# HP 1410 Switch Series

## Product overview

The HP 1410 Switch Series comprises unmanaged Gigabit Ethernet and Fast Ethernet switches, designed for small businesses looking for entry-level low-cost networking solutions that come with a lifetime warranty. The series consists of nine models with flexible mounting options to meet different network switching needs. All models have quality of service (QoS) support and IEEE 802.3x flow control features that provide outstanding data efficiency.

Simplified plug-and-play convenience is enabled by features such as auto-MDIX and auto-speed negotiation. HP has innovated and combined the latest advances in silicon technology to bring you some of the most power-efficient switches—1410-24G-R, 1410-16, and 1410-24 models are advanced IEEE 802.3az-compliant unmanaged Gigabit and Fast Ethernet switches. The switches come with built-in green features and a lifetime warranty, making the series the right choice for organizations seeking a networking solution that's both economical and reliable.

**A summary of the highlights of the 1410 Switch Series:**

• Unmanaged Gigabit Ethernet and Fast Ethernet switches

• Green features for low power consumption

• Fan-less design for silent operation

• QoS support

• Lifetime warranty

# Features and benefits

### QoS

• IEEE 802.1p prioritization

  Delivers data to devices, based on the priority and type of traffic

• DiffServ Code Point (DSCP) support

  Allows real-time traffic prioritization, based on L3 TOS/DSCP parameters

### Connectivity

• Auto-MDIX

  Provides automatic adjustments for straight-through or crossover cables on all 10/100 and 10/100/1000 ports

### Performance

• NEW Energy-efficient Ethernet support

  Supports new IEEE 802.3az standard; and allows lower power consumption, when operated with IEEE-compliant client devices in 100 Mb/s mode only (JG708A, J9662A, and J9663A)

• Half-/full-duplex auto-negotiating capability on every port

  Doubles the throughput of every port

• NEW Jumbo frame support

  Allows frames up to 9,216 bytes to be switched through the network (Gigabit Ethernet models)

• Mini jumbo-frame support

  Allows frames up to 2,048 bytes to be switched through the network, which supports large data transfers (J9662A and J9663A)

**Ease of use**

• Unmanaged

  Provides plug-and-play simplicity

• Comprehensive LED display with per-port indicators

  Provides an at-a-glance view of the status, activity, speed, and full-duplex operation of the switches

• Flow control

  Helps ensure reliable communications during full-duplex operation

• Auto-speed negotiation

  Selects individual port speed automatically, depending on client capabilities; removing the need for manual intervention enables simple plug-and-play operation

**Flexibility**

• Fan-less design

  Enables quiet operation for deployment in open spaces

• NEW Internal power supply

  Delivers operational convenience and an environment suitable for business operations (JG708A, J9561A, and JD986B)

**Warranty and support**

• NEW Lifetime Warranty 2.0

  Advance hardware replacement for as long as you own the product with next-business-day delivery (available in most countries)[1]

• NEW Electronic and telephone support (for Lifetime Warranty 2.0)

  Limited 24x7 telephone support is provided by HP for the first three years; limited electronic and telephone support during business hours is provided by HP for the complete warranty period; to reach our support centers, visit hp.com/networking/contact-support; for details on the duration of support provided with your product purchase, visit hp.com/networking/warrantysummary

[1] HP warranty includes repair or replacement of hardware for as long as you own the product, with next-business-day advance replacement (available in most countries). The disk drives included—with the HP AllianceOne Advanced Services and Services zl Modules, HP Threat Management Services zl Module, HP AllianceOne Extended zl Module with Riverbed Steelhead, HP MSM765 zl Mobility Controller, and HP Survivable Branch Communication zl Module powered by Microsoft® Lync—each have a five-year hardware warranty. For details, refer to the software license and hardware warranty statements at hp.com/networking/warranty.

