

## Hewlett Packard 10Base-T Hub-16M

Designed and developed by Hewlett Packard in partnership with Cisco Systems, the HP 10Base-T Hub-16M is a key component in Cisco's full line of LAN connectivity products.

The HP 10Base-T Hub-16M combines cost-effective LAN connectivity, security, and integrated management with the benefits of Cisco IOS technologies. The 10 Mbps shared Ethernet hub is the ideal complement to Cisco's Catalyst 1900 and 2820 series Ethernet switches for small- and medium- sized businesses, and enterprise branch-offices.

The HP 10Base-T Hub-16M is fully integrated with the NetBeyond extended network system of modular, stackable LAN and WAN products through Cisco IOS technologies for guaranteed product interoperability and unified network management. Both the HP 10Base-T Hub-16M and the NetBeyond extended network system are backed by Cisco Systems' service and support, and the technology leadership that extends the reach of more networks worldwide.

HP 10Base-T Hub-16M



### Cost-effective LAN Connectivity

The HP 10Base-T Hub-16M features 16 10Base-T ports for connecting workstations with inexpensive unshielded twisted-pair (UTP) cabling, and one AUI port for connecting to coaxial or fiber Ethernet cable. To expand the network, up to four HP 10Base-T Hub-16M repeaters can be cascaded without special cross-over cables by optionally configuring port 16 as an uplink (MDI/MDI) through a user-selectable switch on the front panel.

The HP 10Base-T Hub-16M provides affordable, integrated workgroup-to-backbone and workgroup-to-WAN connectivity. Install HP 10Base-T Hub-16M repeaters with Cisco Catalyst 1900 and 2820 series Ethernet switches to improve workgroup performance in a small- to- medium business network. Alternatively, cascade up to 4 hubs as a standalone solution for smaller offices for support of up to 58 nodes. The HP 10Base-T Hub-16M provides managed, secure connectivity to all attached network nodes.

### Integrated Security and Network Management

Built-in SNMP management, port level security and guaranteed interoperability make the HP 10Base-T Hub-16M the best choice for managed networks, and networks with installed Cisco routers and switches.

Integrated Cisco IOS technologies guarantees interoperability between the HP 10Base-T Hub-16M and other Cisco products. Easily monitored and graphically managed through CiscoWorks Windows network management software, the HP 10Base-T Hub-16M incorporates Cisco IOS features such as Cisco Discovery Protocol (CDP) to enable a CiscoWorks Windows network management station to automatically discover the device in a network topology. When the HP 10Base-T Hub-16M is deployed as part of the NetBeyond extended network system, CiscoWorks Windows' special StackMaker and StackView features simplify device configuration, monitoring and management of the entire NetBeyond system.

A wide range of security benefits are provided, including eavesdrop prevention, intruder prevention, and auto port disabling. Network management alarms can be set up to alert the CiscoWorks Windows network management station in the event of a security violation.

## Key Features/ Benefits

### Cost Effective LAN Connectivity

- 16 10Base-T connections for workstations and one AUI connection for workgroup connectivity to coaxial or fiber Ethernet cable
- MDI/MDI-X switch for inter-hub connectivity without special crossover cables
- Automatic partition and reconnection of ports experiencing excessive collisions to prevent network-wide disruption
- StackMaker/StackView feature support for simplified device configuration, monitoring and management of the entire NetBeyond system by CiscoWorks Windows network management software
- Support for optional Cisco 600-Watt AC Redundant Power System for improved fault tolerance and enhanced network uptime

### Integrated Security and Network Management

- Hub-level status LEDs for Power, RPS, Collision, Activity, Security, and Fault indication for the hub provide a comprehensive and convenient visual management system
- Per-port, multi-function status LEDs for Link Integrity/Receive Activity and Port Enabled/Disabled indication.
- SNMP, Telnet and terminal-based out-of-band management console support for comprehensive management and simplified troubleshooting
- Manageable by CiscoWorks Windows and other SNMP-compatible management systems on a per-port and per-hub basis
- Supports Cisco Discovery Protocol to enable a CiscoWorks Windows network management station to automatically discover the device in a network topology
- Hub-level and port-level security features including intruder prevention, auto port disabling, network management alarm, eavesdrop prevention and password protection to prevent unauthorized network access

## Technical Specifications

### Indicators and Interfaces

- Per-port status LEDs indicate Link Integrity/Receive Activity and Port Enabled/Disabled
- Per-hub status LEDs indicate Power, RPS, Activity, Collision, Security, and Fault

### Connectors and Cabling Requirements

- Standard RJ-45 connectors for 16 ports; AUI connector for port 17
- Two-pair Category 3,4, or 5 UTP wiring (RJ-45)
- DB-9 connector for EIA/TIA-232 management console access

### Hub Interconnection Guidelines

- MDI/MDI-X switch on front panel to configure Port 16 for use with “straight-through” cable
- Maximum UTP cable distance between one HP 10Base-T Hub-16M repeater and one end station: 100m (328 ft)
- Maximum UTP cable distance between any two HP 10Base-T Hub-16M repeaters: 100m (328 ft)
- Maximum number of cascaded HP 10Base-T Hub-16M repeaters in a data path over UTP cabling: 4
- Maximum number of HP 10Base-T Hub-16M repeaters in a common Thin Ethernet segment: 30

### Network Management Support

- SNMP Management Information Base (MIB) II, SNMP MIB extensions, Repeater MIB. Cisco IOS and HP management extensions
- Manageable under CiscoWorks Windows and other SNMP management systems
- Telnet and terminal-based out-of-band management console
- IP assignment via Bootstrap Protocol (BOOTP)

#### Dimensions and Weight

- (H x W x D): 1.7 in (4.36 cm) x 16.8 in (42.5) x 9.4 in (23.8 cm)
- Weight: 8 lbs 7 oz (7.43 kg)

#### Environmental Conditions and Power Requirements

- Temperature: 23F - 113F (-5C - 45C)
- Humidity: 10% - 95% at 104F (40C)
- Altitude: 9,843 ft (3,000 m)
- Maximum current: 0.3A
- AC input voltage/frequency: 100-240 volts, 50 to 60 Hz

#### EMI Certification:

- FCC part 15 Class A
- ISO/IEC Guide 22
- EN55022 Class A / CISPR-22 Class A
- VCCI level 1
- Canadian EMC Class A
- Australia/ New Zealand Class A

#### Regulatory Approvals:

- IEC 950: (1991)+A1,A2/ EN60950 (1992)+A1,A2
- CSA950
- NOM-019-SCFI-1994
- UL1950

#### To Order:

Contact your local Cisco reseller

#### Ordering Information

Cisco Model	Product Name	Description
Cisco1516M	HP 10Base-T Hub-16M	16-port 10Base-T SNMP Managed Repeater



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