Zimbra Page 1 of 1

## **Zimbra**

## adriano.soares@tjam.jus.br

## Porposta item 1 PG23-2013\_CORE Systems

**De :** Core Systems < core@coresystems.com.br>

Sex, 17 de Mai de 2013 11:40

2 anexos

**Assunto:** Porposta item 1 PG23-2013\_CORE Systems

Para: cpl@tjam.jus.br

Bom dia Sr. Pregoeiro,

Segue proposta comercial e folder do produto.

Atte,

José Pollari
Sócio-Gerente da
CORE Systems Ltda.
Concessionária Leucotron
Registered Partner Microsoft
Revenda HP, IBM, 3COM, Lenovo e Protagon
Manaus-AM-Brasil
+55 92-3232-1123

e-mail: <a href="mailto:core@coresystems.com.br">core@coresystems.com.br</a>



**Proposta item 01 PG23-2013\_CORE Systems.jpg** 273 KB

PDF

**V1910-48G\_SWTICH HP.pdf** 572 KB



# PODER JUDICIÁRIO TRIBUNAL DE JUSTIÇA DO ESTADO DO AMAZONAS SECRETARIA GERAL DE ADMINISTRAÇÃO DIVISÃO DE INFRAESTRUTURA E LOGÍSTICA

PREGÃO ELETRÔNICO Nº. 023/2013 - TJAM ANEXO V - Formulário de Proposta de Preços

Dados do Fornecedor

Empresa: CORE SYSTEMS - COMPUTADORES E REDES

LTDA.

CNPJ: 23.010.515/0001-78

Endereço: AV. TARUMÃ, 950

Endereço: AV. TARUMÃ, 950

CEP: 69.220-000

IMANAUS

Bairro: PÇA 14

Cidade: MANAUS

E-mail: core@ coresystems.com.br

CORE SYSTEMS COMPUTADORES

E REDES LTDA.

AV. Jaruma N° 950 - Parte - Praça 14

UF: AM

Telefone: (92) 3232-1123

Dados Bancários

Banco: BRADESCO Agência: 320-4 Conta Corrente: 425.244-6

Dados da Cotação

ITEM	MATERIAL/SERVIÇO	UN	QUANT	MARCA	VL UNITÁRIO	VALOR TOTAL
01	Switch Gerenciável 48 portas 10/100/1000 Mbps + 4 portas SFP 1000 Mbps marca HP modelo V1910-48G (JE009A)  Especificações técnicas  Portas: 48 portas 10/100/1000 RJ-45 com negociação automática (10BASE-T tipo IEEE 802.3, 100BASE-TX tipo IEEE 802.3u, 1000BASE-T tipo IEEE 802.3ab); 4 portas SFP 1000 Mbps; Suporta no máximo 48 portas 10/100/1000 com detecção automática e mais 4 portas SFP 1000BASE-X, ou combinação; Montagem: Montado em rack de telecomunicações de 48,26 cm (19 pol.) padrão EIA;  Memória e processador: Módulo: ARM a 333 MHz, 128 MB de flash, tamanho do buffer de pacotes: 512 KB, 128 MB de RAM; Latência: Latência de 100 Mb: < 5 μs; Latência de 1000 Mb: < 5 μs; Capacidade de produção: até 77,4 milhões de pps; Capacidade de routing/switching: 104 Gbps; Tamanho da tabela Routing: 32 entradas; Caracteristicas de gestão: IMC - Centro de gerenciamento inteligente; interface de linha de comando limitada; Navegador Web; SNMP Manager; IEEE 802.3 Ethernet MIB; Consumo de energia: 59,8 W (máximo); Voltagem de entrada: 100 a 240 VAC; Frequência de entrada: 50 / 60 Hz; Segurança: UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 Nº 60950-1-03; Compatibilidade eletromagnética: FCC parte 15 Classe A; VCCI Classe A; EN 55022 Classe A; CISPR 22 Classe A; EN 55024; EN 61000-3-2 2000, 61000-3-3; ICES-003 Classe A; Gama de temperaturas de funcionamento: 0 a 45º C; Intervalo de umidade para funcionamento: 10 a 90% (sem condensação); Dimensões mínimas (L x P x A): 26,01 x 44,2 x 4,32 cm; Peso: 3.08 kg; Garantia: 3 anos NBD, suporte técnico por telefone e atualização de versões de softwares.	UN	100	HP	1.916,00	191.600,00

Validade da Proposta: 60 (sessenta) dias.