# HP 1410 Switch Series

## Specifications

| | HP 1410-8G Switch (J9559A) | HP 1410-16G Switch (J9560A) | HP 1410-24G-R Switch (JG708A) |
|---|---|---|---|
| **Ports** | 8 RJ-45 autosensing 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<br>Supports a maximum of 8 autosensing 10/100/1000 ports | 16 RJ-45 autosensing 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<br>Supports a maximum of 16 autosensing 10/100/1000 ports | 24 RJ-45 autosensing 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<br>Supports a maximum of 24 autosensing 10/100/1000 ports |
| **Physical characteristics**<br>Weight | 6.14(w) x 3.8(d) x 0.96(h) in (15.6 x 9.65 x 2.45 cm)<br>0.74 lb (0.34 kg) | 8.21(w) x 4.41(d) x 1.73(h) in (20.85 x 11.2 x 4.4 cm) (1U height)<br>1.43 lb (0.65 kg) | 17.32(w) x 6.81(d) x 1.73(h) in (44 x 17.3 x 4.4 cm) (1U height)<br>6.61 lb (3 kg) |
| **Memory and processor** | 4 Kb EEPROM capacity; packet buffer size: 192 KB | 512 Kb flash; packet buffer size: 512 KB | 1 MB flash; packet buffer size: 512 KB |
| **Mounting** | Wall, desktop and under-table mounting | Mounts in an EIA standard 19-inch telco rack (hardware included); wall, desktop and under-table mounting | Mounts in an EIA standard 19-inch telco rack (hardware included); desktop mounting |
| **Performance**<br>100 Mb Latency<br>1000 Mb Latency<br>Throughput<br>Switching capacity<br>MAC address table size | < 3.6 µs (LIFO 64-byte packets)<br>< 1.2 µs (LIFO 64-byte packets)<br>up to 11.9 million pps (64-byte packets)<br>16 Gb/s<br>4096 entries | < 8.0 µs (LIFO 64-byte packets)<br>< 3.6 µs (LIFO 64-byte packets)<br>up to 23.8 million pps (64-byte packets)<br>32 Gb/s<br>8192 entries | < 8.0 µs (LIFO 64-byte packets)<br>< 3.6 µs (LIFO 64-byte packets)<br>35.7 million pps (64-byte packets)<br>48 Gb/s<br>8192 entries |
| **Environment**<br>Operating temperature<br>Operating relative humidity<br>Nonoperating/Storage temperature<br>Nonoperating/Storage relative humidity<br>Altitude<br>Acoustic | 32°F to 104°F (0°C to 40°C)<br>15% to 95% @ 104°F (40°C), noncondensing<br>-40°F to 158°F (-40°C to 70°C)<br>15% to 90% @ 149°F (65°C), noncondensing<br>up to 10,000 ft (3 km)<br>Power: 0 dB No fan | 32°F to 104°F (0°C to 40°C)<br>15% to 95% @ 104°F (40°C), noncondensing<br>-40°F to 158°F (-40°C to 70°C)<br>15% to 90% @ 149°F (65°C), noncondensing<br>up to 10,000 ft (3 km)<br>Power: 0 dB No fan | 32°F to 104°F (0°C to 40°C)<br>5% to 95% @ 104°F (40°C), noncondensing<br>-40°F to 158°F (-40°C to 70°C)<br>15% to 90% @ 149°F (65°C), noncondensing<br>up to 16,404 ft (5 km)<br>Power: 0 dB No fan |

