
HP EtherTwist Hub *PLUS*

Technical Data

**Product Number
HP 28688B**

Whether your workgroup is large or small, self-contained or integrated into a larger organization, HP's EtherTwist hubs provide the ideal means to connect your workgroup to an Ethernet/IEEE 802.3 network. These hubs offer a range of port counts and types; most come with full network management features; and all have an excellent cost per port.

Hewlett-Packard has long been known for the reliability of its products, and the EtherTwist hubs carry on that tradition. Because the reliability of these hubs is so strong, we back them with an industry-leading lifetime limited warranty, with onsite service for the first five years.

Flexible Connections—

For small organizations HP offers the EtherTwist Hub/8 and Hub/12—unmanaged hubs with 8 and 12 twisted-pair ports, respectively. The Hub/12 is a good choice if your organization is likely to grow, as it can easily be upgraded to include full network management functions. Both hubs allow easy connection to additional hubs.

Where network management is important, HP offers managed hubs in 12, 24, and 48 twisted-pair ports. The 24-port hub includes advanced features such as an i960 processor and security and is ready to accommodate future network management standards. The 48-port hub is an excellent choice for large departments, and it offers the best price per managed port. Twisted-pair connections can be made via 50-pin Telco connectors (for easy connection to your cross-connect panels) or via individual RJ-45 jacks.

For networks that use backbones of coaxial or fiber-optic cable, HP provides a 9-port thin coaxial hub and an 8-port fiber-optic hub.

All of the HP hubs include a BNC connector for attachment of thin coaxial cable, which can be used as an external bus to connect several hubs in a single, simultaneously active location (such as a rack). In addition, all hubs except the Hub/8 have a standard AUI port, which allows connection of an extra twisted-pair, thin coaxial, or fiber-optic cable via transceiver.

Network Management—

The "Plus" designation on most hub models indicates that these hubs have the ability to be managed by SNMP and are compatible with MIB-II. Plus hubs also include instrumentation firmware called HP EASE (Embedded Advanced Sampling Environment), which allows the hubs to sample and report, on traffic patterns in the network.

Managed hubs can be managed by any SNMP-compatible management station, including industry-leading HP OpenView stations.

Ease of Use—

HP EtherTwist scalable hubs are “plug-and-play” devices in most typical network installations, with simple configuration steps for using the more advanced features. As your organization grows, adding new capacity is easy: just add a new hub to the stack, connect, it to the others with standard twisted-pair or thin coaxial cable, and plug in the power.

HP EtherTwist Hub PLUS Features

- = feature unique to this hub
- = feature shared with other hubs

- Provides 12 twisted-pair ports using 50-pin connector, 1 thin coaxial (BNC) port, and 1 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).

The Hub Plus includes a 50-pin to RJ-45 modular adapter.

- Offers compatibility with the IEEE 802.3 Type 10BaseT standard: supports 10-Mbit/s link speed and 100-m twisted-pair cable lengths (typical); greater distances are possible with low-loss cable.
- Supports voice and data signals in the same cable bundle.
- 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 for fault isolation; detects polarity faults in twisted-pair cables, and reverses polarity to compensate.
- 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 Windows network management products; supports SNMP/IP management under HP OpenView UNIX®; supports management via standard SNMP MIB browsers.
- Supports HP EASE (Embedded Advanced Sampling Environment) traffic sampling.
- Mounts easily in standard 19" rack (with cables facing front and back) using one unit (1.75") of vertical rack space; on wall (flat or on end); or on self or table. Brackets included.
- Installs in minutes.

Specifications

Environmental Characteristics

Operating Temperature:
0°C to 55°C (32°F to 131°F)

Relative Humidity:
15% to 95% @ 40°C (104°F)
noncondensing

Physical Characteristics

Dimensions:
42.6 cm by 23.5 cm by 4.4 cm (16.8
in. by 9.3 in. by 1.7 in.)

Weight:
2.7 kg (6.0 lbs)

Electrical Characteristics

Voltage:
100-120 V ac 200-240 V ac

Current:
0.5 A max. 0.5 A max

Frequency:
50/60 Hz 50/60 Hz

The HP EtherTwist Hub Plus
automatically adjusts to any
voltage from 90 to 240 volts.

Standards

Communications:
IEEE 802.3 Type 10BaseT
IEEE 802.3 Type 10Base2

Safety:
UL 1950
CSA 950
Verified to IEC 950/EN60950

Emissions:
FCC Part 15 Class A
CISPR-22 (1985) Class A
EN 55022 (1988) Class A
VCCI Class 1

Immunity:
ESD:
IEC 801-2: 1991 3 kV CO, 8 kV AD
Radiated Immunity:
IEC 801-3: 1984 3 V/m

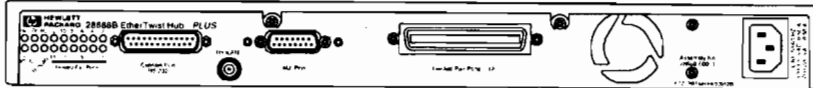
Warranty

The HP 28688B EtherTwist
Hub Plus has a lifetime limited
warranty.

Ordering Information

**HP 28688B EtherTwist Hub
Plus (includes one HP 28638A
Modular Adapter)**

HP 28688B EtherTwist Hub Plus



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