

### Overview

## Models

HP V1910-48G Switch	JE009A
HP V1910-24G-PoE (365 W) Switch	JE007A
HP V1910-24G-PoE (170 W) Switch	JE008A
HP V1910-24G Switch	JE006A
HP V1910-16G Switch	JE005A

## Key features

- Advanced smart-managed switching for SMBs
- Intuitive Web interface for network enhancement
- Layer 2+ operation with 32 static Layer 3 routes
- PoE models with up to 365 W of PoE power
- 3-year warranty

## Product overview

HP V1910 series devices are smart-managed, voice-ready fixed configuration Gigabit Layer 2+ switches designed for small and midsized businesses looking for an easy-to-manage yet advanced networking solution. The series has five models: the HP V1910-16G, V1910-24G, V1910-48G, V1910-24G-PoE (170 W), and V1910-24G-PoE (365 W) Switch. Each V1910 switch has 10/100/1000 ports and an additional four true Gigabit SFP ports. These smart-managed switches deliver advanced features for environments not requiring centralized administration and allow network operation to be enhanced using an intuitive Web-based management interface. Advanced features include Layer 3 static routing, access control lists for enhanced security, auto-voice VLAN, QoS traffic prioritization, LLDP, Spanning Tree Protocols, and Power over Ethernet models. All switches are supported by a 3-year warranty.

## Features and benefits

### Quality of Service (QoS)

- **IEEE 802.1p prioritization:** delivers data to devices based on the priority and type of traffic
- **Traffic prioritization (IEEE 802.1p):** allows real-time traffic classification mapped to four hardware queues per port
- **Layer 4 prioritization:** enables prioritization based on TCP/UDP port numbers
- **Class of service (CoS):** sets the IEEE 802.1p priority tag based on IP address, IP Type of Service (ToS), Layer 3 protocol, TCP/UDP port number, source port, and DiffServ
- **Rate limiting:** sets per-port ingress enforced maximums and per-port, per-queue guaranteed minimums
- **Broadcast control:** allows limitation of broadcast traffic rate to cut down on unwanted broadcast traffic on the network

### Management

- **Simple Web management:** intuitive Web GUI allows for easy management of device by even nontechnical users
- **Single IP management:** enables management of up to 32 V1910 devices using a single Web interface; simplifies management of multiple devices
- **Secure Web GUI:** provides a secure, easy-to-use graphical interface for configuring the module via HTTPS
- **SNMPv1, v2c, and v3:** facilitate centralized discovery, monitoring, and secure management of networking devices
- **Logging:** provides local and remote logging of events via SNMP (v2c and v3) and syslog; provides log throttling and log filtering to reduce the number of log events generated
- **Complete session logging:** provides detailed information for problem identification and resolution



### Overview

- **Uni-Directional Link Detection (UDLD):** monitors cable between two switches and shuts down the ports on both ends if the cable is broken, turning the bi-directional link into uni-directional; this prevents network problems such as loops
- **Dual flash images:** provide independent primary and secondary operating system files for backup while upgrading
- **Port mirroring:** enables traffic on a port to be simultaneously sent to a network analyzer for monitoring
- **Management security:** multiple privilege levels, with password protection, restrict access to critical configuration commands; ACLs provide telnet and SNMP access; local and remote syslog capability allow logging of all access
- **Network Time Protocol (NTP):** synchronizes timekeeping among distributed time servers and clients; keeps consistent timekeeping among all clock-dependent devices within the network so that the devices can provide diverse applications based on the consistent time
- **IEEE 802.1AB Link Layer Discovery Protocol (LLDP):** automated device discovery protocol provides easy mapping by network management applications
- **DHCP options:** client allows automatic setting of IP address
- **Limited CLI:** enables users to quickly deploy and trouble shoot devices in the network
- **RMON:** provides advanced monitoring and reporting capabilities for statistics, history, alarms, and events

### Connectivity

- **Auto-MDI/MDIX:** automatically adjusts for straight-through or crossover cables on all 10/100/1000 ports
- **IEEE 802.3X flow control:** provides a flow throttling mechanism propagated through the network to prevent packet loss at a congested node
- **\* IEEE 802.3af Power over Ethernet (PoE) ready:** PWR models able to provide up to 15.4 W per port to power standards-compliant IP phones, wireless LAN access points, Web cameras, and more
- **Packet storm protection:** protects against broadcast, multicast, or unicast storms with user-defined thresholds
- **Jumbo Frames:** allow high-performance remote backup, server links, and disaster-recovery services

