
HP AdvanceStack 10Base-T Hubs



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Whether your workgroup is large or small, self-contained or integrated into a larger organization, HP AdvanceStack hubs offer expandability and economy when connecting your workgroup. Buy what you need now, then add new functionality to your network as your needs change.

Choose from a range of port counts and types to match your network environment and complexity.

Backed by an industry-leading lifetime warranty, HP AdvanceStack hubs incorporate a rich set of features that are normally found only in modular hubs, while retaining the flexibility and economy of stackable hubs.

HP AdvanceStack Hubs: A Solution for Every Networking Environment

Remote and Central Office Solutions

HP AdvanceStack full-featured hubs deliver the benefits of:

- *Manageability*
- *Availability*
- *Performance*

HP J3200A AdvanceStack 10BT Switching Hub-12R

HP J3202A AdvanceStack 10BT Switching Hub-24R

HP J3204A AdvanceStack 10BT Switching Hub-24T

Small Business and Small Office Solutions

HP AdvanceStack entry-level hubs deliver the benefits of:

- *Simplicity*
- *Reliability*
- *Value*

HP J3128A AdvanceStack 10Base-T Hub-8E

HP J2610B AdvanceStack 10Base-T Hub-8U

HP J2611B AdvanceStack 10Base-T Hub-16U

HP J3162A AdvanceStack Network Kit

Specialized Solutions

HP Ethertwist hubs are managed hubs for specialized environments:

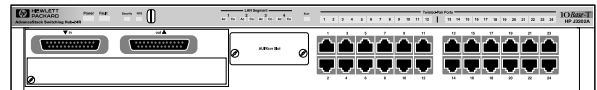
HP J28692A ThinLAN Hub Plus

HP J28682A Fiber-optic Hub Plus

HP AdvanceStack 10Base-T Hubs: At a Glance

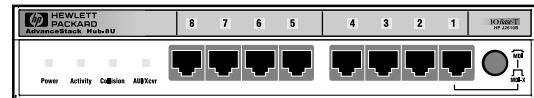
HP AdvanceStack Full-Featured Stackable Hubs

- **HP J3200A AdvanceStack 10BT Switching Hub-12R**
Expandable 12-port, 10Base-T stackable hub with multi-segment architecture and slots for upgrading to advanced functionality. Designed for central and remote office workgroups.
- **HP J3202A AdvanceStack 10BT Switching Hub-24R**
Expandable 24-port, 10Base-T stackable hub with multi-segment architecture and slots for upgrading to advanced functionality. Designed for central and remote office workgroups.
- **HP J3204A AdvanceStack 10BT Switching Hub-24T**
Provides same functionality as J3202A hub, with two 12-port Telco connectors instead of RJ-45 ports.



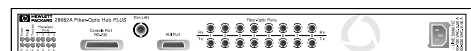
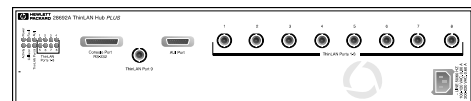
HP AdvanceStack Entry-Level Stackable Hubs

- **HP J3128A AdvanceStack 10Base-T Hub-8E**
The most economical 8-port 10Base-T hub. Designed for small standalone workgroups. Easily expandable through 10Base-T cascading.
- **HP J2610B AdvanceStack 10Base-T Hub-8U**
Economical 8-port 10Base-T hub, upgradable to SNMP management. Designed for small standalone networks and low-density distributed segments.
- **HP J2611B AdvanceStack 10Base-T Hub-16U**
Economical 16-port 10Base-T hub, upgradable to SNMP management. Ideal for incremental expansion of an existing network or for small standalone networks and low-density distributed segments requiring connection to a site backbone.



HP EtherTwist Hubs

- **HP 28692A ThinLAN Hub Plus**
Managed hub for environments that are fully cabled with thin coax, or as the center of a thin coaxial backbone.
- **HP 28682A Fiber-optic Hub Plus**
Managed hub for electrically noisy environments, or for a backbone where noise immunity, security, or long cables are important.



