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# HP AdvanceStack Hubs Data Sheet

## Flexible, Scalable 10Base-T, 100Base-T, and 100VG Network Hubs

HP AdvanceStack 10Base-T Hub-8E  
HP AdvanceStack 10Base-T Hub-8U  
HP AdvanceStack 10Base-T Hub-16U

HP AdvanceStack 10BT Switching Hub-12R  
HP AdvanceStack 10BT Switching Hub-24R  
HP AdvanceStack 10BT Switching Hub-24T

HP AdvanceStack 100Base-T Hub-8TXE  
HP AdvanceStack 100Base-T Hub-12TX  
HP AdvanceStack 100Base-T Hub-12TXM

HP AdvanceStack 100VG Hub-7E  
HP AdvanceStack 100VG Hub-7M  
HP AdvanceStack 100VG Hub-14

HP Networking



You don't have to be a network expert to see what HP AdvanceStack Hubs can do for you. You'll get more network—more performance, more flexibility, and more reliability—and you'll spend less time and money. Because you have better things to do.

## Less Work, More Network



## HP AdvanceStack Hubs at a Glance

Page	Product	Description
<b>HP AdvanceStack 10Base-T Hubs</b>		
4-5	<b>HP AdvanceStack 10Base-T Hub-8E (J3128A)</b>	HP's most economical 10Base-T hub offers eight ports and is easily expandable through 10Base-T cascading.
4-5	<b>HP AdvanceStack 10Base-T Hub-8U (J2610B)</b>	Economical eight-port 10Base-T hub, upgradable to SNMP management.
4-5	<b>HP AdvanceStack 10Base-T Hub-16U (J2611B)</b>	Provides same functionality as Hub-8U, with 16 RJ-45 ports instead of eight.
6-7	<b>HP AdvanceStack 10BT Switching Hub-12R (J3200A)</b>	Basic expandable 12-port 10Base-T stackable hub with multisegment architecture and slots for upgrading to advanced functionality such as management and remote connectivity.
6-7	<b>HP AdvanceStack 10BT Switching Hub-24R (J3202A)</b>	Basic expandable 24-port 10Base-T stackable hub with multisegment architecture and slots for upgrading to advanced functionality such as management and remote connectivity.
6-7	<b>HP AdvanceStack 10BT Switching Hub-24T (J3204A)</b>	Provides same functionality as Hub-24R, with two 12-port Telco connectors instead of RJ-45 ports.
<b>HP AdvanceStack 100Base-T Hubs</b>		
8-9	<b>HP AdvanceStack 100Base-T Hub-8TXE (J3235A)</b>	HP's most economical 100Base-T hub; offers eight RJ-45 ports and a daisy-chaining port for easy cascading with straight-through cable.
8-9	<b>HP AdvanceStack 100Base-T Hub-12TX (J3234A)</b>	An affordable 12-port 100Base-T hub with money-saving slot that accepts switch port module upgrades.
8-9	<b>HP AdvanceStack 100Base-T Hub-12TXM with Management (J3233A)</b>	An affordable 12-port 100Base-T hub with money-saving slot that accepts switch port module upgrades; includes built-in management.
<b>HP AdvanceStack 100VG Hubs</b>		
10-11	<b>HP AdvanceStack 100VG Hub-7E (J3137A)</b>	HP's most economical 100VG hub; offers seven 100VG ports for small standalone workgroups running time-sensitive applications.
10-11	<b>HP AdvanceStack 100VG Hub-7M (J2413A)</b>	Stackable, upgradable seven-port 100VG hub provides connectivity modularity in central and remote-office workgroups running time-sensitive applications.
10-11	<b>HP AdvanceStack 100VG Hub-14 (J2415A)</b>	Expandable, stackable 14-port 100VG hub upgradable to full SNMP management, designed for high-performance workgroups running time-sensitive applications.
<b>HP AdvanceStack Internet Solutions</b>		
12	<b>HP AdvanceStack Internet Router (J3138A)</b>	A money-saving upgrade module that slides into many HP AdvanceStack hubs and switches and provides Cisco-compatible connectivity.
<b>Network Management Software</b>		
13	<b>HP AdvanceStack Assistant for Windows (J2569K)</b>	HP's unique, easy to use software takes the work out of network management.
14-15	<b>HP AdvanceStack Hubs: Accessories</b>	



## HP AdvanceStack 10Base-T Entry-Level Hubs

HP AdvanceStack 10Base-T Hub-8E, Hub-8U, and Hub-16U are designed for small, standalone networks and low-density distributed segments requiring connection to a site backbone. These hubs provide true plug-and-play installation with no special configuration requirements. Their compact footprint enables easy setup in locations where space is limited (Hub-8E, Hub-8U).