### Performance

- **Half-/Full-duplex autonegotiating capability on every port:** doubles the throughput of every port
- **Advanced QoS and traffic shaping:** provides traffic prioritization using IEEE 802.1p Quality of Service (QoS) and Type of Service (TOS) with Differentiated Services Code Point (DSCP) and ingress/egress rate shaping to help ensure that critical time-sensitive traffic like voice receives the priority needed for quality communications
- **VLANs:** segment the network by grouping users based on their data or traffic exchange requirements; help ensure improved use of available bandwidth as traffic flow is directed according to the needs of the business
- **Link aggregation (trunking):** groups together up to 8 ports automatically using Link Aggregation Control Protocol (LACP), or manually, to form an ultra-high-bandwidth connection to the network backbone; helps prevent traffic bottlenecks
- **Selectable queue configurations:** increase performance by selecting the number of queues and associated memory buffering that best meet the requirements of your network applications
- **Spanning Tree Protocol (STP/RSTP/MSTP):** improves network compatibility, scalability, and availability
- **IGMP snooping:** multicast filtering improves network performance, instead of flooding traffic to all ports
- **Unique voice features:** automatic assignment of voice traffic separates VLANs ("auto-voice VLAN"); advanced voice QoS, traffic shaping, multicast filtering, and PoE support delivers the support necessary for quality voice communications
- **Fiber uplink:** provides greater distance connectivity using Gigabit fiber uplinks
- **PoE support (PWR model only):** provides power for IP phones, wireless LAN access points, and other IEEE 802.3af-compliant devices over the same cable used for data; lowers total cost of ownership because there is no need to run additional electrical wiring; supports prestandard PoE plus, allowing the switch to deliver up to 30 W of power

### Resiliency and high availability

- **IEEE 802.1w Rapid Convergence Spanning Tree Protocol:** increases network uptime through faster recovery from failed links
- **IEEE 802.1D Spanning Tree Protocol (STP):** provides redundant links while preventing network loops
- **IEEE 802.1s Multiple Spanning Tree:** provides high link availability in multiple VLAN environments by allowing multiple spanning trees



### Overview

- **Link aggregation** (trunking): groups together up to 8 ports automatically using Link Aggregation Control Protocol (LACP), or manually, to form an ultra-high-bandwidth connection to the network backbone; helps prevent traffic bottlenecks
- **Redundant Power Supply** (365 PWR model only): DC power supply provides additional PoE budget of up to 740 W for high power applications like Gigabit IntelliJack switches

### Layer 2 switching

- **VLAN support and tagging**: supports IEEE 802.1Q (4,094 VLAN IDs) and 256 VLANs simultaneously
- **Jumbo packet support**: supports up to 9220-byte frame size to improve performance of large data transfers
- **Spanning Tree**: fully supports standard IEEE 802.1D Spanning Tree Protocol, IEEE 802.1w Rapid Spanning Tree Protocol for faster convergence, and IEEE 802.1s Multiple Spanning Tree Protocol
- **Port mirroring**: duplicates port traffic (ingress and egress) to a local or remote monitoring port
- **BPDU tunneling**: transmits Spanning Tree Protocol BPDUs transparently, allowing correct tree calculations across service providers, WANs, or MANs
- **Spanning Tree/MSTP, RSTP, and STP Root Guard**: prevent network loops
- **8K MAC addresses**: allows multiple Layer 2 devices to be networked through the switch

### Layer 3 services

- **User Datagram Protocol (UDP) helper function**: allows UDP broadcasts to be directed across router interfaces to specific IP unicast or subnet broadcast addresses and prevents server spoofing for UDP services such as DHCP
- **Address Resolution Protocol (ARP)**: determines the MAC address of another IP host in the same subnet; supports static ARPs; gratuitous ARP allows detection of duplicate IP addresses; proxy ARP allows normal ARP operation between subnets or when subnets are separated by a Layer 2 network

### Layer 3 routing

- **Static IPv4 routing**: provides basic routing (supporting up to 32 static routes); allows manual configuration of routing

### Security

- **Secure Sockets Layer (SSL)**: encrypts all HTTP traffic, allowing secure access to the browser-based management GUI in the switch
- **IEEE 802.1X and RADIUS network logins**: control port-based access for authentication and accountability
- **Port security**: allows access only to specified MAC addresses, which can be learned or specified by the administrator
- **Automatic VLAN assignment**: automatically assigns users to the appropriate VLAN based on their identity and location and the time of day
- **STP BPDU port protection**: blocks Bridge Protocol Data Units (BPDUs) on ports that do not require BPDUs, preventing forged BPDUs attacks
- **STP Root Guard**: protects root bridge from malicious attack or configuration mistakes
- **Network login**: standard IEEE 802.1x allows authentication of multiple users per port, or when a port is shared with an IP phone
- **RADIUS**: eases switch security access administration by using a password authentication server
- **Advanced access control lists (ACLs)**: MAC and IP-based ACLs enable network traffic filtering and enhance network control; time-based ACLs allow for greater flexibility with managing network access