HP AdvanceStack 10Base-T Hubs: Comparative Features

Description	AdvanceStack						ThinLAN	Fiber-optic
	Hub-12R J3200A	Hub-24R J3202A	Hub-24T J3204A	Hub-8E J3128A	Hub-8U J2610B	Hub-16U J2611B	Hub Plus 28692A	Hub Plus 28682A
Ports (as factory installed):								
- 10Base-T								
RJ-45	12	24		8	8	16		
Telco			24					
- BNC (thin coaxial)				1			9	1
- AUI							1	1
- ST (Tx, Rx)								8
- RS-232 console port (on management module)	• ¹	• ¹	• ¹		• ²	• ²	•	•
- Recessed transceiver slot	•	•	•		•	•		
Management Capabilities:								
- HP AdvanceStack Assistant software	•	•	•		•	•		
- RMON support	• ¹	• ¹	• ¹					
- EASE network traffic sampling	• ¹	• ¹	• ¹		• ²	• ²	•	•
- SNMP/IP/IPX management	• ¹	• ¹	• ¹		• ²	• ²	•	•
- Configurable for backup link	• ¹	• ¹	• ¹		• ²	• ²	•	•
- Port security	• ¹	• ¹	• ¹		• ²	• ²		
- Real-time fault isolation	• ¹	• ¹	• ¹					
Rack Space Required (if appropriate, standard 19-inch rack):	6.6 cm 2.6 in	6.6 cm 2.6 in	6.6 cm 2.6 in	n/a	n/a	4.36 cm 1.7 in		
Power Source:	Internal	Internal	Internal	External	External	Internal	Internal	Internal
Warranty (industry-leading):	Lifetime (first 5 years onsite)			Lifetime (return to HP)		Lifetime (first 5 years onsite)		
HP AdvanceStack Hub Accessories (For details refer to the HP AdvanceStack Network Accessories data sheet)								
HP J3210A AdvanceStack 10BT Management Pack	•	•	•					
HP J3212A AdvanceStack Hub 10BT Switch Module	•	•	•					
HP J2962A Redundant Power Supply (RPS)	•	•	•					
HP J2606A Fiber-optic Transceiver Module	•	•	•		•	•		
HP J2607A Twisted-pair Transceiver Module	•	•	•		•	•		
HP J2608A ThinLAN Transceiver Module	•	•	•		•	•		
HP J2609A AUI Port Module	•	•	•		•	•		
HP J3133A 8U/16U SNMP Module					•	•		
HP J2633A AdvanceStack Dial-A-Lan 2A/Plus and 10Base-T SNMP Module Bundle ³ *								
HP J2634A AdvanceStack Dial-A-Lan 4A and 10Base-T SNMP Module Bundle*								
HP J2629A AdvanceStack Router 210 and 10Base-T SNMP Module Bundle*								
EtherTwist Hub Accessories								
HP 28641B ThinLAN Transceiver							•	•
HP 28683A Fiber-optic Transceiver							•	•
HP 28685B EtherTwist Transceiver							•	•

¹ With HP J3210A AdvanceStack 10BT Management Pack installed

² With HP J3133A 8U/16U SNMP Module installed

³ Available in U.S. only.

*Compatible with HP AdvanceStack 10Base-T Hub-12 (J2600A), Hub-24 (J2601A), and Hub-48 (J2602A).

HP AdvanceStack Full-Featured Stackable 10BT Switching Hub-12R, Hub-24R, Hub-24T: A Closer Look

HP AdvanceStack Switching Hubs:

HP J3200A HP AdvanceStack 10BT Switching Hub-12R
HP J3202A HP AdvanceStack 10BT Switching Hub-24R
HP J3204A HP AdvanceStack 10BT Switching Hub-24T

HP AdvanceStack Switching Hub/Management Bundles:

HP J3201A Hub-12R (J3200A) with Management Pack (J3210A)
HP J3203A Hub-24R (J3202A) with Management Pack (J3210A)
HP J3205A Hub-24T (J3204A) with Management Pack (J3210A)

HP J3200A AdvanceStack 10BT Switching Hub-12R



HP J3202A AdvanceStack 10BT Switching Hub-24R



HP J3204A AdvanceStack 10BT Switching Hub-24T



HP AdvanceStack 10BT Switching Hub-12R, Hub-24R, and Hub-24T are designed for interconnected workgroups where flexibility in performance and upgradability to advanced functionality such as switching, management, routing, dial-in/dial-out access, bridging, and redundant power are key considerations. And HP AdvanceStack hubs are backed by a lifetime warranty, with the first five years onsite.