Observações:

1- Estão inclusos nos preços supramencionados todos os custos diretos e indiretos, inclusive de fretes ou os resultantes da incidência de quaisquer tributos, contribuiçõesou obrigações decorrentes da legislação trabalhista, fiscal e previdenciária a que estiver sujeito.

Manaus, 17 de maio de 2013.



## **HP V1910 Switch Series**

Data sheet

## 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.

## 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



## 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
- 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 802.1 w 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
- 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 IP routing:** provides manually configured routing; includes ECMP capability

## 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 BPDU 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): MACand 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 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

## Additional 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 <a href="www.hp.com/networking/warranty">www.hp.com/networking/warranty</a> for details on the support provided and the period during which support is available
- Software releases: refer to 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)

## Specifications

	1.			
	HP V1910-48G Switch (JE009A)	HP V1910-24G-PoE (365 W) Switch (JE007A)	HP V1910-24G-PoE (170 W) Switch (JE008A)	
Ports	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	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)	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)	
	Supports a maximum of 48 auto-sensing	4 SFP 1000 Mbps ports	4 SFP 1000 Mbps ports	
	10/100/1000 ports plus 4 1000Base-X SFP ports, or a combination	Supports a maximum of 24 auto-sensing 10/100/1000 ports plus 4 1000Base-X SFP ports, or a combination	Supports a maximum of 24 auto-sensing 10/100/1000 ports plus 4 1000Base-X SFP ports, or a combination	
Physical characteristics				
Dimensions	10.24(d) x 17.4(w) x 1.7(h) in. (26.01 x 44.2 x 4.32 cm) (1U height)	16.54(d) x 17.4(w) x 1.7(h) in. (42.01 x 44.2 x 4.32 cm) (1U height)	16.54(d) x 17.4(w) x 1.7(h) in. (42.01 x 44.2 x 4.32 cm) (1U height)	
Weight	6.8 lb. (3.08 kg)	6.8 lb. (3.08 kg)	6.8 lb. (3.08 kg)	
Memory and processor				
Module	ARM @ 333 MHz, 128 MB flash, 128 MB RAM; packet buffer size: 512 KB	ARM @ 333 MHz, 128 MB flash, 128 MB RAM; packet buffer size: 512 KB	ARM @ 333 MHz, 128 MB flash, 128 MB RAM; packet buffer size: 512 KB	
Mounting	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)	
Performance				
100 Mb Latency	< 5 μs	< 5 μs	< 5 μs	
1000 Mb Latency	< 5 μs	< 5 μs	< 5 μs	
Throughput	77.4 million pps	41.7 million pps	41.7 million pps	
Routing/Switching capacity	104 Gbps	56 Gbps	56 Gbps	
Routing table size	32 entries	32 entries	32 entries	
Environment				
Operating temperature	32°F to 113°F (0°C to 45°C)	32°F to 113°F (0°C to 45°C)	32°F to 113°F (0°C to 45°C)	
Operating relative humidity	10% to 90%, non-condensing	10% to 90%, non-condensing	10% to 90%, non-condensing	
Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	
Non-operating/Storage relative humidity	10% to 95%, non-condensing	10% to 95%, non-condensing	10% to 95%, non-condensing	
Electrical characteristics	Achieved Miercom Certified Green Award			
Voltage	100-240 VAC	100-240 VAC	100-240 VAC	
Frequency	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz	
Safety	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03	
Emissions	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	FCC parl 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	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	
Management	IMC - Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB	IMC - Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB	IMC - Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB	
Notes	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.	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.	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.	

## Specifications (continued)

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

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

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

#### Services

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

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 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.

3-year, 4-hour onsite, 13x5 coverage for hardware (UV804E)

3-year, 4-hour onsite, 24x7 coverage for hardware (ÚW033E)

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

(ÚW035E)

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 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.