### Convergence

- **LLDP-MED** (Media Endpoint Discovery): is a standard extension of LLDP that stores values for parameters such as QoS and VLAN to automatically configure network devices such as IP phones
- **PoE allocations**: support multiple methods (automatic, IEEE 802.3af class, LLDP-MED, or user specified) to allocate PoE power for more efficient energy savings
- **Automated voice VLAN assignment**: recognizes IP phones and automatically assigns voice traffic to dedicated VLAN for IP



### Overview

phones (may not apply to all models; see specifications for more details)

### Monitor and diagnostics

- **Port mirroring:** enables traffic on a port to be simultaneously sent to a network analyzer for monitoring
- **Software updates:** free downloads from the Web

### Ease of use

- **Flow control:** helps ensure reliable communications during full-duplex operation
- **Power over Ethernet:** power via standards-based PoE source eliminates the need to run costly power outlets at the access point
- **Easy to use:** GUI-driven central management and configuration

### Addition information

- **Green IT and power:** use the latest advances in silicon development, shut off unused ports, and use variable-speed fans to improve power efficiency

### Warranty and support

- **3-year warranty:** with advance replacement and next-business-day delivery (available in most countries)
- **Electronic and telephone support:** limited electronic and telephone support is available from HP; refer to: [www.hp.com/networking/warranty](http://www.hp.com/networking/warranty) for details on the support provided and the period during which support is available
- **Software releases:** refer to: [www.hp.com/networking/warranty](http://www.hp.com/networking/warranty) for details on the software releases provided and the period during which software releases are available for your product(s)



### Technical Specifications

#### HP V1910-48G Switch (JE009A)

<b>Ports</b>	48 RJ-45 auto-negotiating 10/100/1000 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3ab Type 1000Base-T) 4 SFP 1000 Mbps ports Supports a maximum of 48 autosensing 10/100/1000 ports plus 4 1000Base-X SFP ports, or a combination
<b>Physical characteristics</b>	<b>Dimensions</b> 10.24(d) x 17.4(w) x 1.7(h) in. (26.01 x 44.2 x 4.32 cm) (1U height) <b>Weight</b> 6.8 lb. (3.08 kg)
<b>Memory and processor</b>	<b>Module</b> ARM @ 333 MHz, 128 MB flash, 128 MB RAM; packet buffer size: 512 KB
<b>Mounting</b>	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)
<b>Performance</b>	<b>100 Mb Latency</b> < 5 $\mu$ s <b>1000 Mb Latency</b> < 5 $\mu$ s <b>Throughput</b> 77.4 million pps <b>Routing/Switching capacity</b> 104 Gbps <b>Routing table size</b> 32 entries
<b>Environment</b>	<b>Operating temperature</b> 32°F to 113°F (0°C to 45°C) <b>Operating relative humidity</b> 10% to 90%, non-condensing <b>Nonoperating/Storage temperature</b> -40°F to 158°F (-40°C to 70°C) <b>Nonoperating/Storage relative humidity</b> 10% to 95%, non-condensing
<b>Electrical characteristics</b>	<b>Voltage</b> 100-240 VAC
Achieved Miercom Certified Green Award	<b>Frequency</b> 50 / 60 Hz
<b>Safety</b>	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03
<b>Emissions</b>	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A
<b>Management</b>	IMC - Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB
<b>Notes</b>	The HP V1910-48G Switch (JE009A) was formerly sold as the 3Com Baseline Plus 2952 (3CRBSG5293) and may ship with this product labeling. SFP ports and copper ports work simultaneously, independent of each other to give a total of 52 Gigabit-capable ports.
<b>Services</b>	3-year, 4-hour onsite, 13x5 coverage for hardware (UV804E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UW033E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UW036E) 3-year, 24x7 SW phone support, software updates (UV807E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UV805E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UW034E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW037E) 4-year, 24x7 SW phone support, software updates (UV808E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UV806E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UW035E)



### Technical Specifications

5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW038E)  
5-year, 24x7 SW phone support, software updates (UV809E)  
3 Yr 6 hr Call-to-Repair Onsite (UW039E)  
4 Yr 6 hr Call-to-Repair Onsite (UW040E)  
5 Yr 6 hr Call-to-Repair Onsite (UW041E)

Refer to the HP website at: [www.hp.com/networking/services](http://www.hp.com/networking/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**  
(applies to all products in series)