Highlights

- **Flexibility**
HP AdvanceStack Switching hubs combine the simplicity of plug and play with the performance of switching. Each switching hub starts out as a simple shared 10Base-T hub. Add the HP J3210A AdvanceStack Management Pack and tap into the power of a multisegment architecture. Each hub can be partitioned into four fully managed LAN segments for a total of four segments per pack. Each segment is an independent 10 Mbps collision domain shared by fewer users and network devices.

For even more flexibility, place any port on the hub onto any segment using drag-and-drop color-coded software (included in management pack). Segments as small as one port are possible, allowing you to optimize workgroup performance based on user requirements. The result is a new level of scalability and flexibility not previously available in stackable 10BT hubs.

- **Expandability**
HP AdvanceStack hubs are designed to grow with your network. Each switching hub contains two slots: one for adding management and one for adding other advanced features. For example, insert an HP J3212A Hub 10BT Switching Module and turn the switching hub into a switch. An auto-configuration feature in the switch module automatically assigns ports across segments for better performance. Push a “load-balancing” button in HP AdvanceStack Assistant software to fine-tune performance even more.
- **Manageability**
Install HP AdvanceStack 10BT Management Pack in any hub in the stack for a total management solution. The management pack includes a management module and HP AdvanceStack Assistant software, everything you need to manage the network. One management module fully manages all four LAN segments within the stack backbone. In addition to traffic monitoring, fault isolation, and device support, the management solution includes industry standards such as SNMP and MIB II. With the addition of RMON, HP provides a complete management solution.
- **Redundant Power Supply Ready**
HP AdvanceStack hubs can be connected to an external redundant power supply (J2962A) to ensure constant power for maximum networking uptime.

HP AdvanceStack Stackable 10BT Switching Hub-12R, Hub-24R, Hub-24T: A Closer Look (continued)

Choice of Configurations

HP AdvanceStack 10BT Switching Hubs offer a choice of configurations, so you can choose the right hub for your needs.

HP J3200A with 12 shielded RJ-45 ports

HP J3202A with 24 shielded RJ-45 ports

HP J3204A with two 12-port Telco connectors

HP J3201A Bundle (J3200A Hub-12R with J3210A Management Pack)

HP J3203A Bundle (J3202A Hub-24R with J3210A Management Pack)

HP J3205A Bundle (J3204A Hub-24T with J3210A Management Pack)

Standard Features

- Two expansion slots for adding functionality such as management, switching, routing, and remote access.
- Flexible hub architecture allows partitioning of hubs into four fully managed LAN segments for a total of four segments per stack (up to 32 isolated segments per stack).
- Port switching allows any port on the hub to be placed on any segment in the stack, for maximum network performance. Segments as small as one port are possible.
- Includes LEDs for quick hub status checks and troubleshooting assistance.
- Provides “hot-swap” capabilities— if a hub in a stack fails, all of the other hubs in the stack remain powered.

- Redundant power supply support. One RPS provides constant power to up to four HP AdvanceStack devices.
- Includes recessed transceiver slot for highly reliable connection of optional transceiver module (HP J2606A-Fiber, HP J2607A-TP, or HP J2608A-Coax).
- Mounts in a standard 19-inch rack, on a wall (flat or on end), or on any horizontal surface such as a shelf or table. All mounting hardware is included.

Advanced Features*

- Configures a network backup link between devices. Any port can be configured as a primary or backup link.
The backup link is automatically activated in the event of a critical link failure.