| | HP 1410-8G Switch (J9559A) | HP 1410-16G Switch (J9560A) | HP 1410-24G-R Switch (JG708A) |
|---|---|---|---|
| **Electrical characteristics** | | | |
| Frequency | 50/60 Hz | 50/60 Hz | 50/60 Hz |
| Maximum heat dissipation | 41 BTU/hr (43.26 kJ/hr) | 44 BTU/hr (46.42 kJ/hr) | 55 BTU/hr (58 kJ/hr) |
| Voltage | 100-240 VAC | 100-240 VAC | 100-240 VAC |
| Current | 1.0 A | 1.1 A | 0.3 A |
| Maximum power rating | 12 W | 13 W | 16 W |
| Notes | Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.<br>The exact input voltage and frequency rating are determined by the specific power adaptor part number ordered. Please select the correct power adaptor country option. | Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.<br>The exact input voltage and frequency rating are determined by the specific power adaptor part number ordered. Please select the correct power adaptor country option. | Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.<br>This model provides internal power supply. Please select the correct power cord country option. |
| **Safety** | CSA 22.2 No. 60950; EN 60950/IEC 60950; UL 60950-1 | CSA 22.2 No. 60950; UL 60950-1; IEC 60950-1; EN 60950-1 | CSA 22.2 No. 60950; UL 60950-1; IEC 60950-1; EN 60950-1 |
| **Emissions** | FCC Rules Part 15, Subpart B Class A | FCC Rules Part 15, Subpart B Class A | FCC Rules Part 15, Subpart B Class A |
| **Immunity** | | | |
| Generic | EN 55022 CISPR 22 | EN 55022 CISPR 22 | EN 55022 CISPR 22 |
| EN | EN 55024, CISPR 24 | EN 55024, CISPR 24 | EN 55024, CISPR 24 |
| ESD | IEC 61000-4-2 | IEC 61000-4-2 | IEC 61000-4-2 |
| Radiated | IEC 61000-4-3 | IEC 61000-4-3 | IEC 61000-4-3 |
| EFT/Burst | IEC 61000-4-4 | IEC 61000-4-4 | IEC 61000-4-4 |
| Surge | IEC 61000-4-5 | IEC 61000-4-5 | IEC 61000-4-5 |
| Conducted | IEC 61000-4-6 | IEC 61000-4-6 | IEC 61000-4-6 |
| Power frequency magnetic field | IEC 61000-4-8 | IEC 61000-4-8 | IEC 61000-4-8 |
| Voltage dips and interruptions | IEC 61000-4-11 | IEC 61000-4-11 | IEC 61000-4-11 |
| Harmonics | IEC 61000-3-2 | IEC 61000-3-2 | IEC 61000-3-2 |
| Flicker | IEC 61000-3-3 | IEC 61000-3-3 | IEC 61000-3-3 |

**Notes**

IEEE 802.3az Energy Efficient Ethernet protocol is supported by the HP 1410-24G-R (JG708A), HP 1410-16 (J9662A) and HP 1410-24 (J9663A) Switches.

| | HP 1410-8G Switch (J9559A) | HP 1410-16G Switch (J9560A) | HP 1410-24G-R Switch (JG708A) |
|---|---|---|---|
| **Services** | 3-year, 4-hour onsite, 13x5 coverage for hardware (UF795E)<br>3-year, 4-hour onsite, 24x7 coverage for hardware (UF796E)<br>1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR843E)<br>1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR844E)<br>Installation with minimum configuration, system-based pricing (U4826E)<br>Installation with HP-provided configuration, system-based pricing (U4830E)<br>4-year, 4-hour onsite, 13x5 coverage for hardware (UR816E)<br>4-year, 4-hour onsite, 24x7 coverage for hardware (UR817E)<br>5-year, 4-hour onsite, 13x5 coverage for hardware (UR818E)<br>5-year, 4-hour onsite, 24x7 coverage for hardware (UR819E)<br>3-year 6 hr Call-to-Repair Onsite (UW386E)<br>4-year 6 hr Call-to-Repair Onsite (UW387E)<br>5-year 6 hr Call-to-Repair Onsite (UW388E)<br>1-year, 6 hour Call-To-Repair Onsite for hardware (HR845E)<br>Refer to the HP website at 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 (UF797E)<br>3-year, 4-hour onsite, 24x7 coverage for hardware (UF798E)<br>1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR846E)<br>1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR847E)<br>Installation with minimum configuration, system-based pricing (U4826E)<br>Installation with HP-provided configuration, system-based pricing (U4830E)<br>4-year, 4-hour onsite, 13x5 coverage for hardware (UR820E)<br>4-year, 4-hour onsite, 24x7 coverage for hardware (UR821E)<br>5-year, 4-hour onsite, 13x5 coverage for hardware (UR822E)<br>5-year, 4-hour onsite, 24x7 coverage for hardware (UR823E)<br>3-year 6 hr Call-to-Repair Onsite (UW389E)<br>4-year 6 hr Call-to-Repair Onsite (UW390E)<br>5-year 6 hr Call-to-Repair Onsite (UW391E)<br>1-year, 6 hour Call-To-Repair Onsite for hardware (HR848E)<br>Refer to the HP website at 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 (UF797E)<br>3-year, 4-hour onsite, 24x7 coverage for hardware (UF798E)<br>1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR846E)<br>1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR847E)<br>Installation with minimum configuration, system-based pricing (U4826E)<br>Installation with HP-provided configuration, system-based pricing (U4830E)<br>4-year, 4-hour onsite, 13x5 coverage for hardware (UR820E)<br>4-year, 4-hour onsite, 24x7 coverage for hardware (UR821E)<br>5-year, 4-hour onsite, 13x5 coverage for hardware (UR822E)<br>5-year, 4-hour onsite, 24x7 coverage for hardware (UR823E)<br>3-year 6 hr Call-to-Repair Onsite (UW389E)<br>4-year 6 hr Call-to-Repair Onsite (UW390E)<br>5-year 6 hr Call-to-Repair Onsite (UW391E)<br>1-year, 6 hour Call-To-Repair Onsite for hardware (HR848E)<br>Refer to the HP website at 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. |

