ProCurve
Networking by HP

Key features

- Managed Layer 2 feature set
- 10/100 Connectivity with 12 or 24 ports
- Two Gigabit copper or fiber transceiver slots
- Proven reliability
- Industry-leading warranty

Datasheet

HP ProCurve Switch 2500 Series

The HP ProCurve Switch 2500 Series consists of Layer 2 managed 12- and 24-port switches. The switches include two Gigabit transceiver slots for copper or fiber connectivity, including 100Base-FX. The 2512 and 2534 switches have a proven track record of reliability and feature an industry-leading warranty and next-day advance replacement.

HP ProCurve Switch 2500 Series

Features and benefits

Industry-leading warranty

Performance

• **9.6 Gbps switch fabric integrated on chip:** high-performance switch design with a non-blocking architecture

Resiliency and high availability

• **IEEE 802.3ad Link Aggregation Control Protocol (LACP) and ProCurve trunking:** support a single trunk with up to four links (ports)

• **Spanning Tree Protocol (IEEE 802.1D):** provides redundant links while preventing network loops

• **IEEE 802.1w Rapid Convergence Spanning Tree Protocol:** increases network uptime through faster recovery from failed links

Layer 2 switching

• **VLAN support and tagging:** support up to 30 port-based VLANs and dynamic configuration of IEEE 802.1Q VLAN tagging, providing security between workgroups

• **GARP VLAN Registration Protocol:** allows automatic learning and dynamic assignment of VLANs

Security

• **Port security:** allows access only to specified MAC addresses, which can be learned or specified by the administrator

• **IEEE 802.1X and RADIUS network login:** control port-based access for authentication and accountability

• **RADIUS/TACACS+:** eases switch management security administration by using a password authentication server

Convergence

• **IP multicast snooping and data-driven IGMP:** automatically prevents flooding of IP multicast traffic

NEW **LLDP Lite:** allows for discovery and network topology mapping via HP ProCurve Manager

• **Stacking capability:** single IP address management for a virtual stack of up to 16 switches, including the HP ProCurve Switch 2500 Series, 2510 Series, 2600 Series, 2800 Series, 2810 Series, 2900 Series, 3400cl Series, 3500yl Series, 4200vl Series, 6108, 6200yl-24G-mGBIC, and 6400cl Series

Quality of Service (QoS)

• **IEEE 802.1p prioritization:** delivers data to devices based on the priority and type of traffic

Manageability

• **RMON and XRMON:** provide advanced monitoring and reporting capabilities for statistics, history, alarms, and events

• **IEEE 802.1AB Link Layer Discovery Protocol (LLDP):** automated device discovery protocol for easy mapping by network management applications

• **Friendly port names:** allow assignment of descriptive names to ports

• **ProCurve Auto-MDIX:** automatically adjusts for straight-through or crossover cables on all 10/100 ports

• **Web interface:** allows configuration of the switch from any Web browser on the network

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.

HP ProCurve Switch 2500 Series

Specifications

HP ProCurve Switch 2524 (J4813A)

HP ProCurve Switch 2512 (J4812A)

Ports

	24 auto-sensing 10/100 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX); Media Type: Auto-MDIX; Duplex: half or full	12 auto-sensing 10/100 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX); Media Type: Auto-MDIX; Duplex: half or full
	2 open transceiver slots	2 open transceiver slots
	1 RS-232C DB-9 console port	1 RS-232C DB-9 console port

Physical characteristics

Dimensions	8.0(d) x 17.4(w) x 1.8(h) in. (20.32 x 44.2 x 4.57 cm) (1U height)	8.0(d) x 17.4(w) x 1.8(h) in. (20.32 x 44.2 x 4.57 cm) (1U height)
Weight	6.0 lb. (2.72 kg), Fully loaded	6.0 lb. (2.72 kg), Fully loaded

Memory and processor

Processor	ARM7TDMI @ 62.5 MHz, 2 MB flash, 26 KB RAM/ROM capacity; packet buffer size: 6 MB	ARM7TDMI @ 62.5 MHz, 2 MB flash, 26 KB RAM/ROM capacity; packet buffer size: 6 MB

Mounting

	Mounts in a standard 19 in. rack (hardware included)	Mounts in a standard 19 in. rack (hardware included)