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

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 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

IEEE 802.3 Type 10BASE-T

IEEE 802.3ab 1000BASE-T

IEEE 802.3ad Link Aggregation Control Protocol

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

#### QoS/CoS

IEEE 802.1P (CoS)

IEEE 802.1X Port Based Network Access Control

## Specifications (continued)

	THE TAX THE PART AND A	
	HP V1910-24G Switch (JE006A)	HP V1910-16G Switch (JE005A)
Ports	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)	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	4 SFP 1000 Mbps ports
	Supports a maximum of 24 auto-sensing 10/100/1000 ports plus 4 1000Base-X SFP ports, or a combination	Supports a maximum of 16 auto-sensing 10/100/1000 ports plus 4 1000Base-X SFP ports, or a combination
Physical characteristics Dimensions Weight	6.3(d) × 17.4(w) × 1.7(h) in. (16 × 44.2 × 4.32 cm) (1U height) 6.8 lb. (3.08 kg)	6.3(d) x 17.4(w) x 1.7(h) in. (16 x 44.2 x 4.32 cm) (1U height) 6.8 lb. (3.08 kg)
Memory and processor Module	ADV © 222 AUT 120 AD (	ADM © 222 MIL 100 MB []   100 MB DAM
Mounting	ARM @ 333 MHz, 128 MB flash, 128 MB RAM; packet buffer size: 512 KB  Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)	ARM @ 333 MHz, 128 MB flash, 128 MB RAM; packet buffer size: 512 KB Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)
Performance 100 Mb Latency 1000 Mb Latency Throughput Routing/Switching capacity Routing table size	< 5 μs < 5 μs 41.7 million pps 56 Gbps 32 entries	< 5 μs < 5 μs 29.8 million pps 40 Gbps 32 entries
Environment	J2 Gillies	32 enines
Operating temperature Operating relative humidity Non-operating/Storage temperature Non-operating/Storage relative humidity	32°F to 113°F (0°C to 45°C) 10% to 90%, non-condensing -40°F to 158°F (-40°C to 70°C) 10% to 95%, non-condensing	32°F to 113°F (0°C to 45°C) 10% to 90%, non-condensing -40°F to 158°F (-40°C to 70°C) 10% to 95%, non-condensing
Electrical characteristics Voltage	100-240 VAC	100-240 VAC
Frequency	50 / 60 Hz	50 / 60 Hz
Safety	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03
Emissions	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	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
Management	IMC - Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB	IMC - Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB
Notes	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.	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 are mutually exclusive to give a total of 20 Gigabit-capable ports.
Services	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 (UW034E) 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 (UW035E) 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 (UW041E)  Refer to the HP website at <a href="https://www.hp.com/networking/services">www.hp.com/networking/services</a> for details on the	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 (UW034E) 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 (UW035E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UW035E) 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 (UW030E) 5 Yr 6 hr Call-to-Repair Onsite (UW041E)
	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 website at <a href="www.hp.com/networking/services">www.hp.com/networking/services</a> 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.

## Specifications (continued)

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

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

#### 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

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 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 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 Switch Series accessories

#### **Transceivers**

HP X125 1G SFP LC SX Transceiver (JD118B)

HP X120 1G SFP LC LX Transceiver (JD119B)

HP X125 1G SFP RJ45 T Transceiver (JD089B)

HP X124 1G SFP LC LH40 1310nm Transceiver (JD061A)

HP X120 1G SFP LC LH40 1550nm Transceiver (JD062A)

HP X125 1G SFP LC LH70 Transceiver (JD063B)

#### Cables

**NEW** HP 0.5 m Multimode OM3 LC/LC Optical Cable (AJ833A)

**NEW** HP 1 m Multimode OM3 LC/LC Optical Cable (AJ834A)

**NEW** HP 2 m Multimode OM3 LC/LC Optical Cable (AJ835A)

**NEW** HP 5 m Multimode OM3 LC/LC Optical Cable (AJ836A)

**NEW** HP 15 m Multimode OM3 LC/LC Optical Cable (AJ837A)

**NEW** HP 30 m Multimode OM3 LC/LC Optical Cable (AJ838A)

**NEW** HP 50 m Multimode 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)



Products within this series have achieved sufficient scores in each of the rated criteria to achieve the Miercom Certified Green distinction Award. See the Specifications section of this series for more information.

## To learn more, visit www.hp.com/networking