#### Device management

RFC 2819 RMON

#### General protocols

IEEE 802.1D MAC Bridges  
IEEE 802.1p Priority  
IEEE 802.1Q VLANs  
IEEE 802.1s (MSTP)  
IEEE 802.1w Rapid Reconfiguration of Spanning Tree  
IEEE 802.3 Type 10BASE-T  
IEEE 802.3ab 1000BASE-T  
IEEE 802.3ad Link Aggregation Control Protocol (LACP)  
IEEE 802.3i 10BASE-T  
IEEE 802.3x Flow Control  
IEEE 802.3z 1000BASE-X

#### MIBs

RFC 1213 MIB II  
RFC 1493 Bridge MIB  
RFC 2021 RMONv2 MIB  
RFC 2233 Interface MIB  
RFC 2233 Interfaces MIB  
RFC 2571 SNMP Framework MIB  
RFC 2572 SNMP-MPD MIB  
RFC 2573 SNMP-Notification MIB  
RFC 2573 SNMP-Target MIB  
RFC 2613 SMON MIB  
RFC 2618 RADIUS Client MIB  
RFC 2620 RADIUS Accounting MIB  
RFC 2665 Ethernet-Like-MIB  
RFC 2667 IP Tunnel MIB  
RFC 2668 802.3 MAU MIB  
RFC 2674 802.1p and IEEE 802.1Q Bridge MIB  
RFC 2737 Entity MIB (Version 2)  
RFC 3414 SNMP-User based-SM MIB  
RFC 3415 SNMP-View based-ACM MIB  
RFC 3418 MIB for SNMPv3

#### Network management

IEEE 802.1AB Link Layer Discovery Protocol (LLDP)  
IEEE 802.1D (STP)  
RFC 1215 SNMP Generic traps



### Technical Specifications

**QoS/Cos**  
IEEE 802.1P (CoS)

**Security**  
IEEE 802.1X Port Based Network Access Control

---

#### HP V1910-24G-PoE (365 W) Switch (JE007A)

<b>Ports</b>	24 RJ-45 auto-negotiating 10/100/1000 PoE ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3ab Type 1000Base-T, IEEE 802.3af PoE) 4 SFP 1000 Mbps ports Supports a maximum of 24 autosensing 10/100/1000 ports plus 4 1000Base-X SFP ports, or a combination
<b>Physical characteristics</b>	<b>Dimensions</b> 16.54(d) x 17.4(w) x 1.7(h) in. (42.01 x 44.2 x 4.32 cm) (1U height) <b>Weight</b> 6.8 lb. (3.08 kg)
<b>Memory and processor</b>	<b>Module</b> ARM @ 333 MHz, 128 MB flash, 128 MB RAM; packet buffer size: 512 KB
<b>Mounting</b>	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)
<b>Performance</b>	<b>100 Mb Latency</b> < 5 $\mu$ s <b>1000 Mb Latency</b> < 5 $\mu$ s <b>Throughput</b> 41.7 million pps <b>Routing/Switching capacity</b> 56 Gbps <b>Routing table size</b> 32 entries
<b>Environment</b>	<b>Operating temperature</b> 32°F to 113°F (0°C to 45°C) <b>Operating relative humidity</b> 10% to 90%, non-condensing <b>Non-operating/Storage temperature</b> -40°F to 158°F (-40°C to 70°C) <b>Non-operating/Storage relative humidity</b> 10% to 95%, non-condensing
<b>Electrical characteristics</b>	<b>Voltage</b> 100-240 VAC <b>Frequency</b> 50 / 60 Hz
<b>Safety</b>	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03
<b>Emissions</b>	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A
<b>Management</b>	IMC - Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB
<b>Notes</b>	The HP V1910-24G-PoE (365 W) Switch (JE007A) was formerly sold as the 3Com Baseline Plus 2928 HPWR (3CRBSG28HPWR93) and may ship with this product labeling. SFP ports and copper ports can work simultaneously, independent of each other to give a total of 28 Gigabit-capable ports.
<b>Services</b>	3-year, 4-hour onsite, 13x5 coverage for hardware (UV804E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UW033E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UW036E) 3-year, 24x7 SW phone support, software updates (UV807E)



### Technical Specifications

Installation with minimum configuration, system-based pricing (UW451E)  
4-year, 4-hour onsite, 13x5 coverage for hardware (UV805E)  
4-year, 4-hour onsite, 24x7 coverage for hardware (UW034E)  
4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW037E)  
4-year, 24x7 SW phone support, software updates (UV808E)  
5-year, 4-hour onsite, 13x5 coverage for hardware (UV806E)  
5-year, 4-hour onsite, 24x7 coverage for hardware (UW035E)  
5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW038E)  
5-year, 24x7 SW phone support, software updates (UV809E)  
3 Yr 6 hr Call-to-Repair Onsite (UW039E)  
4 Yr 6 hr Call-to-Repair Onsite (UW040E)  
5 Yr 6 hr Call-to-Repair Onsite (UW041E)