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

The Hub-8U and Hub-16U can be upgraded to advanced network management with remote management capabilities via the optional HP AdvanceStack T Hub-8U/16U SNMP Module.

HP AdvanceStack Assistant for Windows, included at no extra cost with all HP managed devices, delivers the tools you need to keep your network running smoothly. The new Network Performance Advisor feature in the software provides valuable recommendations on moving nodes, using switching technologies, and adding 100Mbps upgrades—all aimed at maintaining peak performance in your network.

### These Entry-Level Hubs Deliver:

#### Simplicity

- True plug-and-play installation; no special configuration requirements
- Compact design for easy setup in space-limited locations
- Standard 19-inch rack-mountable form factor, with all mounting hardware included (Hub-16U)
- Easy connection to additional hubs via a cascade (MDI) or coaxial (BNC) connection

#### Reliability

- Proven technology that adheres to the Hewlett-Packard tradition of unparalleled quality and reliability
- Backed by HP's lifetime warranty

#### Value

- Economical purchase price
- Low cost of ownership
- Choice of bundles and kits for added savings

#### Upgradability

- Advanced network management with remote management capabilities (Hub-8U and Hub-16U) via optional HP AdvanceStack 8U/16U SNMP Module; includes HP AdvanceStack Assistant for Windows software at no extra cost for easy and effective network management
- A variety of optional integrated transceiver modules allows connection to other media types including fiber optic, coaxial (BNC), UTP, and AUI (Hub-8U and Hub-16U)



**HP AdvanceStack 10Base-T Hub-8E (J3128A)**

Unmanaged hub with eight RJ-45 ports



**HP AdvanceStack 10Base-T Hub-8U (J2610B)**

Upgradable hub with eight RJ-45 ports



**HP AdvanceStack 10Base-T Hub-16U (J2611B)**

Upgradable hub with 16 RJ-45 ports



## HP AdvanceStack 10BT Switching Hubs

HP AdvanceStack Switching Hubs combine economical 10Base-T functionality with the performance enhancements of management and switching. Each switching hub starts out as a basic shared 10Base-T hub. Insert the HP AdvanceStack 10BT Management Pack for a total management solution, including the power of segmentation.

Insert the HP Hub 10BT Switch Module and autoconfiguration at start-up automatically turns the hub stack into a multisegment, high-performance, switched solution; the automatic load-balancing feature in the software fine tunes network performance even more.

HP AdvanceStack Assistant for Windows, included at no extra cost with all management modules, does more than just monitor your network—the new Network Performance Advisor feature also recommends how to improve network performance.

### These 10Base-T Hubs Deliver:

#### Ease-of-use

- Management pack includes 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
- Complete management solution includes industry standards such as SNMP, MIB II, and full RMON (all nine groups), in addition to EASE, traffic monitoring, fault isolation, and device support

#### Performance

- Load-balancing feature in HP AdvanceStack Assistant automatically redistributes top talkers for added fine tuning
- Multisegment architecture allows each hub to be partitioned into four fully managed LAN segments for a total of four segments per stack
- Port switching lets you 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
- Autoconfiguration feature in the switch module automatically assigns ports across segments for better performance

#### Flexibility

- Modular architecture provides simple access to basic hub features with expansion capabilities as your network evolves
- Each hub contains two slots, one for adding management and one for adding other advanced features such as switching and routing

#### Reliability

- External redundant power supply ensures constant power for maximum network uptime



**HP AdvanceStack 10BT Switching Hub-12R (J3200A)**  
With 12 RJ-45 ports



**HP AdvanceStack 10BT Switching Hub-24R (J3202A)**  
With 24 RJ-45 ports



**HP AdvanceStack 10BT Switching Hub-24T (J3204A)**  
With two 12-port Telco connectors



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## HP AdvanceStack 100Base-T Hubs

Ease to install, maintain, and upgrade, HP AdvanceStack 100Base-T hubs give you HP's traditional reliability and high performance without all the work required by more complex solutions. All HP AdvanceStack 100Base-T hubs are cascadable or stackable and manageable to increase your flexibility and your savings.

