### Cisco 1500 Series Micro Hub

Economical LAN Connections for Small Offices—The Cisco 1500 series Micro hub provides an economical, scalable solution for creating LANs in small offices. When combined with a Cisco 1600 series router, the Cisco 1500 Micro hub offers a complete LAN/WAN solution that is easy to install, operate, manage, and expand.

#### Cisco 1500 Series Micro Hub

A single Cisco 1500 Micro Hub can create a LAN that connects up to eight user PCs, printers, fax servers, and other devices. In addition, up to 5 hubs can be stacked to create a single manageable stack. The three models in the Cisco 1500 series offer these features:

- The In/Out stacking port on a Cisco 1503 unit can connect up to five Cisco 1500 Micro Hubs (any combination of models) to create a single, manageable stack. The Cisco 1503 supports remote monitoring, and management through the console port on the rear panel of the unit. Management can be performed locally using the hub firmware, or remotely using optional network management software, such as the CiscoWorks<sup>™</sup> Windows software.
- The Cisco 1502 model also provides an In/Out stacking port for creating a stack of up to five Cisco Micro Hub units. The Cisco 1502 supports monitoring and management through a connection to a Cisco 1503 unit (the Cisco 1502 model does not provide a console port).
- The Cisco 1501 provides the most cost-effective solution for small LANs where management is not required. The Cisco 1501 model can be used in a stack, but does not provide an In/Out stacking port for creating a stack.

#### Easy to Install

Installing a Cisco 1500 series Micro Hub takes only minutes and does not require technical knowledge. Automatic configuration and self-test on start-up verifies that the hub will function properly. The Cisco 1503 model also supports remote management via the management console port. The provided color-coded cables that match color coded ports on the rear panel of the unit, enable fast and simple connection of users PCs, printers, fax servers, and other devices to the Cisco 1500 series Micro Hub. The products also automatically detect and correct network wiring problems.

Figure 1 Cisco 1500 Series Micro Hub



#### Easy to Operate

The Cisco 1500 series Micro Hub automatically partitions and reconnects the LAN when it detects excessively long packets. Partitioning prevents a faulty adapter card or device from slowing down or stopping the entire network. Port 5 can connect the Cisco 1500 series Micro Hub to a compatible 10BaseT hub or a LAN switch with the same cables used to connect the hub to PC's, eliminating the need for special cross over cables.



#### Easy to Expand

Any of the Cisco 1500 models can operate as stand alone networking devices or they can be connected to other 10BaseT hubs or switches to form a larger network.

For growing networks, up to five Cisco 1500 Micro Hubs can be connected in a stack through the In/Out stacking port on a Cisco 1503 or 1502 model to create a single LAN for up to 40 users and devices. The managed hub automatically assigns IDs for the connected hubs. The entire stack can be configured and managed locally or from a remote location.

#### Easy to Manage

The Cisco 1503 model supports local management and monitoring via the console port. For management locally or from a central or remote site, the Cisco 1503 and 1502 models support the Simple Network Management Protocol (SNMP) with an SNMP agent included in the software of the unit. Both models also support management with Cisco's CiscoWorks Windows management system.

Flash memory in all units makes it easy to update the Cisco 1500 series Micro Hub software through an Xmodem file transfer or via Trivial File Transfer Protocol (TFTP), enabling users to take advantage of new feature upgrades.

#### **Complete Standards Conformance**

The Cisco 1500 series Micro Hubs meet the IEEE 802.3 repeater specification and 10BaseT Ethernet standards. The Cisco 1503 and 1502 models conform to SNMP and support the repeater Management Information Base (MIB), Ethernet MIB, MIB II, Cisco stack MIB, and Cisco repeater MIB.

#### Single Vendor Support

Cisco Systems offers complete technical support and service for all Cisco 1500 series Micro Hubs, whether they are purchased separately or in combination with other Cisco products. Toll-free, 24-hour technical support is available directly from Cisco.

#### Cisco 1500 Series—Configurations

Model	Cisco 1501	Cisco 1502	Cisco 1503
User Ports	Eight	Eight	Eight
Console Port	No	No	Yes
In/Out Cascade Port	No	Yes	Yes
Management	None	Via connection to a Cisco 1503 hub	Local or remote

#### **Specifications**

#### Ports/Connector Types

- Eight workstation connectors: RJ-45 MDI-ZX shielded connectors (port 5 provides MDI-X or MDI options)
- Two In/Out stacking ports: RJ-45 backplane bus ports
- One console port: RJ-45
- Media supported: Category 3,4,5 or UTP 100 ohm shielded twisted-pair (STP)

#### Hub Stack

- Expansion: up to five units
- Expansion interface: proprietary RJ-45
- Configuration: automatic hub-ID and bus termination (for stack)

#### Indicator Panel LED Display

- PWR: Indicates whether power is being supplied to hub
- OK: Indicates whether self-test is successful
- 1-8: Port status, including link, activity, partition, and disable
- COL: Hub has detected a collision on the network
- MGMT (Cisco 1503 only): Indicates that the hub is receiving SNMP data

#### **Management Options**

- Direct connection to console port
- Network connection via Telnet service
- Network connection via optional SNMP management software

#### **Specifications**

- **Dimensions (H x W x D):** 3.1 x 11.2 x 8.7 inch (7.85 x 28.4 x 22.1 cm), height includes stacking curves on top of hub
- Weight: 1.3 lb (0.6 kg)
- Standards conformance: IEEE 802.3 10BaseT

1500 Series Micro Hub Environmental Specifications

- Power consumption: Nominal 12 watts
- Power: (external): 13.5 VDC (+/- 5%), 2A
- Operating temperature: 32 to 104F (0 to 40C)
- Nonoperating temperature: -40 to 149F (-20 to 65C)
- Operating humidity: 10 to 85% noncondensing
- Operating altitude: 15,000 feet

# CISCO SYSTEMS

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