HP J3212A AdvanceStack Hub 10BT Switch Module

The switch module can be added to HP AdvanceStack 10BT Switching Hub-12R, Hub-24R, and Hub-24T, for a new level of performance.

- *Simple, economical 8-port switch solution allows easy switching between hub segments within the stack.*
- *Plug-and-play solution easily inserts into the expansion slot of HP AdvanceStack 10BT hubs.*
- *Auto-configuration upon start-up. Load-balancing feature in software provides performance tuning.*

- Includes Intel i960 RISC-based processor, 1 Mbyte RAM, 1 Mbyte Flash EEPROM, and 8 Mbyte SIMM to provide ample processing power and memory for future network management needs.
- Provides complete workgroup security features: intruder prevention, auto port disabling, network management alarm, eavesdrop prevention, authorized managers list, and password protection.
- Allows redundant management capabilities: when a second management module (HP J3210A) is installed in the stack, it provides backup support for the entire stack.
- Allows intelligent error monitoring, intelligent segmentation recovery, and autosegmentation for fault isolation.
- Supports SNMP/IP and IPX multivendor management with HP AdvanceStack Assistant for Windows and SNMP/IP management with HP AdvanceStack Assistant for UNIX.

** Features available when an optional HP AdvanceStack 10BT Switching Hub Management Pack (J3210A) is installed. Please see your authorized dealer for configuration requirements.*

HP AdvanceStack Assistant for Windows (HP J2569J) and HP AdvanceStack Assistant for UNIX (27361J) include management applications designed specifically for HP AdvanceStack hubs.

HP AdvanceStack 10Base-T Entry-Level Stackable Hub-8E, Hub-8U, Hub-16U: A Closer Look

HP AdvanceStack Hubs:

HP J3128A AdvanceStack 10Base-T Hub-8E
HP J2610B AdvanceStack 10Base-T Hub-8U
HP J2611B AdvanceStack 10Base-T Hub-16U

HP AdvanceStack Hubs/SNMP Bundles:

HP J3134A Hub-8U (J2610B) with SNMP Module (J3133A)
HP J3135A Hub-16U (J2611B) with SNMP Module (J3133A)

HP J3128A AdvanceStack 10Base-T Hub-8E



HP J2610B AdvanceStack 10Base-T Hub-8U



HP J2611B AdvanceStack 10Base-T Hub-16U



Highlights

• Ease of Use

HP AdvanceStack 10Base-T Hub-8E, Hub-8U, and Hub-16U offer true plug-and-play installation by allowing the user to set up the hubs quickly with no special configuration requirements. The compact design of Hub-8E and Hub-8U enables easy installation in locations where space is limited.

HP AdvanceStack Hub-16U comes in the standard 19-inch rack-mountable form factor (all mounting hardware is included).

As your network expands, the Hub-8E, Hub-8U, and Hub-16U can be easily connected to additional hubs through a daisy chain connection (MDI) or through a coaxial connection (BNC).

• Upgradability

As your network grows, hub management becomes increasingly important. HP AdvanceStack Hub-8U and Hub-16U can be upgraded with the optional HP AdvanceStack SNMP Module (J3133A) to add advanced SNMP management with remote management capabilities.

In addition, HP offers a variety of optional integrated transceiver modules for the Hub-8U and Hub-16U to allow you to connect to other media types including fiber-optic, coaxial (BNC), UTP, and AUI.

• Reliability

HP AdvanceStack Hub-8E, Hub-8U, and Hub-16U rely on proven technology, which results in a product that adheres to the Hewlett-Packard tradition of unparalleled quality and reliability.

Standard Features

- Provides eight or sixteen 10Base-T ports using RJ-45 connectors, allowing you to connect eight or sixteen PCs or printers for file and resource sharing. The Hub-8E provides an additional BNC port for connection to 10Base-2 coaxial networks.
- Includes LEDs for Power, Activity, Collisions, AUI/Xcvr and Per Port Status, providing quick hub status checks and troubleshooting support.
- Includes one daisy chain port (or MDI switch/port) for standard unshielded twisted-pair connections between hubs without special crossover cables.
- Includes automatic polarity detection and correction on UTP ports.
- Provides automatic port/segment partitioning and reconnection.