The HP AdvanceStack 100Base-T Hub-8TXE is the ideal 100Base-T network solution for small workgroups and server farms supporting demanding applications like online transaction processing. It offers eight RJ-45 ports and a daisy-chaining port for easy cascading with straight-through cable. A low-cost reliable powerhouse in a streamlined package for easy installation and use.

The HP AdvanceStack 100Base-T Hub-12TX has 12 RJ-45 ports, a cascade (MDI) port for easy switch connections, and an expansion slot for performance upgrades. Just plug in a Switch Port Module to increase your throughput and extend your network distances while saving money over buying a separate component. A reliable, powerful performer that keeps your network costs down and your network up—both now and in the future.

The HP AdvanceStack 100Base-T Hub-12TXM has 12 RJ-45 ports, a cascade (MDI) port for easy switch connections, an expansion slot for performance upgrades, and built-in SNMP management. A single Hub-12TXM will manage an entire stack of HP AdvanceStack 100Base-T hubs, so you can save money by adding Hub-12TX unmanaged hubs when you need more ports. A complete high-speed hub solution that offers reliable performance, management capabilities, and money-saving upgradeability.

### These 100Base-T Hubs Deliver:

#### Ease-of-use

- Industry-leading HP AdvanceStack Assistant for Windows is included free of charge with every managed hub
- HP AdvanceStack Assistant integrates with HP OpenView to provide device management for 100Base-T hubs and accessories
- With an HP AdvanceStack 100Base-T hub, you can manage all ports in a stack with a single managed hub (Hub-12TX and Hub-12TXM)
- Each hub includes all the necessary stacking hardware and cables for easy, trouble-free installation.

#### Performance

- Full-duplex switch port modules give you the ability to increase throughput and extend the distance to network devices—up to 200 Mbps total throughput and up to 2 km with fiber (Hub-12TX and Hub-12TXM)

#### Reliability

- HP's traditions of high quality and leading technology provide the highest degree of network reliability
- Backed by HP's lifetime warranty



**HP AdvanceStack 100Base-T Hub-8TXE (J3235A)**

Economical high-speed hub with eight RJ-45 ports



**HP AdvanceStack 100Base-T Hub-12TX (J3234A)**

Upgradeable high-speed hub with 12 RJ-45 ports



**HP AdvanceStack 100Base-T Hub-12TXM (J3233A)**

Upgradeable high-speed hub with 12 RJ-45 ports and built-in management



## HP AdvanceStack 100VG Hubs

HP AdvanceStack 100VG hubs are ideal for networks that require high-speed connectivity for new or time-sensitive applications such as multimedia, imaging, and video.

HP AdvanceStack 100VG Hub-7E is an economical, entry-level high-speed hub that provides a cost-effective solution for small standalone workgroups in Ethernet environments. HP AdvanceStack 100VG Hub-7M and Hub-14 are manageable, expandable high-speed hubs. The Hub-7M is ideal for interconnecting high-performance workgroups, while the Hub-14 is used to connect end nodes in a workgroup.

HP AdvanceStack Assistant for Windows, included at no extra cost with all HP managed devices, delivers the tools you need to keep your network running smoothly. The Network Performance Advisor feature in the software provides valuable recommendations on moving nodes, using switching technologies, and adding upgrades—all aimed at maintaining peak performance in your network. Each HP AdvanceStack 100VG hub includes a lifetime limited warranty and is backed by HP's leading product support organization.

