

D-Link DGS 1510-52XMP(DGS-1510-52XMP)

D-Link DGS 1510-52XMP - Switch - L3 - smart - 48 x 10/100/1000 (PoE+) + 4 x 10 Gigabit SFP+
- rack-mountable - PoE+ (370 W)

The D-Link DGS-1510 Series is the advanced generation of Smart Managed switches with 10G capability. The PoE-capable switches provide additional flexibility for businesses looking to power IP phones, wireless access points, or IP cameras using existing network infrastructure. The combination of high bandwidth connections and PoE support make the DGS-1510 Series ideal for Small-Medium Enterprise (SME) and Small-Medium Business (SMB) environments.



Key Selling Points

- 10G SFP+ stacking/uplink ports
- Layer 3 traffic management
- Extensive Layer 2 features
- Traffic classification & QoS
- Keep your network secure
- IPv6 ready

Product Features

10G SFP+ stacking/uplink ports

The two SFP+ ports of the DGS-1510 Series switches allow users to create a physical stack of up to 6 units in a fault-tolerant ring or linear topology using Direct Attach Cables (DACs) or any compatible SFP+ transceiver. This creates a total of 288 Gigabit ports, ensuring high bandwidth while staying cost-efficient. Meanwhile, the remaining uplink ports can be used for other functions, such as connecting to a larger network. Users can also easily configure and manage any of the DGS-1510 Series Smart Managed switches in a single stack. With 20 Gbps full-duplex capabilities, the DGS-1510 Series offers 10G connectivity to core networks and servers while still maintaining fast data transfer rates.

Layer 3 traffic management

The DGS-1510 Series provides static routing, allowing you to segment your network into workgroups that communicate between VLANs and increase application performance. With these capabilities, you can reduce the load on your core devices, allowing you to create a scalable and efficient network.

Extensive Layer 2 features

The DGS-1510 Series switches are equipped with a complete line-up of Layer 2 features, including IGMP Snooping, Port Mirroring, Spanning Tree, and Link Layer Discovery Protocol (LLDP). The IEEE 802.3x Flow Control function allows servers to directly connect to the switch for fast, reliable data transfer. Network maintenance features include Loopback Detection and Cable Diagnostics. Loopback Detection automatically detects and shuts down loops created by a specific port or VLAN. The Cable Diagnostics feature, designed primarily for administrators and customer service representatives, can determine cable quality and can quickly discover sections of cabling that need to be replaced.

Traffic classification & QoS

The DGS-1510 Series supports Auto Surveillance VLAN (ASV) and Auto Voice VLAN, which are suited for VoIP and video surveillance deployments. Auto Surveillance VLAN is an advanced technology built into D-Link Smart switches. This technology consolidates data and surveillance video transmissions through a single DGS-1510 Series Smart Managed switch, saving businesses the costs of maintaining expensive dedicated hardware and infrastructure. ASV also ensures the quality of real-time video for monitoring and control without compromising the transmission of conventional network data by giving ASV traffic priority over other packets.

Keep your network secure

D-Link's innovative Safeguard Engine protects the DGS-1510 Series against traffic flooding caused by malicious attacks. The DGS-1510 Series supports both MAC and web-based access control. This gives network administrators multiple authentication options, reducing deployment times and removing the need for client software. The DGS-1510 Series supports IEEE 802.1X port-based authentication, allowing network users to be authenticated through external RADIUS servers. The Address Resolution Protocol (ARP) Spoofing Prevention feature helps to prevent attacks that may allow an intruder to intercept users' traffic while the DHCP Server Screening feature screens rogue DHCP server packets from user ports to prevent unauthorized IP assignment.

IPv6 ready

The DGS-1510 Series is IPv6 ready and supports various IPv6 functions such as MLD Snooping, IPv6 security features, and IPv6 Quality of Service (QoS), ensuring seamless integration with next generation networks. The DGS-1510 Series also supports IPv4/v6 dual stack functionality, which allows the switches to act as a bridge between IPv4 and IPv6 networks.

Main Specifications

Product Description	D-Link DGS 1510-52XMP - switch - 48 ports - smart - rack-mountable
Device Type	Switch - 48 ports - L3 - smart - stackable