Available on Hub-8U, Hub-16U:

- Upgrade to advanced functionality, such as SNMP management, with the insertion of the optional HP J3133A AdvanceStack 8U/16U SNMP Module.
- Incorporate one transceiver slot for connection to a variety of network backbones when an optional HP transceiver module (HP J2606A-Fiber, HP J2607A-TP, J2608A-Coax, or HP J2609A-AUI) is installed.

HP AdvanceStack 10Base-T Entry-Level Stackable Hub-8E, Hub-8U, Hub-16U: A Closer Look (continued)

Optional Advanced Features for Hub-8U, Hub-16U

- The optional HP J3133A AdvanceStack 8U/16U SNMP Module provides:
 - Full SNMP management with hub-level and port-level security features: intruder prevention, auto port disabling, network management alarm, eavesdrop prevention, authorized managers list, assigned port access, and password protection.
 - Remote management capabilities via telnet and/or dial-in with the use of an external modem.
 - Support by industry-leading software (HP OpenView and HP AdvanceStack Assistant for Windows).
- ASCII console support.
- HP EASE (Embedded Advanced Sampling Environment) application for intelligent network traffic monitoring, performance optimization, and trend analysis capability.
- Duplicate IP address detection capability.
- Intelligent error monitoring, intelligent partition recovery providing fault isolation and improved network integrity beyond standard 10Base-T specifications for ports experiencing collision problems.
- Support for SNMP/IP and IPX multivendor management with HP AdvanceStack Assistant for Windows (J2569J) and SNMP/IP management with HP AdvanceStack Assistant for UNIX (27361J). It is also manageable from any management station with a standard SNMP MIB browser.

HP J3162A Network Kit:

HP J3128A AdvanceStack Hub-8E with three HP J2973A DeskDirect 10-Mbit PCI LAN Adapters and three 50-foot UTP cables



HP EtherTwist Hubs: A Closer Look

HP EtherTwist Hubs:

HP 28692A ThinLAN Hub Plus

HP 28682A Fiber-optic Hub Plus

HP 28692A ThinLAN Hub Plus



Features

- Provides nine ThinLAN coaxial (BNC) ports and one AUI port; the AUI port connects (via transceiver) to thick or thin coaxial, fiber-optic, or twisted-pair cable. All ports are active (AUI and BNC ports function independently).
- Offers compatibility with the IEEE 802.3 Type 10Base2 standard: supports 10 Mbps link speed and 185-m coaxial cable lengths.

HP 28682A Fiber-optic Hub Plus



Features

- Provides eight fiber-optic ports (ST connectors), one thin coaxial (BNC) port, and one AUI port; the AUI port connects (via transceiver) to thick or thin coaxial, fiber-optic, or twisted-pair cable. All ports are active (AUI and BNC ports function independently).
- Offers compatibility with the IEEE 802.3 FOIRL standard: supports 10 Mbps link speed; both 62.5/125- μm and 50/125- μm optical fiber; and 1-km cable lengths (or more, depending on network configuration).

Features Common to All HP EtherTwist Hubs

- Supports both Ethernet and IEEE 802.3, and operates transparently to network operating system (NOS) software.
- Provides an RS-232 console port for configuring ports and viewing hub statistics. A terminal or emulator can connect to this port either directly or via modem.
- Includes self-test, port diagnostics, automatic cable fault detection, and loopback test for cable testing.
- Provides LEDs for Port Status, Activity, Collisions, Fault, and Power.
- Segments malfunctioning ports automatically; restores ports automatically when fault is corrected.
- Allows one redundant link per hub for backup over a separate path.
- Supports SNMP/IP and SNMP/IPX network management under HP OpenView network management products; supports SNMP/IP management via standard SNMP MIB browsers.
- Supports HP EASE (Embedded Advanced Sampling Environment) traffic sampling.
- Mounts easily in standard 19-inch rack (with cables facing front or back); on wall (flat or on end); or on shelf or table. Brackets included.