### These 100VG Hubs Deliver:

#### Ease-of-use

- Optional SNMP/Bridge Module includes HP AdvanceStack Assistant at no extra cost, for easy and effective network management (Hub-7M and Hub-14)

#### Performance

- 100VG technology delivers 10 times the speed of 10Base-T and up to 20 times the throughput for less than twice the price
- Powerful 100Mbps solution supports new applications requiring a high-speed, low-latency, deterministic network

#### Flexibility

- Support for standard Ethernet frame types ensures compatibility with existing applications
- IEEE 802.12 compliance provides flexible, configurable support over existing cabling
- Add-in capabilities include SNMP management, security, remote access, and bridging (Hub-7M and Hub-14)

#### Reliability

- Rich feature set offers UTP and fiber-optic connectivity via recessed transceiver; redundant uplink; and redundant power supply options (Hub-7M and Hub-14)



**HP AdvanceStack 100VG Hub-7E (J3137A)**  
Entry-level, high-speed 100VG hub with seven fixed ports



**HP AdvanceStack 100VG Hub-7M (J2413A)**  
Manageable, expandable, modular high-speed 100VG hub for interconnecting high-performance workgroups in Ethernet environments



**HP AdvanceStack 100VG Hub-14 (J2415A)**  
Manageable, expandable, modular high-speed 100VG hub for connecting end nodes in a workgroup

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# HP AdvanceStack Internet Router

The HP AdvanceStack Internet Router brings together “best-in-class” Cisco routers and HP AdvanceStack network devices to provide an integrated branch-office solution. The Internet Router facilitates remote installation, configuration, and management of geographically distributed workgroups; Cisco-compatible software provides protocol and routing support for all major internetworking protocol suites, including IP, Novell, IPX, and AppleTalk. The Internet Router can be inserted into HP AdvanceStack 10BT Switching Hubs, Switch 208T and Switch 224T.

With its two-slot expansion cabinet, the HP AdvanceStack Remote 2C and Internet Router Bundle offers expandable Internet and intranet access in any vendor's 10Base-T or 100VG network environment.

## This Internet Router Delivers:

### Ease-of-use

- Includes Cisco IOS ( Internet Operating System) desktop software, with free updates for the entire five-year onsite warranty
- Can be managed with HP OpenView and CiscoVision
- Industry-standard SNMP/IP management with support for terminal configuration through the console port (cable provided)

### Performance

- Performs multiple routing protocols across a variety of media services
- 4:1 ISDN compression provides effective port speeds of up to 512Kbps
- Optimization of WAN bandwidth through PPP compression, load balancing, dial-on-demand routing (DDR), and IPX spoofing
- Multiprotocol software support for IP (RIP, IP, and IGRP), IPX (IPX and IPX spoofing), and AppleTalk

### Flexibility/Scalability

- 8 MB Flash SIMM memory expandable to 16 MB; 8 MB DRAM expandable to 32 MB

### Reliability

- Flash memory and optional redundant power supply for fault tolerance
- Resilient backup WAN link for 100% uptime
- Backed by a five-year warranty

## Standard Features

- Two high-speed DB-60 ports, an RJ-45 ISDN port (without NT-1), an RJ-45 auxiliary port, and a console port
- High-speed interface bus powered by a robust Motorola 68360 processor
- Provides resilient WAN links with either another high-speed serial link or a cost-effective ISDN connection
- Console port (cable included) enables local terminal, while SNMP supports remote management; autoinstall reduces the complexity of configuration
- CiscoVision integrates with industry-leading HP OpenView to provide seamless compatibility in both HP network and Cisco routing environments
- Supports remote install, configuration, and management of geographically distributed workgroups
- Full security for access lists; MDS routing authentication; network layer encryption; support for Radius and TACACS+



### HP AdvanceStack Internet Router (J3138A)

Cisco-compatible Internet connectivity or branch-office WAN routing

### Specifications

#### Environmental Characteristics

Operating Temperature:

0°C to 55°C (32°F to 131°F)

Operating Relative Humidity:

15 to 95% @ 40°C (104°F), noncondensing

#### Physical Characteristics

Dimensions: 16.6 x 17.3 x 4.1 cm

(6.6 x 6.8 x 1.6 in)

Weight: .91 kg (2 lb)

#### Electrical Characteristics

Supplied from expansion slot

### Standards

#### Safety

Verified to EN 60950/IEC 950

UL 1950

CSA 950

#### Emissions

EN 55022/CISPR-22 Class A

FCC Class A

VCCI Class A

#### Immunity

Generic: EN 50082-1

ESD: IEC 1000-4-2, 4 kV CD, 8 kV AD

Radiated: IEC 1000-4-3, 3/Vm

EFT/Burst: IEC 1000-4-4, 1.0 kV (power line)

