

## Technical Data

### HP ThinLAN Hub Plus

#### Part Number

28692A

The HP 28692A ThinLAN Hub Plus is a 10-Mbit/s multiport repeater used to interconnect personal computers and other network devices over thin coaxial cable local area networks (thinLANs) that comply with the IEEE 802.3 Type 10Base2 standard. The HP ThinLAN Hub Plus repeats data received from an attached LAN segment to all other segments attached to the other hub ports. The HP ThinLAN Hub Plus extends your network by connecting thinLAN segments in a star topology. Attached to each thinLAN segment can be hubs, bridges, and routers, or PCs and computers.

Coupled with HP OpenView Resource Manager, ThinLAN Hub Pluses are capable of providing instrumentation-like functions across your network. This will eliminate the need for a LAN analyzer per segment. HP EASE (Embedded Advanced Sampling Environment) is a breakthrough technology that allows HP EtherTwist devices to do protocol analyses. This will identify top talkers, heavy users, errors, and communication pairs.

#### Features

- † Provides nine thinLAN coaxial ports using BNC connectors and one AUI port. The AUI port allows simultaneous connection to thin or thick coaxial, fiber-optic, or twisted-pair cable via a transceiver.
- † Is compatible with the IEEE 802.3 Type 10Base2 standard.
- † Supports 10-Mbit/s link speed.
- † Supports both IEEE 802.3 and Ethernet.
- † Provides cable fault detection.
- † Isolates network faults by automatically segmenting ports disturbing the network.
- † Includes LEDs for a quick visual check of port status, collisions, activity, and power.
- † Provides console (RS-232) port, which allows users to read

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network statistics and configure ports in the hub. This port connects to a terminal or terminal emulator either directly or via a modem.

- † Includes diagnostics for checking port functionality and loopback test for troubleshooting cable problems.

- † Is transparent to network operating system software.

- † Supports SNMP/IP- and IPX-based network management.

Specifically, the hub can be managed from a central network management station using HP OpenView Hub Manager (HP 28686D) or HP OpenView Interconnect Manager/DOS (HP 27256D).

- † Mounts in a standard 19-inch rack with cables facing front or back, on a wall (flat or on end), or on any horizontal surface like a shelf or table. Since the hub is only 3<sup>1</sup>/<sub>2</sub> inches high (two rack spaces), it takes up very little space in any mounting configuration.

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## Functional Description

The HP ThinLAN Hub Plus is a multiport repeater. Data signals that come into the hub from any of its ports are automatically regenerated and transmitted to all the other hub ports. The hub regenerates the data without interpreting the contents, so it can be used in either IEEE 802.3 or Ethernet networks and with any upper-level protocol.

The hub also performs collision detection. A collision occurs when two or more network devices try to transmit at the same time. When the hub detects this, it stops repeating either of the transmissions and starts transmitting a jamming signal. The jamming signal tells the transmitting devices that a collision has occurred. The colliding devices then stop transmitting for a random amount of time before attempting to retransmit the data. Once the collision condition is removed, the hub stops transmitting the jamming signal, and normal operation is restored.

The HP ThinLAN Hub Plus will automatically disable (autosegment) a port if the port experiences excessive collisions (greater than 30 consecutive collisions). The port will automatically return to operation if the excessive collision condition goes away.

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## Functional Specifications

### Environmental Characteristics

**Operating Temperature:**

0°C to 55°C (32°F to 131°F)

**Relative Humidity:**

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

### Physical and Electrical Characteristics

**Dimensions:** 42.6 cm by 23.5 cm by 8.9 cm  
(16.8 in by 9.3 in by 3.5 in)

**Weight:** 4.0 kg (8.8 lb)

**Power Consumption:**

ac Voltage:	100–120 V	200–240 V
Current:	0.8 A max	0.6 A max
Frequency:	50/60 Hz	50/60 Hz

The HP ThinLAN Hub Plus automatically adjusts to any voltage between 90 and 240 volts.

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## Standards

### **Communications:**

IEEE 802.3 Type 10Base2

### **Safety:**

UL 1950

CSA 950

Verified to IEC 950/EN 60950

### **Emissions:**

FCC Part 15 Class A

CISPR-22 Class B

EN 55022 Class B

VCCI Class 2

### **Immunity:**

#### *ESD:*

IEC 801-2 Level 3 (10 kV)

EN 55101-2

#### *Radiated Emissions:*

IEC 801-3 Level 2 (3 V/m)

EN 55101-3

## Ordering Information

**HP 28692A** ThinLAN Hub Plus

## Warranty

The HP 28692A ThinLAN Hub Plus is warranted for one year against defects.