HP AdvanceStack 10Base-T Hubs: Specifications and Standards

Product Specifications

Description	Switching Hub-12R J3200A	Switching Hub-24R J3202A	Switching Hub-24T J3204A
Environmental Characteristics: - Operating temperature: 5°C to 40°C 0°C to 55°C - Relative humidity: 15–95% @ 40°C, noncondensing	• •	• •	• •
Physical Characteristics: - Dimensions - Weight	44.2 x 31.8 x 6.6 cm 7.4 x 12.5 x 2.6 in 4.1 kg 9.0 lb	44.2 x 31.8 x 6.6 cm 7.4 x 12.5 x 2.6 in 4.1 kg 9.0 lb	44.2 x 31.8 x 6.6 cm 7.4 x 12.5 x 2.6 in 4.1 kg 9.0 lb
Electrical Characteristics: - Voltage* - Current - Frequency*	100-127 V ac; 200-240 V ac 1.0 A max, 0.6 A max 50/60 Hz	100-127 V ac; 200-240 V ac 1.0 A max, 0.6 A max 50/60 Hz	100-127 V ac; 200-240 V ac 1.0 A max, 0.6 A max 50/60 Hz
Memory: - SIMM	8 MB	8 MB	8 MB

* Input voltage/frequency is AC adapter specific.

Standards

Description	Switching Hub-12R J3200A	Switching Hub-24R J3202A	Switching Hub-24T J3204A
Communications: - IEEE 802.3 Type FOIRL - IEEE 802.3 Type 10Base-T - IEEE 802.3 Type 10Base2 - RFC 1368 IEEE repeater MIB and MIB II	• • • •	• • • •	• • • •
Safety: - UL 1950 - CSA 950 - Verified to IEC 950/EN 60950 - NOM-019-SCFI-1993 - NOM-001-SCFI-1993	• • • •	• • • •	• • • •
Emissions: - FCC Part 15 Class A - CISPR-22 (1985) Class A - CISPR-22 (1985) Class B - EN 55022 (1988) Class A - EN 55022 (1988) Class B - VCCI Level 1	• • • • •	• • • • •	• • • • •
Immunity: - ESD: IEC 801-2: 1991 4 kV CD, 8 kV AD - Radiated Immunity: IEC 801-3: (1984) 3 V/m - EFT/Burst: IEC 801-4: 1988 - 0.5 kV signal lines, 1.0 kV power line - Generic Immunity: EN 55082-1 (1992)	• • • • •	• • • • •	• • • • •

Hub-8E J3128A	Hub-8U J2610B	Hub-16U J2611B	ThinLAN Hub Plus 28692A	Fiber-optic Hub Plus 28682A
• •	• •	• •	• •	• •
19.0 x 11.6 x 2.5 cm 7.5 x 4.6 x 1.0 in .64 kg 1.41 lb	21.6 x 17.0 x 4.1 cm 8.5 x 6.7 x 1.6 in 1.45 kg 3.2 lb	42.5 x 23.8 x 4.36 cm 16.7 x 9.4 x 1.7 in 2.2 kg 4.8 lb	42.6 x 23.5 x 8.9 cm 16.8 x 9.3 x 3.5 in 4.0 kg 8.8 lb	42.6 x 23.5 x 4.4 cm 16.8 x 9.3 x 1.7 in 2.7 kg 6.0 lb
100-250 V ac 0.8 A max 50/60 Hz	100-240 V ac 0.7 A max 50/60 Hz	100-127 V ac; 200-240 V ac 0.3 A max, 0.2 A max 50/60 Hz, 50/60 Hz	200-240 V ac 0.8 A max, 0.6 A max 50/60 Hz	200-240 V ac 0.5 A max, 0.4 A max 50/60 Hz

Hub-8E J3128A	Hub-8U J2610B	Hub-16U J2611B	ThinLAN Hub Plus 28692A	Fiber-optic Hub Plus 28682A
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Product literature, frequently asked support questions, and other information are available on HP's Network Connectivity Home Page on the World Wide Web.

From your browser, type the URL:

http://www.hp.com/go/network_city