Refer to the HP website at: [www.hp.com/networking/services](http://www.hp.com/networking/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**  
(applies to all products in series)

#### Device management

RFC 2819 RMON

#### General protocols

IEEE 802.1D MAC Bridges  
IEEE 802.1p Priority  
IEEE 802.1Q VLANs  
IEEE 802.1s (MSTP)  
IEEE 802.1w Rapid Reconfiguration of Spanning Tree  
IEEE 802.3 Type 10BASE-T  
IEEE 802.3ab 1000BASE-T  
IEEE 802.3ad Link Aggregation Control Protocol (LACP)  
IEEE 802.3i 10BASE-T  
IEEE 802.3x Flow Control  
IEEE 802.3z 1000BASE-X

#### MIBs

RFC 1213 MIB II  
RFC 1493 Bridge MIB  
RFC 2021 RMONv2 MIB  
RFC 2233 Interface MIB  
RFC 2233 Interfaces MIB  
RFC 2571 SNMP Framework MIB  
RFC 2572 SNMP-MPD MIB  
RFC 2573 SNMP-Notification MIB  
RFC 2573 SNMP-Target MIB  
RFC 2613 SMON MIB  
RFC 2618 RADIUS Client MIB  
RFC 2620 RADIUS Accounting MIB  
RFC 2665 Ethernet-Like-MIB  
RFC 2667 IP Tunnel MIB  
RFC 2668 802.3 MAU MIB  
RFC 2674 802.1p and IEEE 802.1Q Bridge MIB  
RFC 2737 Entity MIB (Version 2)  
RFC 3414 SNMP-User based-SM MIB





### Technical Specifications

RFC 3415 SNMP-View based-ACM MIB  
RFC 3418 MIB for SNMPv3

#### Network management

IEEE 802.1AB Link Layer Discovery Protocol (LLDP)  
IEEE 802.1D (STP)  
RFC 1215 SNMP Generic traps

#### QoS/Cos

IEEE 802.1P (CoS)

#### Security

IEEE 802.1X Port Based Network Access Control

---

### HP V1910-24G-PoE (170 W) Switch (JE008A)

<b>Ports</b>	24 RJ-45 auto-negotiating 10/100/1000 PoE ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3ab Type 1000Base-T, IEEE 802.3af PoE) 4 SFP 1000 Mbps ports Supports a maximum of 24 autosensing 10/100/1000 ports plus 4 1000Base-X SFP ports, or a combination
<b>Physical characteristics</b>	<b>Dimensions</b> 16.54(d) x 17.4(w) x 1.7(h) in. (42.01 x 44.2 x 4.32 cm) (1U height) <b>Weight</b> 6.8 lb. (3.08 kg)
<b>Memory and processor</b>	<b>Module</b> ARM @ 333 MHz, 128 MB flash, 128 MB RAM; packet buffer size: 512 KB
<b>Mounting</b>	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)
<b>Performance</b>	<b>100 Mb Latency</b> < 5 $\mu$ s <b>1000 Mb Latency</b> < 5 $\mu$ s <b>Throughput</b> 41.7 million pps <b>Routing/Switching capacity</b> 56 Gbps <b>Routing table size</b> 32 entries
<b>Environment</b>	<b>Operating temperature</b> 32°F to 113°F (0°C to 45°C) <b>Operating relative humidity</b> 10% to 90%, non-condensing <b>Non-operating/Storage temperature</b> -40°F to 158°F (-40°C to 70°C) <b>Non-operating/Storage relative humidity</b> 10% to 95%, non-condensing
<b>Electrical characteristics</b>	<b>Voltage</b> 100-240 VAC <b>Frequency</b> 50 / 60 Hz
<b>Safety</b>	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03
<b>Emissions</b>	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A
<b>Management</b>	IMC - Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB



### Technical Specifications

<b>Notes</b>	The HP V1910-24G-PoE (170 W) Switch (JE008A) was formerly sold as the 3Com Baseline Plus 2928 PWR (3CRBSG28PWR93) and may ship with this product labeling. SFP ports and copper ports work simultaneously, independent of each other to give a total of 28 Gigabit-capable ports.
<b>Services</b>	3-year, 4-hour onsite, 13x5 coverage for hardware (UV804E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UW033E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UW036E) 3-year, 24x7 SW phone support, software updates (UV807E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UV805E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UW034E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW037E) 4-year, 24x7 SW phone support, software updates (UV808E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UV806E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UW035E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW038E) 5-year, 24x7 SW phone support, software updates (UV809E) 3 Yr 6 hr Call-to-Repair Onsite (UW039E) 4 Yr 6 hr Call-to-Repair Onsite (UW040E) 5 Yr 6 hr Call-to-Repair Onsite (UW041E)

Refer to the HP website at: [www.hp.com/networking/services](http://www.hp.com/networking/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**  
(applies to all products in series)

#### Device management

RFC 2819 RMON

#### General protocols

IEEE 802.1D MAC Bridges  
IEEE 802.1p Priority  
IEEE 802.1Q VLANs  
IEEE 802.1s (MSTP)  
IEEE 802.1w Rapid Reconfiguration of Spanning Tree  
IEEE 802.3 Type 10BASE-T  
IEEE 802.3ab 1000BASE-T  
IEEE 802.3ad Link Aggregation Control Protocol (LACP)  
IEEE 802.3i 10BASE-T  
IEEE 802.3x Flow Control  
IEEE 802.3z 1000BASE-X

#### MIBs

RFC 1213 MIB II  
RFC 1493 Bridge MIB  
RFC 2021 RMONv2 MIB  
RFC 2233 Interface MIB  
RFC 2233 Interfaces MIB  
RFC 2571 SNMP Framework MIB  
RFC 2572 SNMP-MPD MIB  
RFC 2573 SNMP-Notification MIB  
RFC 2573 SNMP-Target MIB  
RFC 2613 SMON MIB  
RFC 2618 RADIUS Client MIB



### Technical Specifications

RFC 2620 RADIUS Accounting MIB  
RFC 2665 Ethernet-Like-MIB  
RFC 2667 IP Tunnel MIB  
RFC 2668 802.3 MAU MIB  
RFC 2674 802.1p and IEEE 802.1Q Bridge MIB  
RFC 2737 Entity MIB (Version 2)  
RFC 3414 SNMP-User based-SM MIB  
RFC 3415 SNMP-View based-ACM MIB  
RFC 3418 MIB for SNMPv3

#### Network management

IEEE 802.1AB Link Layer Discovery Protocol (LLDP)  
IEEE 802.1D (STP)  
RFC 1215 SNMP Generic traps

#### QoS/Cos

IEEE 802.1P (CoS)

#### Security

IEEE 802.1X Port Based Network Access Control

---

### HP V1910-24G Switch (JE006A)

<b>Ports</b>	24 RJ-45 auto-negotiating 10/100/1000 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3ab Type 1000Base-T) 4 SFP 1000 Mbps ports Supports a maximum of 24 autosensing 10/100/1000 ports plus 4 1000Base-X SFP ports, or a combination
<b>Physical characteristics</b>	<b>Dimensions</b> 6.3(d) x 17.4(w) x 1.7(h) in. (16 x 44.2 x 4.32 cm) (1U height) <b>Weight</b> 6.8 lb. (3.08 kg)
<b>Memory and processor</b>	<b>Module</b> ARM @ 333 MHz, 128 MB flash, 128 MB RAM; packet buffer size: 512 KB
<b>Mounting</b>	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)
<b>Performance</b>	<b>100 Mb Latency</b> < 5 $\mu$ s <b>1000 Mb Latency</b> < 5 $\mu$ s <b>Throughput</b> 41.7 million pps <b>Routing/Switching capacity</b> 56 Gbps <b>Routing table size</b> 32 entries
<b>Environment</b>	<b>Operating temperature</b> 32°F to 113°F (0°C to 45°C) <b>Operating relative humidity</b> 10% to 90%, non-condensing <b>Non-operating/Storage temperature</b> -40°F to 158°F (-40°C to 70°C) <b>Non-operating/Storage relative humidity</b> 10% to 95%, non-condensing
<b>Electrical characteristics</b>	<b>Voltage</b> 100-240 VAC <b>Frequency</b> 50 / 60 Hz



### Technical Specifications

<b>Safety</b>	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03
<b>Emissions</b>	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A
<b>Management</b>	IMC - Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB
<b>Notes</b>	The HP V1910-24G Switch (JE006A) was formerly sold as the 3Com Baseline Plus 2928 (3CRBSG2893) and may ship with this product labeling. SFP ports and copper ports can work simultaneously, independent of each other to give a total of 28 Gigabit-capable ports.
<b>Services</b>	3-year, 4-hour onsite, 13x5 coverage for hardware (UV804E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UW033E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UW036E) 3-year, 24x7 SW phone support, software updates (UV807E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UV805E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UW034E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW037E) 4-year, 24x7 SW phone support, software updates (UV808E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UV806E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UW035E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW038E) 5-year, 24x7 SW phone support, software updates (UV809E) 3 Yr 6 hr Call-to-Repair Onsite (UW039E) 4 Yr 6 hr Call-to-Repair Onsite (UW040E) 5 Yr 6 hr Call-to-Repair Onsite (UW041E)

Refer to the HP website at: [www.hp.com/networking/services](http://www.hp.com/networking/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.

