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.

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.

Key features

- Layer 2+1 GbE and 10GbE switch family with optional Power over Ethernet (PoE/PoE+) support
  - Compact, fanless 1GbE 8, 18, and 26 port switches
  - PoE-powered 8-port switch for flexible office placement (non-PoE model)
  - Half rack width 26- and 18-port switches with two dedicated 1GbE SFP uplink ports
  - Rack width 52-port switches with four dedicated 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 (available in 2H15)
- Dell Fresh Air 2.0 capable performance with energy-efficient operation
- Patented locking plug and console port
### Port attributes

<table>
<thead>
<tr>
<th></th>
<th>X1008/P</th>
<th>X1018/P</th>
<th>X1026/P</th>
<th>X1052/P</th>
<th>X4012</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/100/1000Base-T auto-sensing GbE switching</td>
<td>8</td>
<td>16</td>
<td>24</td>
<td>48</td>
<td>N</td>
</tr>
<tr>
<td>SFP/SFP+ fiber ports</td>
<td>N</td>
<td>2 SFP</td>
<td>2 SFP</td>
<td>4 SFP/SFP+</td>
<td>12 SFP/SFP+</td>
</tr>
<tr>
<td>Power over Ethernet (PoE) ports</td>
<td>8 PoE, up to 123W total (X1008P)</td>
<td>16 PoE, up to 246W total (X1018P)</td>
<td>24 PoE/PoE+, up to 369W total (X1026P)</td>
<td>24 PoE/PoE+, up to 369W total (X1052P)</td>
<td>N</td>
</tr>
<tr>
<td>PoE powered</td>
<td>S (X1008)</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Power reduction for short cables or inactive connections</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>N</td>
</tr>
<tr>
<td>Autonegotiation for speed, duplex mode and flow control</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>N</td>
</tr>
<tr>
<td>Auto-MDI/MDIX mode and flow control</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>N</td>
</tr>
</tbody>
</table>

### Performance

<table>
<thead>
<tr>
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<th>X1008/P</th>
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<th>X4012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switch fabric capacity</td>
<td>Up to 16Gbps</td>
<td>Up to 36Gbps</td>
<td>Up to 52Gbps</td>
<td>Up to 176Gbps</td>
<td>Up to 240Gbps</td>
</tr>
<tr>
<td>Forwarding rate</td>
<td>11.9Mpps</td>
<td>26.8Mpps</td>
<td>38.7Mpps</td>
<td>131Mpps</td>
<td>178.6Mpps</td>
</tr>
<tr>
<td>MAC addresses</td>
<td>16K</td>
<td>16K</td>
<td>16K</td>
<td>16K</td>
<td>32K</td>
</tr>
<tr>
<td>Packet buffer memory</td>
<td>1MB</td>
<td>1MB</td>
<td>1MB</td>
<td>1MB</td>
<td>1MB</td>
</tr>
</tbody>
</table>

### Quality of service

<table>
<thead>
<tr>
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<th>X1052/P</th>
<th>X4012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority queues per port</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

### Management

<table>
<thead>
<tr>
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<th>X1052/P</th>
<th>X4012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web GUI interface and SNMP monitoring; limited CLI</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
</tr>
</tbody>
</table>

### Chassis

<table>
<thead>
<tr>
<th></th>
<th>X1008/P</th>
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<th>X1052/P</th>
<th>X4012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (H x W x D)</td>
<td>1.67 in x 5.95 in x 5.95 in (42.5 mm x 151.13 mm x 151.13 mm)</td>
<td>X1018: 1.62 in x 8.23 in x 9.84 in (41.25 mm x 209.0 mm x 250.0 mm)</td>
<td>X1026P: 1.62 in x 8.23 in x 9.84 in (41.25 mm x 209.0 mm x 450.0 mm)</td>
<td>X1052: 1.71 in x 17.1 in x 10.63 in (43.5 mm x 434.0 mm x 270.0 mm)</td>
<td></td>
</tr>
<tr>
<td>Rack mount</td>
<td>N</td>
<td>1RU, half width</td>
<td>1RU, half width</td>
<td>1RU</td>
<td>1RU, half width</td>
</tr>
<tr>
<td>Unit weight</td>
<td>X1008: 0.80 Kg</td>
<td>X1018: 1.76 Kg</td>
<td>X1026: 1.88 Kg</td>
<td>X1052: 3.80 Kg</td>
<td>2.03 Kg</td>
</tr>
<tr>
<td>Fans</td>
<td>Fanless design</td>
<td>X1018P: 2 (rear)</td>
<td>X1026: Fanless design</td>
<td>X1052P: 4 (rear)</td>
<td>Fanless design</td>
</tr>
<tr>
<td>Environmental operating conditions</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>0° to 50°C (32° to 122°F)</td>
<td>0° to 50°C (32° to 122°F)</td>
<td>0° to 50°C (32° to 122°F)</td>
<td>0° to 50°C (32° to 122°F)</td>
<td>0° to 50°C (32° to 122°F)</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-20° to 70°C (-4° to 158°F)</td>
<td>-20° to 70°C (-4° to 158°F)</td>
<td>-20° to 70°C (-4° to 158°F)</td>
<td>-20° to 70°C (-4° to 158°F)</td>
<td>-20° to 70°C (-4° to 158°F)</td>
</tr>
<tr>
<td>Operating relative humidity</td>
<td>10% to 90% non-condensing</td>
<td>10% to 90% non-condensing</td>
<td>10% to 90% non-condensing</td>
<td>10% to 90% non-condensing</td>
<td>10% to 90% non-condensing</td>
</tr>
<tr>
<td>Storage relative humidity</td>
<td>10% to 80% non-condensing</td>
<td>10% to 80% non-condensing</td>
<td>10% to 80% non-condensing</td>
<td>10% to 80% non-condensing</td>
<td>10% to 80% non-condensing</td>
</tr>
<tr>
<td>Acoustic (max dB @ 50°C)</td>
<td>N</td>
<td>X1018: N</td>
<td>X1026: N</td>
<td>X1052: 56.7</td>
<td>55.6</td>
</tr>
</tbody>
</table>

