Datasheet

HP ProCurve Switch 1800 Series

The HP ProCurve Switch 1800 Series consists of two Gigabit, fanless, Web-managed switches that are ideal for deployment in open offices that require silent operation. The HP ProCurve Switch 1800-24G is a 24-port 10/100/1000 switch with two dual-personality ports for RJ-45 10/100/1000 or mini-GBIC fiber Gigabit connectivity. The HP ProCurve Switch 1800-8G is a small form factor, 8-port 10/100/1000 switch. The ProCurve Switch 1800 Series enables increased network capabilities and control versus unmanaged switches, with support for fundamental networking protocols such as trunking and VLANs. Both switches are managed through an intuitive Web interface. The ProCurve Switch 1800 Series is ideal for businesses making the transition from unmanaged connectivity to managed networks without added cost or complexity.
Features and benefits

Industry-leading warranty

- **Connectivity**
  - Jumbo packet support: to improve performance of large data transfers

- **Resiliency and high availability**
  - IEEE 802.3ad Link Aggregation Control Protocol (LACP): provides link-level redundancy with support for up to 4 trunks on the HP ProCurve Switch 1800-8G and 12 trunks on the HP ProCurve Switch 1800-24G, each with up to 8 links (ports) per trunk

- **Layer 2 switching**
  - VLAN support and tagging: support up to 64 port-based VLANs and dynamic configuration of IEEE 802.1Q VLAN tagging, providing security between workgroups

- **Security**
  - Management password: provides security so that only authorized access to the Web browser interface is allowed

- **Quality of Service (QoS)**
  - Traffic prioritization: honors priority of traffic based on IEEE 802.1p to deliver data to devices based on the priority and type of traffic
  - Broadcast control: allows limitation of broadcast traffic rate to cut down on unwanted broadcast traffic on the network

- **Ease of use**
  - Comprehensive LED display with per-port indicators: provides an at-a-glance view of status, activity, speed, and full-duplex operation
  - ProCurve/IEEE Auto-MDIX: automatically adjusts for straight-through or crossover cables on all 10/100/1000 ports

- **Flexibility**
  - Small form factor: ideal for desktop use; space-efficient for deployment flexibility (1800-8G switch only)
  - Designed with no fan: enables quiet operation for deployment in open spaces

- **Warranty and support**
  - ProCurve Lifetime Warranty: for as long as you own the product, with next-business-day advance replacement (available in most countries).
  - Electronic and telephone support: limited electronic and telephone support is available from HP. Refer to the HP Web site at www.procurve.com/support for details on the support provided and the period during which support is available.
  - Software releases: refer to the HP Web site at www.procurve.com/support for details on the software releases provided and the period during which software releases are available.

Ease of use

- Port mirroring: enables traffic on a port to be simultaneously sent to a network analyzer for monitoring

Manageability

- Intuitive Web interface: enables simple management via an easy-to-use Web browser interface for switch configuration, monitoring, and administration

- Integration with HP ProCurve Manager: enables discovery and mapping via ProCurve Manager, available as a free download from the Web

• For as long as you own the product, with next-business-day advance replacement (available in most countries). The following hardware products and their related series modules have a one-year hardware warranty with extensions available: HP ProCurve Routing Switch 9300m Series, HP ProCurve Switch 8100fl Series, and HP ProCurve Network Access Controller 800. The following hardware mobility products have a one-year hardware warranty with extensions available: HP ProCurve M111 Client Bridge, HP ProCurve MSM3xx-R Access Points, HP ProCurve MSM7xx Mobility and Access Controllers, HP ProCurve RF Manager IDS/IPS Systems, HP ProCurve MSM Power Supplies, HP ProCurve 1-Port Power Injector, and HP ProCurve CNMS Appliances. Disk drives in the HP ProCurve ONE Services 2 Modules have a five-year hardware warranty. Standalone software, upgrades, or licenses may have a different warranty duration. For details, refer to the ProCurve Software License, Warranty, and Support booklet at http://www.procurve.com/warranty.
## HP ProCurve Switch 1800 Series

### Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>HP ProCurve Switch 1800-8G (J9029A)</th>
<th>HP ProCurve Switch 1800-24G (J9028B)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ports</strong></td>
<td>8 auto-sensing 10/100/1000 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3ab Type 1000Base-T); Media Type: Auto-MDIx; Duplex: 10Base-T/100Base-TX: half or full; 1000Base-T: full only</td>
<td>22 auto-sensing 10/100/1000 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3ab Type 1000Base-T); Media Type: Auto-MDIx; Duplex: 10Base-T/100Base-TX: half or full; 1000Base-T: full only</td>
</tr>
<tr>
<td><strong>Physical characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>4.58(d) x 7.73(w) x 1.73(h) in. (11.63 x 19.63 x 4.39 cm) (1U height)</td>
<td>6.74(d) x 17.42(w) x 1.73(h) in. (17.12 x 44.25 x 4.39 cm) (1U height)</td>
</tr>
<tr>
<td>Weight</td>
<td>1.19 lb. (0.54 kg), Fully loaded</td>
<td>4.32 lb. (1.96 kg), Fully loaded</td>
</tr>
<tr>
<td><strong>Memory and processor</strong></td>
<td>1 MB flash, 64 KB SDRAM, 1 MB RAM/ROM capacity; packet buffer size: 144 KB</td>
<td>2 MB flash, 64 KB SDRAM, 2 MB RAM/ROM capacity; packet buffer size: 500 KB</td>
</tr>
<tr>
<td><strong>Mounting</strong></td>
<td>Horizontal surface mounting only</td>
<td>Mounts in an EIA-standard 19 in. telco racks (hardware included)</td>
</tr>
<tr>
<td><strong>Performance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 Mb Latency</td>
<td>&lt; 3.9 µs (64-byte packets)</td>
<td>&lt; 4.7 µs (64-byte packets)</td>
</tr>
<tr>
<td>1000 Mb Latency</td>
<td>&lt; 2.1 µs (64-byte packets)</td>
<td>&lt; 3.0 µs (64-byte packets)</td>
</tr>
<tr>
<td>Throughput</td>
<td>up to 11.9 million pps (64-byte packets)</td>
<td>up to 35.7 million pps (64-byte packets)</td>
</tr>
<tr>
<td>Switching capacity</td>
<td>16 Gbps</td>
<td>48 Gbps</td>
</tr>
<tr>
<td>MAC address table size</td>
<td>8000 entries</td>
<td>8000 entries</td>
</tr>
<tr>
<td><strong>Environment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating temperature</td>
<td>32°F to 104°F (0°C to 40°C)</td>
<td>32°F to 104°F (0°C to 40°C)</td>
</tr>
<tr>
<td>Operating relative humidity</td>
<td>10% to 90% @ 104°F (40°C), non-condensing</td>
<td>10% to 90% @ 104°F (40°C), non-condensing</td>
</tr>
<tr>
<td>Non-operating/Storage temperature</td>
<td>-40°F to 158°F (-40°C to 70°C)</td>
<td>-40°F to 158°F (-40°C to 70°C)</td>
</tr>
<tr>
<td>Non-operating/Storage relative humidity</td>
<td>10% to 90% @ 149°F (65°C), non-condensing</td>
<td>10% to 90% @ 149°F (65°C), non-condensing</td>
</tr>
<tr>
<td>Altitude</td>
<td>up to 10000 ft. (3 km)</td>
<td>up to 10000 ft. (3 km)</td>
</tr>
<tr>
<td>Acoustic</td>
<td>Power: 0 dB no fan</td>
<td>Power: 0 dB no fan</td>
</tr>
<tr>
<td><strong>Electrical characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum heat dissipation</td>
<td>61 BTU/hr (64 kW/hr)</td>
<td>92 BTU/hr (97 kW/hr)</td>
</tr>
<tr>
<td>Voltage</td>
<td>100-240 VAC</td>
<td>100-127 / 200-240 VAC</td>
</tr>
<tr>
<td>Current</td>
<td>0.5 A</td>
<td>0.8 / 0.4 A</td>
</tr>
<tr>
<td>Power consumption</td>
<td>18 W</td>
<td>27 W</td>
</tr>
</tbody>
</table>
### Frequency
- 60 Hz
- 50 / 60 Hz

### Notes
- Maximum power rating is the worst-case theoretical maximum power number with fully loaded PoE, 100% traffic, all ports plugged in, and all modules populated.
- The exact input voltage and frequency rating are determined by the specific power adapter part number ordered. Please select the correct power adapter country option.

### Safety
- CSA 22.2 No. 60950; EN 60950/IEC 60950; UL 60950

### Emissions
- FCC Rules Part 15, Subpart B Class A; EN 55022; VCCI; ICES-003 (Canada)
- CSA 22.2 No. 60950; EN 60950/IEC 60950; UL 60950

### Immunity
- EN 55024, CISPR 24
- ESD EN 61000-4-2
- Radiated EN 61000-4-3
- EFT/Burst EN 61000-4-4
- Surge EN 61000-4-5
- Conducted EN 61000-4-6
- Power frequency magnetic field EN 61000-4-8
- Voltage dips and interruptions EN 61000-4-11
- Harmonics EN 61000-3-2
- Flicker EN 61000-3-3

### Management
- HP ProCurve Manager; Web browser
- HP ProCurve Manager; Web browser

### Notes
- Use only supported genuine ProCurve mini-GBICs with your switch.
- Use only supported genuine ProCurve mini-GBICs with your switch.

### Services
- 3-year, 4-hour onsite, 13x5 coverage for hardware (UE256E)
- 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software support (UE257E)
- 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UE259E)
- Installation with minimum configuration, system-based pricing (U4826E)
- Installation with HP-provided configuration, system-based pricing (U4830E)

### Standards and protocols
- General protocols
  - IEEE 802.1p Priority
  - IEEE 802.1Q VLANs
  - IEEE 802.3ad Link Aggregation Control Protocol (LACP)
- IEEE 802.3x Flow Control
- RFC 1534 DHCP/BOOTP Interoperation
- Network management
  - IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
HP ProCurve Switch 1800 Series accessories

HP ProCurve Manager 2.3 (-)

HP ProCurve Switch 1800-24G (J9028B)

HP ProCurve Gigabit-SX-LC Mini-GBIC (J4858C)
HP ProCurve Gigabit-LX-LC Mini-GBIC (J4859C)
HP ProCurve Gigabit-LH-LC Mini-GBIC (J4860C)
NEW HP ProCurve 1000-BX-D SFP-LC Mini-GBIC (J9142B)
NEW HP ProCurve 1000-BX-U SFP-LC Mini-GBIC (J9143B)

For more information
To learn more about HP ProCurve Networking, please visit ProCurve.com

© 2008 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein. January 2009