



Dell Networking X-Series

1/10GbE switches with an intuitive GUI designed to optimize cloud and onsite network applications

The Dell Networking X-Series is a family of smart managed 1GbE and 10GbE Ethernet switches designed for small and medium businesses who crave enterprise-class network control fused with consumer-like ease. X-Series switches have a variety of port counts, PoE options and deployment choices. Setup and management are greatly simplified with an intuitive GUI and hardware design. A broad set of models means deploying capacity on your terms, including the compact 8-port unit designed for desk, wall or ceiling mounting with a smart design.

Practical innovations for small networks

Powerful tools inside an elegant interface with app-like functionality make X-Series switches a pleasure to use. Familiar commands and alerts similar to PCs and servers means there is less jargon to learn and more knowledge to gain. Connect, auto-configure, and power VoIP phones and wireless access points with PoE options.

Sleek navigation with efficient and instinctual work flow

The design of everything from navigation and clicks to menu structures and help tips was inspired by the way IT pros think and work. Streamlined tools, step-by-step wizards and a concise, informative dashboard make switch configuration and calibration fast and accurate. Common tasks, alerts, port status and network visualization are on one beautiful dashboard screen.

Unmatched traffic visibility and real-time control

Optimize cloud services and onsite network applications with security and traffic priority features. See network traffic and move from monitoring to resolving in one continuous sequence. Unique multi-port selection for batch routines plus port profiles for common devices eliminate extra steps and configuration errors.

Key features

- Layer 2+ 1 GbE and 10GbE switch family with optional Power over Ethernet (PoE/PoE+) support
 - » Compact, fanless 1GbE 8-port switch
 - » 1GbE 8-port PoE-powered compact design for flexible office placement (non-PoE model)
 - » Half rack width 26- and 18-port switches with two 1GbE SFP uplink ports
 - » Rack width 52-port switches with four 10GbE SFP+ uplink ports
 - » 10GbE 12-port model for high-speed server and storage connect, or network aggregation
- Revolutionary GUI design for ease of setup and “actionable monitoring”
 - » Powerful tools inside an elegant interface with app-like functionality
 - » Streamlined tools, step-by-step wizards and a customizable dashboard
 - » Common tasks, alerts, port status and network visualization on a single dashboard
 - » Optimize cloud services and onsite network applications with security and traffic priority features
 - » See network traffic and move from monitoring to resolving in one continuous sequence
 - » Multi-port selection for batch routines and port profiles for common devices eliminate extra steps and configuration errors
- Tandem rack tray accommodates two half rack-width switches in 1RU
- Dell Fresh Air 2.0 capable performance with energy-efficient operation
- Locking plug and console port