### Power

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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Power (max)</td>
<td>X1008: 9.9W</td>
<td>X1018P: 141.9W</td>
<td>X1018: 14.7W</td>
<td>X1026P: 289.9W</td>
<td>X1026: 17.5W</td>
</tr>
<tr>
<td>Power (BTU/hr)</td>
<td>X1008: 33.7</td>
<td>X1018P: 484.1</td>
<td>X1018: 50.2</td>
<td>X1026P: 990</td>
<td>X1026: 59.8</td>
</tr>
</tbody>
</table>

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

- RFC 768: UDP
- RFC 783: RTP
- RFC 791: IP
- RFC 792: ICMP
- RFC 793: TCP
- RFC 813: Window & Ack Strategy
- RFC 879: TCP Max. Segment Size etc
- RFC 896: IP/ICMP 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: Broadband Ethernet Frames
- RFC 922: Broadband Ethernet Frames with Subnets
- RFC 920: Domain Requirements
- RFC 950: Internet-standard subnetworking 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
- 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-TRIA
- 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 1622: DNS Cache
- RFC 1624: Computation of Internet Checksum via Incremental update
- RFC 1700: Assigned Numbers
- RFC 1712: Requirements for DHCP version 4 routers
- RFC 1867: Form-based File Upload in HTML
- RFC 2131: Dynamic Host Configuration Protocol
- RFC 2132: DHCP Options and BootP-vendor Extensions
- RFC 2236: IGMPv2 snooping
- RFC 2246: TLS protocol, version 1.0
- RFC 2666: Hypertext Transfer Protocol -- HTTP/1.1
- RFC 2818: HTTP Over TLS
- RFC 2865: Radius
- RFC 2866: Radius Accounting
- RFC 2867: RADIUS Tunnel Accounting
- RFC 2868: RADIUS Tunnel Authentication
- RFC 2869: RADIUS Extensions
- RFC 2925: Definitions of Managed Objects for Remote Ping Traceroute, and Lookup Operations
- RFC 2933: IGMP MIB
- RFC 3069: VLAN Aggregation for efficient IP Address allocation
- RFC 3164: BSD Syslog Protocol
- RFC 3376: IGMPv3 snooping
- RFC 3580: RADIUS

IETF standards Management support

- RFC 1212: MB Definition
- RFC 1213: MIB II
- RFC 1215: Standard Traps
- RFC 1286: Bridge MIB
- RFC 1442: SMIPv2 (SNMPv2-MIB)
- RFC 1451: Manager-to-MIB Manager
- 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 SNMPv2
- RFC 2012: Transmission Control Protocol (TCP) MIB using SNMPv2
- RFC 2013: User Datagram Protocol (UDP) MIB using SNMPv2
- RFC 2233: Interfaces Group using SNMPv2
- 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 SNMPv2
- RFC 2580: Conformance Statements for SNMPv2
- 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 (IEEE802.1Q MIB)
- RFC 2737: ENTITY-MIB
- RFC 2819: RMON MIB
- RFC 2863: Interface Evolution
- RFC 3410: Applicability Statements for SNMPv3
- RFC 3412: Message Processing and Dispatching for the Simple Network Management Protocol (SNMP)
- RFC 3413: Simple Network Management Protocol (SNMP) Applications
- RFC 3415: View-based Access Control Model (VACM) for the Simple Network Management Protocol (SNMPv3)
- RFC 3584: Coexistence between Version 1, Version 2, and Version 3 of SNMP
- RFC 4331: draft-ietf-magma-snoop-01.txt
- RFC 4332: draft-ietf-syslog-device-mib-01.txt
- RFC 4333: draft-ietf-bridgelog-02.txt

IETF standard SNMP traps supported

- RFC 1157: linkDown, linkUp, linkStatus, authentication Failure, coldStart, …Traps
- RFC 1215: Standard Traps
- RFC 1493: newRoot, topologyChange
- RFC 3417: Transport Mappings for SNMP
- RFC 3418: MIB for SNMP

IEEE MIB support

- LAG MIB: Support for 802.3ad functionality

OE&M 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.