0.5 kV (signal line)

#### Also Available:

HP AdvanceStack Remote 2C and Internet Router Bundle (J3231A)  
Two-slot expansion cabinet and HP AdvanceStack Internet Router for operation in mixed vendor network environments

#### Accessories (see pages 14-15):

HP V.35 Synchronous Cable (DTE, male, 10 feet) (J3139A)

HP RS-232 Synchronous Cable (DTE, male, 10 feet) (J3140A)

HP RS-449 Synchronous Cable (DTE, male, 10 feet) (J3141A)

HP X.21 Synchronous Cable (DTE, male, 10 feet) (J3142A)



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## Accessories

Hewlett-Packard offers a broad range of optional accessories and modules to increase the capabilities of your network and to connect your networking devices into different types of networks.

### HP AdvanceStack 10Base-T Entry-Level Hub Accessories

<b>HP AdvanceStack 10Base-T Fiber-Optic Transceiver Module (J2606A)</b>	Connects HP networking device with a recessed transceiver slot to a fiber-optic network. (Not compatible with HP AdvanceStack 10Base-T Hub-8E.)
<b>HP AdvanceStack 10Base-T Twisted-Pair Transceiver Module (J2607A)</b>	Connects HP networking device with a recessed transceiver slot to an unshielded twisted-pair (UTP) network. (Not compatible with HP AdvanceStack 10Base-T Hub-8E.)
<b>HP AdvanceStack ThinLAN Transceiver Module (J2608A)</b>	Connects HP networking device with a recessed transceiver slot to a ThinLAN coaxial network. (Not compatible with HP AdvanceStack 10Base-T Hub-8E.)
<b>HP AdvanceStack AUI Port Module (J2609A)</b>	Provides AUI port connection for HP networking devices designed to accept it. (Not compatible with HP AdvanceStack 10Base-T Hub-8E.)
<b>HP AdvanceStack 8U/16U SNMP Module (J3133A)</b>	Provides full-featured SNMP management for small, standalone remote workgroups. Can be managed remotely when attached to an external modem. Includes HP AdvanceStack Assistant for Windows management software. (Compatible with HP AdvanceStack Hub-8U and Hub-16U only.)

### HP AdvanceStack 10BT Switching Hub Accessories

<b>HP AdvanceStack 10Base-T Fiber-Optic Transceiver (J2606A)</b>	Connects HP networking device with a recessed transceiver slot to a fiber-optic network.
<b>HP AdvanceStack 10Base-T Twisted-Pair Transceiver (J2607A)</b>	Connects HP networking device with a recessed transceiver slot to an unshielded twisted-pair (UTP) network.
<b>HP AdvanceStack 10Base-T ThinLAN Transceiver (J2608A)</b>	Connects HP networking device with a recessed transceiver slot to a ThinLAN coaxial network.
<b>HP AdvanceStack 10Base-T AUI Port Module (J2609A)</b>	Provides AUI port connection for HP networking devices designed to accept it.
<b>HP AdvanceStack Redundant Power Supply (J2962A)</b>	Allows connection of up to four HP AdvanceStack hubs, Switch 208T or Switch 224T for maximum uptime.
<b>HP AdvanceStack Internet Router (J3138A)</b>	Plug-and-play WAN module for branch offices inserts into expansion slot for plug-and-play Internet/intranet access; compatible with Cisco IOS, provides IP, IPX, and AppleTalk routing.
<b>HP AdvanceStack 10BT Management Pack (J3210A)</b>	Inserts into its own slot for an easy-to use, management solution (SNMP and RMON). Fully manages an entire stack; supports RS-232 serial port with ASCII and Telnet support. Includes HP AdvanceStack Assistant for Windows management software.
<b>HP AdvanceStack 10BT Switch Module (J3212A)</b>	Plug-and-play switch module easily inserts into expansion slot for economical eight-port switching between hub segments in the stack. Autoconfiguration and load-balancing feature in software provides performance fine tuning.

Product literature, answers to 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:

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