# HP 1410 Switch Series

## Specifications (continued)

| | HP 1410-24G Switch (J9561A) | HP 1410-8 Switch (J9661A) | HP 1410-16 Switch (J9662A) |
|---|---|---|---|
| **Ports** | 22 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE802.3ab Type 1000BASE-T); Media Type: Auto-MDIX; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only<br>2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab 1000BASE-T Gigabit Ethernet) or an open mini-GBIC slot (for use with mini-GBIC transceivers)<br>Supports a maximum of 24 Gigabit Ethernet ports | 8 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX); Duplex: half or full<br>Supports a maximum of 8 autosensing 10/100 ports | 16 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX); Duplex: half or full<br>Supports a maximum of 16 autosensing 10/100 ports |
| **Physical characteristics**<br><br>Weight | 13.23(w) x 6.65(d) x 1.73(h) in (33.6 x 16.9 x 4.4 cm) (1U height)<br>2.98 lb (1.35 kg) | 6.14(w) x 3.74(d) x 0.97(h) in (15.6 x 9.5 x 2.46 cm)<br>0.74 lb (0.34 kg) | 8.21(w) x 4.21(d) x 1.73(h) in (20.85 x 10.69 x 4.39 cm) (1U height)<br>1.43 lb (0.65 kg) |
| **Memory and processor** | 512 Kb flash; packet buffer size: 512 KB | 16 Kb EEPROM; packet buffer size: 96 KB | 16Kb EEPROM; packet buffer size: 2 Mb |
| **Mounting** | Mounts in an EIA standard 19-inch telco rack (hardware included); wall, desktop and under-table mounting | Wall, desktop and under-table mounting | Mounts in an EIA standard 19-inch telco rack (hardware included) wall, desktop and under-table mounting |
| **Performance**<br>100 Mb Latency<br>1000 Mb Latency<br>Throughput<br>Switching capacity<br>MAC address table size | < 8.0 µs (LIFO 64-byte packets)<br>< 3.6 µs (LIFO 64-byte packets)<br>up to 35.7 million pps (64-byte packets)<br>48 Gb/s<br>8192 entries | < 3.7 µs (LIFO 64-byte packets)<br><br>up to 1.1 million pps (64-byte packets)<br>1.6 Gb/s<br>1024 entries | < 10.6 µs (LIFO 64-byte packets)<br><br>up to 2.3 million pps (64-byte packets)<br>3.2 Gb/s<br>8192 entries |