Legend: **S** — Standard, **OA** — Option Available, **N** — Not Available

Port attributes	X1008/P	X1018/P	X1026/P	X1052/P	X4012
10/100/1000Base-T auto-sensing GbE switching	8	16	24	48	N
SFP 1Gb fiber ports	N	2	2	N	N
SFP+ 10Gb fiber ports	N	N	N	4	12
Power over Ethernet (PoE) ports	8 PoE, up to 123W total (X1008P)	16 PoE, up to 246W total (X1018P)	24 PoE/PoE+, up to 369W total (X1026P)	24 PoE/PoE+, up to 369W total (X1052P)	N
PoE powered	S (X1008)	N	N	N	N
Power reduction for short cables or inactive connections	S	S	S	S	N
Autonegotiation for speed, duplex mode and flow control	S	S	S	S	N
Auto-MDI/MDIX mode and flow control	S	S	S	S	N
Performance	X1008/P	X1018/P	X1026/P	X1052/P	X4012
Switch fabric capacity	Up to 16Gbps	Up to 36Gbps	Up to 52Gbps	Up to 176Gbps	Up to 240Gbps
Forwarding rate	11.9Mpps	26.8Mpps	38.7Mpps	131Mpps	178.6Mpps
MAC addresses	16K	16K	16K	16K	16K
Packet buffer memory	8Mb	8Mb	8Mb	8Mb	8Mb
Quality of service	X1008/P	X1018/P	X1026/P	X1052/P	X4012
Priority queues per port	4	4	4	8	8
Management	X1008/P	X1018/P	X1026/P	X1052/P	X4012
Limited SNMP monitoring and CLI management — See User Guide for details	S	S	S	S	Full SNMP monitoring
Chassis	X1008/P	X1018/P	X1026/P	X1052/P	X4012
Dimensions (H x W x D)	1.67 in x 5.95 in x 5.95 in (42.5 mm x 151.13 mm x 151.13 mm)	X1018: 1.62 in x 8.23 in x 9.84 in (41.25 mm x 209.0 mm x 250.0 mm) X1018P: 1.62 in x 8.23 in x 17.72 in (41.25 mm x 209.0 mm x 450.0 mm)	X1026: 1.62 in x 8.23 in x 9.84 in (41.25 mm x 209.0 mm x 250.0 mm) X1026P: 1.62 in x 8.23 in x 17.72 in (41.25 mm x 209.0 mm x 450.0 mm)	X1052: 1.71 in x 17.1 in x 10.63 in (43.5 mm x 434.0 mm x 270.0 mm) X1052P: 1.71 in x 17.1 in x 16.0 in (43.5 mm x 434.0 mm x 407.0 mm)	1.62 in x 8.23 in x 9.84 in (41.25 mm x 209.0 mm x 250.0 mm)
Rack mount	N	1RU, half width	1RU, half width	1RU	1RU, half width
Unit weight	X1008: 0.80 Kg X1008P: 0.83 Kg	X1018: 1.76 Kg X1018P: 3.21 Kg	X1026: 1.88 Kg X1026P: 3.80 Kg	X1052: 3.80 Kg X1052P: 6.00 Kg	2.03 Kg
Fans	Fanless design	X1018: Fanless design X1018P: 2 (rear)	X1026: Fanless design X1026P: 2 (rear)	X1052: 2 (rear) X1052P: 4 (rear)	2 (rear)
Environmental operating conditions	X1008/P	X1018/P	X1026/P	X1052/P	X4012
100% lead-free	Yes	Yes	Yes	Yes	Yes
Operating temperature	32° to 122°F (0° to 50°C)	32° to 122°F (0° to 50°C)	32° to 122°F (0° to 50°C)	32° to 122°F (0° to 50°C)	32° to 122°F (0° to 50°C)
Storage temperature	-4° to 158° F (-20° to 70°C)	-4° to 158° F (-20° to 70°C)	-4° to 158°F (-20° to 70°C)	-4° to 158° F (-20° to 70°C)	-4° to 158° F (-20° to 70°C)
Operating relative humidity	10% to 90% non-condensing	10% to 90% non-condensing	10% to 90% non-condensing	10% to 90% non-condensing	10% to 90% non-condensing
Storage relative humidity	10% to 80% non-condensing	10% to 80% non-condensing	10% to 80% non-condensing	10% to 80% non-condensing	10% to 80% non-condensing
Acoustic (max dB @ 50°C)	N	X1018: N X1018P: 54.6	X1026: N X1026P: 55.3	X1052: 56.7 X1052P: 58.2	55.6
Power	X1008/P	X1018/P	X1026/P	X1052/P	X4012
Power supply	X1008: 24W (external) X1008P: 150W (external)	X1018: 40W X1018P: 280W	X1026: 40W X1026P: 450W	X1052: 100W X1052P: 525W	100W
Power (max)	X1008: 9.9W X1008P: 141.8W	X1018: 14.7W X1018P: 289.9W	X1026: 17.5W X1026P: 452.8W	X1052: 60.2W X1052P: 475W	41.7W
Power (BTU/hr)	X1008: 33.7 X1008P: 484.1	X1018: 50.2 X1018P: 990	X1026: 59.8 X1026P: 1564.3	X1052: 205.2 X1052P: 1620.8	142.2



Port attributes

Supports Virtual Cable Diagnostics by Marvell™ and fiber transceiver diagnostics

Integrated LEDs for improved visual monitoring and analysis

VLAN

Supports up to 4096 port-based VLANs. Honors all 4096 VLAN tags

Quality of service

Honor 802.1p values and honor IP DSCP values

Supports strict priority and configurable weighted round robin (WRR) scheduling across queues