<b>Standards and protocols</b> (applies to all products in series)	<b>Device management</b> RFC 2819 RMON
---	---

#### General protocols

IEEE 802.1D MAC Bridges  
IEEE 802.1p Priority  
IEEE 802.1Q VLANs  
IEEE 802.1s (MSTP)  
IEEE 802.1w Rapid Reconfiguration of Spanning Tree  
IEEE 802.3 Type 10BASE-T  
IEEE 802.3ab 1000BASE-T  
IEEE 802.3ad Link Aggregation Control Protocol (LACP)  
IEEE 802.3i 10BASE-T  
IEEE 802.3x Flow Control  
IEEE 802.3z 1000BASE-X

#### MIBs

RFC 1213 MIB II  
RFC 1493 Bridge MIB  
RFC 2021 RMONv2 MIB  
RFC 2233 Interface MIB  
RFC 2233 Interfaces MIB



### Technical Specifications

RFC 2571 SNMP Framework MIB  
RFC 2572 SNMP-MPD MIB  
RFC 2573 SNMP-Notification MIB  
RFC 2573 SNMP-Target MIB  
RFC 2613 SMON MIB  
RFC 2618 RADIUS Client MIB  
RFC 2620 RADIUS Accounting MIB  
RFC 2665 Ethernet-Like-MIB  
RFC 2667 IP Tunnel MIB  
RFC 2668 802.3 MAU MIB  
RFC 2674 802.1p and IEEE 802.1Q Bridge MIB  
RFC 2737 Entity MIB (Version 2)  
RFC 3414 SNMP-User based-SM MIB  
RFC 3415 SNMP-View based-ACM MIB  
RFC 3418 MIB for SNMPv3

#### Network management

IEEE 802.1AB Link Layer Discovery Protocol (LLDP)  
IEEE 802.1D (STP)  
RFC 1215 SNMP Generic traps

#### QoS/Cos

IEEE 802.1P (CoS)

#### Security

IEEE 802.1X Port Based Network Access Control

---

### HP V1910-16G Switch (JE005A)

<b>Ports</b>	16 RJ-45 auto-negotiating 10/100/1000 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3ab Type 1000Base-T) 4 SFP 1000 Mbps ports Supports a maximum of 16 autosensing 10/100/1000 ports plus 4 1000Base-X SFP ports, or a combination
<b>Physical characteristics</b>	<b>Dimensions</b> 6.3(d) x 17.4(w) x 1.7(h) in. (16 x 44.2 x 4.32 cm) (1U height) <b>Weight</b> 6.8 lb. (3.08 kg)
<b>Memory and processor</b>	<b>Module</b> ARM @ 333 MHz, 128 MB flash, 128 MB RAM; packet buffer size: 512 KB
<b>Mounting</b>	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)
<b>Performance</b>	<b>100 Mb Latency</b> < 5 $\mu$ s <b>1000 Mb Latency</b> < 5 $\mu$ s <b>Throughput</b> 29.8 million pps <b>Routing/Switching capacity</b> 40 Gbps <b>Routing table size</b> 32 entries
<b>Environment</b>	<b>Operating temperature</b> 32°F to 113°F (0°C to 45°C) <b>Operating relative humidity</b> 10% to 90%, non-condensing



### Technical Specifications

	<b>Non-operating/Storage temperature</b>	-40°F to 158°F (-40°C to 70°C)
	<b>Non-operating/Storage relative humidity</b>	10% to 95%, non-condensing
<b>Electrical characteristics</b>	<b>Voltage</b>	100-240 VAC
	<b>Frequency</b>	50 / 60 Hz
<b>Safety</b>	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03	
<b>Emissions</b>	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A	
<b>Management</b>	IMC - Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB	
<b>Notes</b>	The HP V1910-16G Switch (JE005A) was formerly sold as the 3Com Baseline Plus PWR 2920 (3CRBSG2093) and may ship with this product labeling. SFP ports and copper ports can work simultaneously, independent of each other to give a total of 20 Gigabit-capable ports.	
<b>Services</b>	3-year, 4-hour onsite, 13x5 coverage for hardware (UV804E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UW033E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UW036E) 3-year, 24x7 SW phone support, software updates (UV807E) Installation with minimum configuration, system-based pricing (UW451E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UV805E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UW034E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW037E) 4-year, 24x7 SW phone support, software updates (UV808E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UV806E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UW035E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW038E) 5-year, 24x7 SW phone support, software updates (UV809E) 3 Yr 6 hr Call-to-Repair Onsite (UW039E) 4 Yr 6 hr Call-to-Repair Onsite (UW040E) 5 Yr 6 hr Call-to-Repair Onsite (UW041E)	