| | HP 1410-24G Switch (J9561A) | HP 1410-8 Switch (J9661A) | HP 1410-16 Switch (J9662A) |
|---|---|---|---|
| **Environment** | | | |
| Operating temperature | 32°F to 104°F (0°C to 40°C) ) | 32°F to 104°F (0°C to 40°C) | 32°F to 104°F (0°C to 40°C |
| Operating relative humidity | 15% to 95% @ 104°F (40°C), noncondensing | 15% to 95% @ 104°F (40°C), noncondensing | 5% to 95% @ 104°F (40°C), noncondensing |
| Nonoperating/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) |
| Nonoperating/Storage relative humidity | 15% to 90% @ 149°F (65°C), noncondensing | 15% to 90% @ 149°F (65°C), noncondensing | 15% to 90% @ 149°F (65°C), noncondensing |
| Altitude | up to 10,000 ft (3 km) | up to 10,000 ft (3 km) | up to 16,404 ft (5 km) |
| Acoustic | Power: 0 dB No fan | Power: 0 dB No fan | Power: 0 dB No fan |
| **Electrical characteristics** | | | |
| Frequency | 50/60 Hz | 50/60 Hz | 50/60 Hz |
| Maximum heat dissipation | 75 BTU/hr (79.13 kJ/hr) | 13 BTU/hr (13.72 kJ/hr) | 13 BTU/hr (13.72 kJ/hr) |
| Voltage | 100-240 VAC | 100-240 VAC | 100-240 VAC |
| DC voltage | | 12 V | 12 V |
| Current | 0.3 A | 0.3 A | 0.3 A |
| Maximum power rating | 22 W | 3.6 W | 3.6 W |
| Notes | Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.<br>This model provides internal power supply. Please select the correct power cord country option. | Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.<br>The exact input voltage and frequency rating are determined by the specific power adaptor part number ordered. Please select the correct power adaptor country option. | Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.<br>The exact input voltage and frequency rating are determined by the specific power adaptor part number ordered. Please select the correct power adaptor country option. |
| **Safety** | CSA 22.2 No. 60950; UL 60950-1; IEC 60950-1; EN 60950-1 | UL 60950-1; CSA 22.2 60950-1; IEC 60950-1:2005; EN 60950-1:2006 + A11:2009 | UL 60950-1; CSA C22.2 60950-1; IEC 60950-1:2005; EN 60950-1:2006 + A11:2009 |
| **Emissions** | FCC Rules Part 15, Subpart B Class A | FCC Rules Part 15, Subpart B Class A | FCC Rules Part 15, Subpart B Class A |

| | HP 1410-24G Switch (J9561A) | HP 1410-8 Switch (J9661A) | HP 1410-16 Switch (J9662A) |
|---|---|---|---|
| **Immunity** | | | |
| Generic | EN 55022 CISPR 22 | EN 55022 CISPR 22 | EN 55022 CISPR 22 |
| EN | EN 55024, CISPR 24 | EN 55024, CISPR 24 | EN 55024, CISPR 24 |
| ESD | IEC 61000-4-2 | IEC 61000-4-2 | IEC 61000-4-2 |
| Radiated | IEC 61000-4-3 | IEC 61000-4-3 | IEC 61000-4-3 |
| EFT/Burst | IEC 61000-4-4 | IEC 61000-4-4 | IEC 61000-4-4 |
| Surge | IEC 61000-4-5 | IEC 61000-4-5 | IEC 61000-4-5 |
| Conducted | IEC 61000-4-6 | IEC 61000-4-6 | IEC 61000-4-6 |
| Power frequency magnetic field | IEC 61000-4-8 | IEC 61000-4-8 | IEC 61000-4-8 |
| Voltage dips and interruptions | IEC 61000-4-11 | IEC 61000-4-11 | IEC 61000-4-11 |
| Harmonics | IEC 61000-3-2 | IEC 61000-3-2 | IEC 61000-3-2 |
| Flicker | IEC 61000-3-3 | IEC 61000-3-3 | IEC 61000-3-3 |

**Notes**

Use only supported genuine HP mini-GBICs with your switch.

IEEE 802.3az Energy Efficient Ethernet protocol is supported by the HP 1410-24G-R (JG708A), HP 1410-16 (J9662A) and HP 1410-24 (J9663A) Switches.

