400,667 hours	• 236,406 hours
Acoustics	• 0 dB(A)	• 0 dB(A)	• 51.7 dB(A)	• 51.7 dB(A)	• 0 dB(A)	• 52.4 dB(A)
Heat Dissipation	• 519.51 BTU/hr	• 59.09 BTU/hr	• 1521.99 BTU/hr	• 900.36 BTU/hr	• 118.92 BTU/hr	• 1634.01 BTU/hr
Weight	• 1.77 kg (3.90 lbs)	• 2.15 kg (4.74 lbs)	• 3.94 kg (8.68 lbs)	• 3.75 kg (8.27 lbs)	• 3.46 kg (7.63 lbs)	• 6.26 kg (13.80 lbs)
Dimensions	• 330 x 180 x 44 mm (12.09 x 7.09 x 1.73 in)	• 440 x 140 x 44 mm (12.09 x 5.51 x 1.73 in)	• 440 x 250 x 44 mm (12.09 x 9.84 x 1.73 in)	• 440 x 250 x 44 mm (12.09 x 9.84 x 1.73 in)	• 440 x 210 x 44 mm (12.09 x 8.27 x 1.73 in)	• 440 x 430 x 44 mm (12.09 x 16.93 x 1.73 in)
Ventilation	• Fanless	• Fanless	• 2 x Fans	• 2 x Fans	• Fanless	• 3 x Fans
Operating Temperature	-5 to 50 °C (23 to 122 °F)					
Storage Temperature	-20 to 70 °C (-4 to 158 °F)					
Operating Humidity	0% to 95% non-condensing					
Storage Humidity	0% to 95% non-condensing					
EMI	CE, FCC, VCCI, BSMI					
Safety	UL, CB, LVD, BSMI, CCC					

Software Features

VLAN	• 802.1Q Tagged VLAN • Management VLAN • Voice VLAN	• VLAN Group • Supports 256 static VLAN groups

L2 Features	• Flow Control
	  • 802.3x Flow Control
	  • HOL Blocking Prevention
	• Jumbo Frames
	• IGMP Snooping
	  • IGMP v1/v2/v3 awareness Snooping
	  • Supports 256 Groups
		• Cable Diagnostics
		• LLDP
		• Spanning Tree Protocol
		  • 802.1D STP
		  • 802.1w RSTP
		• 802.3ad Link Aggregation

Security	• SSL • DHCP Server Screening • Port Security	• Access Control List (ACL) • Max # of Entries: 768
Management	• Cloud-based through Nuclias[1]	• Nuclias mobile app[2]
Green Technology	• Compliant with RoHS 6	• Time-based PoE

Order Information	
Part Number	*Description*
DBS-200-10MP	8 Ports 10/100/1000 Mbps PoE + 2 Ports 100/1000 Mbps SFP Nuclias Cloud-Managed Switch
DBS-2000-28	24 Ports 10/100/1000 Mbps + 4 Ports Combo 10/100/1000BASE-T/SFP Nuclias Cloud-Managed Switch
DBS-2000-28P	24 Ports 10/100/1000 Mbps PoE + 4 Ports Combo 10/100/1000BASE-T/SFP Nuclias Cloud-Managed Switch
DBS-2000-28MP	24 Ports 10/100/1000 Mbps PoE + 4 Ports Combo 10/100/1000BASE-T/SFP Nuclias Cloud-Managed Switch
DBS-2000-52	48 Ports 10/100/1000 Mbps + 4 Ports Combo 10/100/1000BASE-T/SFP Nuclias Cloud-Managed Switch
DBS-2000-52MP	48 Ports 10/100/1000 Mbps PoE + 4 Ports Combo 10/100/1000BASE-T/SFP Nuclias Cloud-Managed Switch
Licenses	
DBS-WW-Y1-LIC	1 Year Cloud License
DBS-WW-Y3-LIC	3 Years Cloud License
DBS-WW-Y5-LIC	5 Years Cloud License
Optional SFP Transceivers	
DGS-712	1000BASE-T copper
DEM-302S-LX	1000BASE-LX, single-mode, 2 km
DEM-302S-BXD/BXU	Gigabit WDM transceiver, single-mode, 2 km
DEM-310GT	1000BASE-LX, single-mode, 10 km
DEM-311GT	1000BASE-SX, multi-mode, 550 m
DEM-312GT2	1000BASE-SX, multi-mode, 2 km
DEM-314GT	1000BASE-LHX, single-mode, 50 km
DEM-315GT	100BASE-ZX, single-mode, 80 km
DEM-330T/R	Gigabit WDM transceiver, single-mode, 10 km
DEM-331T/R	Gigabit WDM transceiver, single-mode, 40 km
DEM-210	100BASE-FX, single-mode, 15 km
DEM-211	100BASE-FX, multi-mode, 2 km
DEM-220T/R	Fast Ethernet WDM transceiver, single-mode, 20 km

1 Active D-Link Nuclias account and valid device license required.

2 App support for switches will be available in December 2019

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