Enclosure Type	Rack-mountable 1U
Subtype	Gigabit Ethernet
Ports	48 x 10/100/1000 (PoE+) + 4 x 10 Gigabit SFP+
Power Over Ethernet (PoE)	PoE+
PoE Budget	370 W
Performance	Switching capacity: 176 Gbps ; Forwarding performance: 130.95 Mpps
Capacity	VLAN groups: 4094 ; Static ARP entries: 256
MAC Address Table Size	16K entries
Jumbo Frame Support	9216 bytes
Routing Protocol	IGMPv2, IGMP, static IP routing, IGMPv3, MLDv2, MLD
Remote Management Protocol	SNMP 1, RMON 1, Telnet, SNMP 3, SNMP 2c, SSH-2, CLI
Features	Flow control, auto-negotiation, ARP support, auto-uplink (auto MDI/MDI-X), IGMP snooping, DoS attack prevention, port mirroring, store and forward, Broadcast Storm Control, half duplex mode, full duplex mode, Multicast Storm Control, Unicast Storm Control, sFlow, Spanning Tree Protocol (STP) support, Rapid Spanning Tree Protocol (RSTP) support, Multiple Spanning Tree Protocol (MSTP) support, DHCP snooping, Access Control List (ACL) support, Quality of Service (QoS), MLD snooping, Dynamic ARP Inspection (DAI), reset button, LLDP support, DHCP relay, Link Aggregation Control Protocol (LACP), Port Security, SNMP trap, DHCP client, Dynamic VLAN Support (GVRP), dual firmware images, Strict Priority Queuing (SPQ), Multicast filtering function, TFTP client, Ethernet Ring Protection Switching (ERPS), 4 fans, 3MB packet buffer, cable test, system log, IP source guard, Deficit Round Robin (DRR), Bridge protocol data unit (BPDU), Internet Control Message Protocol (ICMP), Network Timing Protocol (NTP), Authentication, Authorization and Accounting (AAA), Web-based Access Control (WAC), LLDP-MED, Weighted Round Robin (WRR), Head-of-line (HOL) Blocking Prevention, loopback detection
Compliant Standards	IEEE 802.3, IEEE 802.3u, IEEE 802.1D, IEEE 802.1Q, IEEE 802.3ab, IEEE 802.1p, IEEE 802.3af, IEEE 802.3x, IEEE 802.3ad (LACP), IEEE 802.1w, IEEE 802.1x, IEEE 802.3ae, IEEE 802.1s, IEEE 802.1ab (LLDP), IEEE 802.3at
Power	AC 120/230 V (50/60 Hz)
Dimensions (WxDxH)	44 cm x 30.8 cm x 4.4 cm
Weight	5.41 kg

Extended Specification

General

Device Type	Switch - 48 ports - L3 - smart - stackable
Enclosure Type	Rack-mountable 1U
Subtype	Gigabit Ethernet
Ports	48 x 10/100/1000 (PoE+) + 4 x 10 Gigabit SFP+
Power Over Ethernet (PoE)	PoE+
PoE Budget	370 W
Performance	Switching capacity: 176 Gbps Forwarding performance: 130.95 Mpps
Capacity	VLAN groups: 4094 Static ARP entries: 256
MAC Address Table Size	16K entries
Jumbo Frame Support	9216 bytes
Max Units In A Stack	6
Routing Protocol	IGMPv2, IGMP, static IP routing, IGMPv3, MLDv2, MLD
Remote Management Protocol	SNMP 1, RMON 1, Telnet, SNMP 3, SNMP 2c, SSH-2, CLI

Encryption Algorithm	SSL,TLS,SSL 3.0,SSL 2.0,PEAP,TTLS
Authentication Method	RADIUS,TACACS+,Secure Shell v.2 (SSH2),Extensible Authentication Protocol (EAP)
Features	Flow control,auto-negotiation,ARP support,auto-uplink (auto MDI/MDI-X),IGMP snooping,DoS attack prevention,port mirroring,store and forward,Broadcast Storm Control,half duplex mode,full duplex mode,Multicast Storm Control,Unicast Storm Control,sFlow,Spanning Tree Protocol (STP) support,Rapid Spanning Tree Protocol (RSTP) support,Multiple Spanning Tree Protocol (MSTP) support,DHCP snooping,Access Control List (ACL) support,Quality of Service (QoS),MLD snooping,Dynamic ARP Inspection (DAI),reset button,LLDP support,DHCP relay,Link Aggregation Control Protocol (LACP),Port Security,SNMP trap,DHCP client,Dynamic VLAN Support (GVRP),dual firmware images,Strict Priority Queuing (SPQ),Multicast filtering function,TFTP client,Ethernet Ring Protection Switching (ERPS),4 fans,3MB packet buffer,cable test,system log,IP source guard,Deficit Round Robin (DRR),Bridge protocol data unit (BPDU),Internet Control Message Protocol (ICMP),Network Timing Protocol (NTP),Authentication,Authorization and Accounting (AAA),Web-based Access Control (WAC),LLDP-MED,Weighted Round Robin (WRR),Head-of-line (HOL) Blocking Prevention,loopback detection
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Status Indicators	Power,error,fan,link/activity/speed,stack

Expansion / Connectivity

Interfaces	48 x 1000Base-T RJ-45 PoE+ - 30 W 4 x 10GBase-X SFP+ 1 x console RJ-45 management
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Power

Power Device	Internal power supply
Voltage Required	AC 120/230 V (50/60 Hz)
Power Consumption Operational	486.9 Watt

Miscellaneous

MTBF	303,027 hours
Compliant Standards	VCCI,C-Tick,BSMI,cUL,CB,FCC

Dimensions &Weight

Width	44 cm
Depth	30.8 cm
Height	4.4 cm
Weight	5.41 kg

Environmental Parameters

Min Operating Temperature	-5 °C
Max Operating Temperature	50 °C
Humidity Range Operating	0 - 95% (non-condensing)
Min Storage Temperature	-20 °C
Max Storage Temperature	70 °C
Humidity Range Storage	0 - 95% (non-condensing)