| | HP 1410-24G Switch (J9561A) | HP 1410-8 Switch (J9661A) | HP 1410-16 Switch (J9662A) |
|---|---|---|---|
| **Services** | 3-year, 4-hour onsite, 13x5 coverage for hardware (UF795E)<br>3-year, 4-hour onsite, 24x7 coverage for hardware (UF796E)<br>1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR843E)<br>1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR844E)<br>4-year, 4-hour onsite, 24x7 coverage for hardware (UR817E)<br>3-year 6 hr Call-to-Repair Onsite (UW386E)<br>1-year, 6 hour Call-To-Repair Onsite for hardware (HR845E)<br>Refer to the HP website at 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 (UF797E)<br>3-year, 4-hour onsite, 24x7 coverage for hardware (UF798E)<br>1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR846E)<br>1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR847E)<br>4-year, 4-hour onsite, 13x5 coverage for hardware (UR820E)<br>4-year, 4-hour onsite, 24x7 coverage for hardware (UR821E)<br>5-year, 4-hour onsite, 13x5 coverage for hardware (UR822E)<br>5-year, 4-hour onsite, 24x7 coverage for hardware (UR823E)<br>3-year 6 hr Call-to-Repair Onsite (UW389E)<br>4-year 6 hr Call-to-Repair Onsite (UW390E)<br>5-year 6 hr Call-to-Repair Onsite (UW391E)<br>1-year, 6 hour Call-To-Repair Onsite for hardware (HR848E)<br>Refer to the HP website at 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 (UF797E)<br>3-year, 4-hour onsite, 24x7 coverage for hardware (UF798E)<br>1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR846E)<br>1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR847E)<br>4-year, 4-hour onsite, 13x5 coverage for hardware (UR820E)<br>4-year, 4-hour onsite, 24x7 coverage for hardware (UR821E)<br>5-year, 4-hour onsite, 13x5 coverage for hardware (UR822E)<br>5-year, 4-hour onsite, 24x7 coverage for hardware (UR823E)<br>3-year 6 hr Call-to-Repair Onsite (UW389E)<br>4-year 6 hr Call-to-Repair Onsite (UW390E)<br>5-year 6 hr Call-to-Repair Onsite (UW391E)<br>1-year, 6 hour Call-To-Repair Onsite for hardware (HR848E)<br>Refer to the HP website at 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. |

# HP 1410 Switch Series

## Specifications (continued)

| | HP 1410-24 Switch (J9663A) | HP 1410-24-R Switch (JD986B) | HP 1410-24-2G Switch (J9664A) |
|---|---|---|---|
| **Ports** | 24 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only Supports a maximum of 24 autosensing 10/100 ports | 24 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only Supports a maximum of 24 autosensing 10/100 ports | 24 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX); Duplex: half or full 2 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only Supports a maximum of 24 autosensing 10/100 ports plus 2 autosensing 10/100/1000 ports |
| **Physical characteristics** <br> Weight | 13.23(w) x 6.65(d) x 1.73(h) in (33.6 x 16.89 x 4.39 cm) (1U height) 2.98 lb (1.35 kg) | 17.32(w) x 6.81(d) x 1.73(h) in (44 x 17.3 x 4.4 cm) (1U height) 4.41 lb (2.0 kg) | 13.23(w) x 6.65(d) x 1.73(h) in (33.6 x 16.89 x 4.39 cm) (1U height) 2.98 lb (1.35 kg) |
| **Memory and processor** | 16 Kb EEPROM; packet buffer size: 2 Mb | 8kb EEPROM; packet buffer size: 2 Mb | 2 Kb EEPROM; packet buffer size: 2.5 Mb |
| **Mounting** | Mounts in an EIA standard 19-inch telco rack (hardware included); wall, desktop and under-table mounting | Mounts in an EIA standard 19-inch telco rack (hardware included); desktop mounting | Mounts in an EIA standard 19-inch telco rack (hardware included); wall, desktop and under-table mounting |
| **Performance** <br> 100 Mb Latency <br> 1000 Mb Latency <br> Throughput <br> Switching capacity <br> MAC address table size | < 11 µs (LIFO 64-byte packets) <br><br> up to 3.5 million pps (64-byte packets) <br> 4.8 Gb/s <br> 8192 entries | < 11 µs (LIFO 64-byte packets) <br><br> 3.5 million pps (64-byte packets) <br> 4.8 Gb/s <br> 8192 entries | < 5.6 µs (LIFO 64-byte packets) <br> < 2.2 µs (LIFO 64-byte packets) <br> up to 6.5 million pps (64-byte packets) <br> 8.8 Gb/s <br> 8192 entries |
| **Environment** <br> Operating temperature <br> Operating relative humidity <br> Nonoperating/Storage temperature <br> Nonoperating/Storage relative humidity <br> Altitude <br> Acoustic | 32°F to 104°F (0°C to 40°C) ) <br> 15% to 95% @ 104°F (40°C), noncondensing <br> -40°F to 158°F (-40°C to 70°C) <br> 15% to 90% @ 149°F (65°C), noncondensing <br> up to 10,000 ft (3 km) <br> Power: 0 dB No fan | 32°F to 104°F (0°C to 40°C) <br> 15% to 95% @ 104°F (40°C), noncondensing <br> -40°F to 158°F (-40°C to 70°C) <br> 15% to 90% @ 149°F (65°C), noncondensing <br> up to 10,000 ft (3 km) <br> Power: 0 dB No fan | 32°F to 104°F (0°C to 40°C <br> 5% to 95% @ 104°F (40°C), noncondensing <br> -40°F to 158°F (-40°C to 70°C) <br> 15% to 90% @ 149°F (65°C), noncondensing <br> up to 16,404 ft (5 km) <br> Power: 0 dB No fan |
| **Electrical characteristics** <br> Frequency <br> Maximum heat dissipation <br> Voltage <br> DC voltage <br> Current <br> Maximum power rating <br> Notes | 50/60 Hz <br> 17 BTU/hr (17.93 kJ/hr) <br> 100-240 VAC <br> 12 V <br> 0.4 A <br> 4.8 W <br> Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. The exact input voltage and frequency rating are determined by the specific power adaptor part number ordered. Please select the correct power adaptor country option. | 50/60 Hz <br> 21 BTU/hr (22 kJ/hr) <br> 100-240 VAC <br> 3.3 V <br> 1.1 A <br> 3.6 W <br> Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. This model provides an internal power supply. Please select the correct power cord country option. | 50/60 Hz <br> 37 BTU/hr (39.03 kJ/hr) <br> 100-240 VAC <br> 12 V <br> 0.9 A <br> 10.8 W <br> Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. The exact input voltage and frequency rating are determined by the specific power adaptor part number ordered. Please select the correct power adaptor country option. |