Refer to the HP website at: [www.hp.com/networking/services](http://www.hp.com/networking/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**  
(applies to all products in series)

**Device management**  
RFC 2819 RMON

#### General protocols

IEEE 802.1D MAC Bridges  
IEEE 802.1p Priority  
IEEE 802.1Q VLANs  
IEEE 802.1s (MSTP)  
IEEE 802.1w Rapid Reconfiguration of Spanning Tree  
IEEE 802.3 Type 10BASE-T  
IEEE 802.3ab 1000BASE-T  
IEEE 802.3ad Link Aggregation Control Protocol (LACP)  
IEEE 802.3i 10BASE-T  
IEEE 802.3x Flow Control



## Technical Specifications

IEEE 802.3z 1000BASE-X

### MIBs

RFC 1213 MIB II  
RFC 1493 Bridge MIB  
RFC 2021 RMONv2 MIB  
RFC 2233 Interface MIB  
RFC 2233 Interfaces MIB  
RFC 2571 SNMP Framework MIB  
RFC 2572 SNMP-MPD MIB  
RFC 2573 SNMP-Notification MIB  
RFC 2573 SNMP-Target MIB  
RFC 2613 SMON MIB  
RFC 2618 RADIUS Client MIB  
RFC 2620 RADIUS Accounting MIB  
RFC 2665 Ethernet-Like-MIB  
RFC 2667 IP Tunnel MIB  
RFC 2668 802.3 MAU MIB  
RFC 2674 802.1p and IEEE 802.1Q Bridge MIB  
RFC 2737 Entity MIB (Version 2)  
RFC 3414 SNMP-User based-SM MIB  
RFC 3415 SNMP-View based-ACM MIB  
RFC 3418 MIB for SNMPv3

### Network management

IEEE 802.1AB Link Layer Discovery Protocol (LLDP)  
IEEE 802.1D (STP)  
RFC 1215 SNMP Generic traps

### QoS/Cos

IEEE 802.1P (CoS)

### Security

IEEE 802.1X Port Based Network Access Control



### Accessories

HP V1910 Switch Series accessories	<b>Transceivers</b>	
	HP X120 1G SFP LC SX Transceiver	JD118B
	HP X120 1G SFP LC LX Transceiver	JD119B
	HP X125 1G SFP RJ45 T Transceiver	JD089B
	HP X121 1G SFP LC LX Tran	J4859C
	HP X121 1G SFP RJ45 T Transceiver	J8177C
	HP X124 1G SFP LC SX Transceiver	JD493A
	HP X124 1G SFP LC LX Transceiver	JD494A
	<b>Cables</b>	
	HP .5m Multi-mode OM3 LC/LC Optical Cable	AJ833A
	HP 1m Multi-mode OM3 LC/LC Optical Cable	AJ834A
	HP 2m Multi-mode OM3 LC/LC Optical Cable	AJ835A
	HP 5m Multi-mode OM3 LC/LC Optical Cable	AJ836A
	HP 15m Multi-mode OM3 LC/LC Optical Cable	AJ837A
	HP 30m Multi-mode OM3 LC/LC Optical Cable	AJ838A
	HP 50m Multi-mode OM3 LC/LC Optical Cable	AJ839A
	NEW HP 0.5 m PremierFlex OM3+ LC/LC Optical Cable	BK837A
	NEW HP 1 m PremierFlex OM3+ LC/LC Optical Cable	BK838A
	NEW HP 2 m PremierFlex OM3+ LC/LC Optical Cable	BK839A
	NEW HP 5 m PremierFlex OM3+ LC/LC Optical Cable	BK840A
	NEW HP 15 m PremierFlex OM3+ LC/LC Optical Cable	BK841A
	NEW HP 30 m PremierFlex OM3+ LC/LC Optical Cable	BK842A
	NEW HP 50 m PremierFlex OM3+ LC/LC Optical Cable	BK843A

To learn more, visit: [www.hp.com/networking](http://www.hp.com/networking)

© Copyright 2011 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.