Link aggregation

Industry-standard link aggregation adhering to IEEE 802.3ad standards (static and dynamic, LACP)

Supports 12 link aggregation groups and up to 4 ports per group

Management

Local password and restricted IP addresses

Port mirroring

Internal DHCP Server

DHCP client support

Port statistics available through industry-standard RMON

Jumbo frame support for packets up to 9,000 bytes

Broadcast storm control

Uploadable switch software via web GUI

Uploadable configurations via web GUI

Configurable as web-managed switch

IEEE standards support

IEEE 802.1D	Spanning Tree, GARP and GVRP
IEEE 802.1p	Traffic Prioritization
IEEE 802.1Q	VLAN Trunking
IEEE 802.1w	Rapid Spanning Tree Protocol
IEEE 802.1S	Multiple Spanning Tree Protocol
IEEE 802.1t	IEEE802.1D maintenance
IEEE 802.1v	VLAN Classification by Protocol & Port
IEEE 802.1x	Port Based Network Access Control
IEEE 802.3	10 Mbps Ethernet
IEEE 802.3i	10base -T
IEEE 802.3u	100Base-T Ethernet
IEEE 802.3z	1000 Mbps Ethernet
IEEE 802.3ab	1000Base-T
IEEE 802.3ac	Frame extension for VLAN tags
IEEE 802.3ad	Link Aggregation Control Protocol
IEEE 802.3ae	10 Gig Ethernet
IEEE 802.2	
IEEE 802.3x	
IEEE 802.3i	
IEEE 802.1v	VLAN Classification by Protocol & Port
IEEE 802.1ab	LLDP
ANSI/TIA-1057-2006	LLDP-MEDW

IETF standards supported

RFC 768	UDP
RFC 783	TFTP v2
RFC 791	IP
RFC 792	ICMP
RFC 793	TCP
RFC 813	Window & Ack Strategy
RFC 879	TCP Max. Segment Size Etc
RFC 896	IP/TCP Congestion Control
RFC 826	ARP
RFC 854	Telnet
RFC 855	Telnet Option Specification
RFC 856	Telnet Binary Transmission

RFC 858	Telnet Suppress Go-Ahead option
RFC 894	IP over Ethernet Frames
RFC 919	Broadcast Ethernet Frames
RFC 922	Broadcast Ethernet Frames with Subnets
RFC 920	Domain Requirements
RFC 950	Internet Standard subnetting procedure
RFC 951	Bootp
RFC 1027	Using ARP to implement transparent subnet gateways
RFC 1042	A Standards for transmission of IP datagrams over IEEE 802 Networks
RFC 1071	Computing the Internet Checksum
RFC 1112	Internet Gateway Management Protocol (IGMP) V1
RFC 1123	Requirements for Internet Hosts
RFC 1141	Incremental Updating of the Internet Checksum
RFC 1155	Structure and Identification of Management Information (SMI)
RFC 1157	Simple Network Management Protocol (SNMP) version 1
RFC 1350	Trivial File Transfer Protocol (TFTP) Rev. 2
RFC 1518	CIDR-ARCH
RFC 1519	CIDR-STR
RFC 1533	DHCP options and BOOTP vendor extensions
RFC 1541	Dynamic Host Configuration Protocol (DHCP)
RFC 1542	Clarifications and Extensions for the Bootstrap Protocol
RFC 1612	DNS Client
RFC 1624	Computation of Internet Checksum via Incremental update
RFC 1700	Assigned Numbers
RFC 1812	Requirements for IP version 4 routers
RFC 1867	Form-based File Upload in HTML
RFC 2030	Simple Network Time Protocol (SNTP) Version 4 for IPv4, IPv6 and OSI
RFC 2131	Dynamic Host Configuration Protocol
RFC 2132	DHCP Options and BootP vendor Extensions
RFC 2236	IGMP version 2
RFC 2246	TLS protocol, version 1.0
RFC 2284	PPP Extensible Authentication Protocol, EAP, March 1998
RFC 2616	HTTP/1.1
RFC 2818	HTTP Transfer Protocol -- Hypertext Transfer Protocol --
RFC 2865	Radius
RFC 2866	Radius Accounting
RFC 2867	RADIUS Tunnel Accounting
RFC 2868	RADIUS Tunnel Authentication
RFC 2869	Attributes
RFC 2925	RADIUS Extensions
RFC 2933	Definitions of Managed Objects for Remote Ping Traceroute, and Lookup
RFC 3069	Operations
RFC 3164	IGMP MIB
RFC 3376	VLAN Aggregation for efficient IP Address allocation
RFC 3580	BSD Syslog Protocol