|  | HP 1410-24 Switch (J9663A) | HP 1410-24-R Switch (JD986B) | HP 1410-24-2G Switch (J9664A) |
|---|---|---|---|
| **Safety** | UL 60950-1; CSA 22.2 60950-1; IEC 60950-1:2005; EN 60950-1:2006 + A11:2009 | UL 60950-1; CSA 22.2 60950-1; IEC 60950-1:2005; EN 60950-1:2006 + A11:2009 | UL 60950-1; CSA 22.2 60950-1; IEC 60950-1:2005; EN 60950-1:2006 + A11:2009 |
| **Emissions** | FCC Rules Part 15, Subpart B Class A | FCC Rules Part 15, Subpart B Class A | FCC Rules Part 15, Subpart B Class A |
| **Immunity** | | | |
| Generic | EN 55022 CISPR 22 | EN 55022 CISPR 22 | EN 55022 CISPR 22 |
| EN | EN 55024, CISPR 24 | EN 55024, CISPR 24 | EN 55024, CISPR 24 |
| ESD | IEC 61000-4-2 | IEC 61000-4-2 | IEC 61000-4-2 |
| Radiated | IEC 61000-4-3 | IEC 61000-4-3 | IEC 61000-4-3 |
| EFT/Burst | IEC 61000-4-4 | IEC 61000-4-4 | IEC 61000-4-4 |
| Surge | IEC 61000-4-5 | IEC 61000-4-5 | IEC 61000-4-5 |
| Conducted | IEC 61000-4-6 | IEC 61000-4-6 | IEC 61000-4-6 |
| Power frequency magnetic field | IEC 61000-4-8 | IEC 61000-4-8 | IEC 61000-4-8 |
| Voltage dips and interruptions | IEC 61000-4-11 | IEC 61000-4-11 | IEC 61000-4-11 |
| Harmonics | IEC 61000-3-2 | IEC 61000-3-2 | IEC 61000-3-2 |
| Flicker | IEC 61000-3-3 | IEC 61000-3-3 | IEC 61000-3-3 |

**Notes**

IEEE 802.3az Energy Efficient Ethernet protocol is supported by the HP 1410-24G-R (JG708A), HP 1410-16 (J9662A) and HP 1410-24 (J9663A) Switches.