Performance

Latency	< 10 µs (LIFO)	< 10 µs (LIFO)
Throughput	6.6 million pps (64-byte packets)	4.8 million pps (64-byte packets)
Switching capacity	9.6 Gbps	9.6 Gbps
MAC address table size	4096 entries	4096 entries

Environment

Operating temperature	32ºF to 131ºF (0ºC to 55ºC)	32ºF to 131ºF (0ºC to 55ºC)
Operating relative humidity	15% to 95% @ 104ºF (40ºC), non-condensing	15% to 95% @ 104ºF (40ºC), non-condensing
Non-operating/Storage temperature	-40ºF to 158ºF (-40ºC to 70ºC)	-40ºF to 158ºF (-40ºC to 70ºC)
Non-operating/Storage relative humidity	15% to 90% @ 149ºF (65ºC), non-condensing	15% to 95% @ 149ºF (65ºC), non-condensing
Shock and vibration	HP759, HP760 (similar to EN 60068, IEC 68)	HP759, HP760 (similar to EN 60068, IEC 68)

Electrical characteristics

Maximum heat dissipation	123 BTU/hr (130 kJ/hr)	123 BTU/hr (130 kJ/hr)
Voltage	100-127 / 200-240 VAC	100-127 / 200-240 VAC
Current	2.4 / 1.2 A	2.4 / 1.2 A
Power consumption	36 W	36 W
Frequency	50 / 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.	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.

HP ProCurve Switch 2500 Series

Safety

cUL (CSA 950); EN 60950/IEC 60950; NOM-019-SCFI-1994; UL 1950 3rd edition	cUL (CSA 950); EN 60950/IEC 60950; NOM-019-SCFI-1994; UL 1950 3rd edition

Emissions

FCC Class A; VCCI Class A; EN 55022/CISPR 22 Class A	FCC Class A; VCCI Class A; EN 55022/CISPR 22 Class A

Immunity

Generic	EN 55024, CISPR 24	EN 55024, CISPR 24
ESD	IEC 61000-4-2; 4 kV CD, 8 kV AD	IEC 61000-4-2; 4 kV CD, 8 kV AD
Radiated	IEC 61000-4-3; 3 V/m	IEC 61000-4-3; 3 V/m
EFT/Burst	IEC 61000-4-4; 1.0 kV (power line), 0.5 kV (signal line)	IEC 61000-4-4; 1.0 kV (power line), 0.5 kV (signal line)

Management

HP ProCurve Manager Plus; HP ProCurve Manager (included); command-line interface; Web browser; configuration menu; out-of-band management (serial RS-232C)	HP ProCurve Manager Plus; HP ProCurve Manager (included); command-line interface; Web browser; configuration menu; out-of-band management (serial RS-232C)

Services

3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E) 3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (U6321E) 3-year, 24x7 SW phone support, software updates (UF792E) Installation with minimum configuration, system-based pricing (U4826E) Installation with HP-provided configuration, system-based pricing (U4830E)	3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E) 3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (U6321E) 3-year, 24x7 SW phone support, software updates (UF792E) Installation with minimum configuration, system-based pricing (U4826E) Installation with HP-provided configuration, system-based pricing (U4830E)
Refer to the HP Web site at www.procurve.com/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.	Refer to the HP Web site at www.procurve.com/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

Standards and protocols

General protocols
IEEE 802.1D MAC Bridges
IEEE 802.1p Priority
IEEE 802.1Q VLANs
IEEE 802.1w Rapid Reconfiguration of Spanning Tree
IEEE 802.3ad Link Aggregation Control Protocol (LACP)
IEEE 802.3x Flow Control

IP multicast
RFC 3376 IGMPv3

MIBs
RFC 1213 MIB II
RFC 1493 Bridge MIB
RFC 2613 SMON MIB
RFC 2674 802.1p and IEEE 802.1Q Bridge MIB

Network management
RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events)
RFC 3164 BSD syslog Protocol
SNMPv1/v2c
XRMON

Security
IEEE 802.1X Port Based Network Access Control
RFC 1492 TACACS+
SSHv1 Secure Shell

HP ProCurve Switch 2500 Series accessories

HP ProCurve 100/1000-T Transceiver (J4834A)

HP ProCurve 100-FX SC Transceiver (J4853A)

HP ProCurve Gigabit-SX Transceiver (J4131B)

HP ProCurve Gigabit-LX Transceiver (J4132A)

HP ProCurve Switch Gigabit Stacking Kit (J4116A)

HP ProCurve Manager 2.3 (-)

For more information

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