IETF Internet drafts

draft-ietf-hubmib-etherif-mib-v3-00.txt	Will obsolete RFC 2665
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IETF standards mManagement support

RFC 1212	MIB Definition
RFC 1213	MIB II
RFC 1215	Standard Traps
RFC 1286	Bridge MIB
RFC 1442	SMIPv2 (SNMPv2 MIB)

RFC 1451	Manager-to-Manager MIB
RFC 1493	Definitions of Managed Objects for Bridges
RFC 1573	Evolution of Interfaces
RFC 1643	Etherlike MIB
RFC 1757	Remote Network Monitoring (RMON) MIB
RFC 1901	Community based SNMPv2
RFC 1907	SNMP v2 MIB
RFC 2011	Internet Protocol (IP) MIB using SMIPv2
RFC 2012	Transmission Control Protocol (TCP) MIB using SMIPv2
RFC 2013	User Datagram Protocol (UDP) MIB using SMIPv2
RFC 2233	Interfaces Group using SMIPv2
RFC 2358	Etherlike
RFC 2576	Coexistence between Version 1, Version 2, and Version 3 of the Internet-standard Network Management Framework
RFC 2579	Textual Conventions for SMIPv2
RFC 2580	Conformance Statements for SMIPv2
RFC 2618	RADIUS MIB
RFC 2665	Ethernet-like Interface Types MIB
RFC 2666	Identification of Ethernet Chip sets
RFC 2674	MIB for Bridge with Traffic Classes, Multicast Filtering and VLAN Extension (IEEE802.1p/q MIB)
RFC 2737	ENTITY-MIB
RFC 2819	RMON MIB
RFC 2863	Interface Evolution
RFC 3410	Applicability Statements for SNMP
RFC 3411	An Architecture for Describing Simple Network Management Protocol (SNMP) Management Frameworks
RFC 3412	Message Processing and Dispatching for the Simple Network Management Protocol (SNMP)
RFC 3413	Simple Network Management Protocol (SNMP) Applications
RFC 3414	User-based Security Model (USM) for version 3 of the Simple Network Management Protocol (SNMPv3)
RFC 3415	View-based Access Control Model (VACM) for the Simple Network Management Protocol (SNMP)
RFC 3584	Coexistence between Version 1, Version 2, and Version 3 of SNMP
RFC 4330	Simple Network Time Protocol (SNTP) Version 4 for IPv4, IPv6 and OSI
	draft-ietf-magma-snoop-01.txt
	draft-ietf-syslog-device-mib-01.txt
	draft-ietf-bridge-8021x-03.txt

IETF standard SNMP traps supported

RFC 1157	linkDown, linkUp, authentication Failure, coldstart, ...Traps
RFC 1215	Standard Traps
RFC 1493	newRoot, topologyChange Traps
RFC 3416	Version 2 of the Protocol Operations for the Simple Network Management Protocol (SNMP)
RFC 3417	Transport Mappings for SNMP
RFC 3418	MIB for SNMP

IEEE MIB support

LAG MIB	Support for 802.3ad functionality
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OEM friendly

With an easy to remove Dell badge, your networking device can look as if it was designed by you. Details at Dell.com/OEM.

Lifetime Limited Warranty

Dell Networking X-series switches are backed by an industry-leading, lifetime warranty guaranteeing Basic Hardware Service. X-series switches not only provide the quality, reliability and capability you expect from Dell, but also peace of mind that comes with a true lifetime warranty. Details at Dell.com/lifetimewarranty.

For more information, visit Dell.com/Networking.