| **Services** | 3-year, 4-hour onsite, 13x5 coverage for hardware (UF797E) | 3-year, 4-hour onsite, 13x5 coverage for hardware (UF797E) | 3-year, 4-hour onsite, 13x5 coverage for hardware (UF797E) |
|---|---|---|---|
| | 3-year, 4-hour onsite, 24x7 coverage for hardware (UF798E) | 3-year, 4-hour onsite, 24x7 coverage for hardware (UF798E) | 3-year, 4-hour onsite, 24x7 coverage for hardware (UF798E) |
| | 1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR846E) | 1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR846E) | 1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR846E) |
| | 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR847E) | 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR847E) | 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR847E) |
| | 4-year, 4-hour onsite, 13x5 coverage for hardware (UR820E) | 4-year, 4-hour onsite, 13x5 coverage for hardware (UR820E) | 4-year, 4-hour onsite, 13x5 coverage for hardware (UR820E) |
| | 4-year, 4-hour onsite, 24x7 coverage for hardware (UR821E) | 4-year, 4-hour onsite, 24x7 coverage for hardware (UR821E) | 4-year, 4-hour onsite, 24x7 coverage for hardware (UR821E) |
| | 5-year, 4-hour onsite, 13x5 coverage for hardware (UR822E) | 5-year, 4-hour onsite, 13x5 coverage for hardware (UR822E) | 5-year, 4-hour onsite, 13x5 coverage for hardware (UR822E) |
| | 5-year, 4-hour onsite, 24x7 coverage for hardware (UR823E) | 5-year, 4-hour onsite, 24x7 coverage for hardware (UR823E) | 5-year, 4-hour onsite, 24x7 coverage for hardware (UR823E) |
| | 3-year 6 hr Call-to-Repair Onsite (UW389E) | 3-year 6 hr Call-to-Repair Onsite (UW389E) | 3-year 6 hr Call-to-Repair Onsite (UW389E) |
| | 4-year 6 hr Call-to-Repair Onsite (UW390E) | 4-year 6 hr Call-to-Repair Onsite (UW390E) | 4-year 6 hr Call-to-Repair Onsite (UW390E) |
| | 5-year 6 hr Call-to-Repair Onsite (UW391E) | 5-year 6 hr Call-to-Repair Onsite (UW391E) | 5-year 6 hr Call-to-Repair Onsite (UW391E) |
| | 1-year, 6 hour Call-To-Repair Onsite for hardware (HR848E) | 1-year, 6 hour Call-To-Repair Onsite for hardware (HR848E) | 1-year, 6 hour Call-To-Repair Onsite for hardware (HR848E) |
| | Refer to the HP website at 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. | Refer to the HP website at 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. | Refer to the HP website at 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)

| **General protocols** | IEEE 802.1p Priority | IEEE 802.3ab 1000BASE-T Gigabit Ethernet over twisted pair (10/100/1000 models only) IEEE 802.3i 10BASE-T Ethernet over twisted pair | IEEE 802.3u 100BASE-TX Fast Ethernet, 100BASE-FX with auto negotiation IEEE 802.3x Flow Control |
|---|---|---|---|

# HP 1410 Switch Series accessories

| | |
|---|---|
| **Cables** | HP 0.5 m Multimode OM3 LC/LC Optical Cable (AJ833A)<br>HP 1 m Multimode OM3 LC/LC Optical Cable (AJ834A)<br>HP 2 m Multimode OM3 LC/LC Optical Cable (AJ835A)<br>HP 5 m Multimode OM3 LC/LC Optical Cable (AJ836A)<br>HP 15 m Multimode OM3 LC/LC Optical Cable (AJ837A)<br>HP 30 m Multimode OM3 LC/LC Optical Cable (AJ838A)<br>HP 50 m Multimode OM3 LC/LC Optical Cable (AJ839A)<br>HP Premier Flex LC/LC Multi-mode OM4 2 fiber 1m Cable (QK732A)<br>HP Premier Flex LC/LC Multi-mode OM4 2 fiber 2m Cable (QK733A)<br>HP Premier Flex LC/LC Multi-mode OM4 2 fiber 5m Cable (QK734A)<br>HP Premier Flex LC/LC Multi-mode OM4 2 fiber 15m Cable (QK735A)<br>HP Premier Flex LC/LC Multi-mode OM4 2 fiber 30m Cable (QK736A)<br>HP Premier Flex LC/LC Multi-mode OM4 2 fiber 50m Cable (QK737A) |
| **HP 1410-24G Switch (J9561A)** | HP X121 1G SFP LC SX Transceiver (J4858C)<br>HP X121 1G SFP LC LX Transceiver (J4859C)<br>HP X111 100M SFP LC FX Transceiver (J9054C) |

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