Catalyst 1900

This chapter provides information on the Catalyst 1900 switch. The information is organized into the following sections:

- Product Overview
- Standard Features
- Configuring and Managing a Catalyst 1900
- Product Numbers

Note   Cisco documentation and additional literature are available in a CD-ROM package, which ships with your product. The Documentation CD-ROM, a member of the Cisco Connection Family, is updated monthly. Therefore, it might be more up to date than printed documentation. To order additional copies of the Documentation CD-ROM, contact your local sales representative or call customer service. The CD-ROM package is available as a single package or as an annual subscription. You can also access Cisco documentation on the World Wide Web at http://www.cisco.com, http://www-china.cisco.com, or http://www-europe.cisco.com.

Product Overview

The Catalyst 1900 is a standalone switch that boosts performance for Ethernet workgroups. The Catalyst 1900 provides Ethernet switching to 100BaseT networks and is available in three configurations.

- 25 switched Ethernet ports and two fixed 100BaseT ports
- 25 switched Ethernet ports with one 100BaseTX and one 100BaseFX port
- 12 switched Ethernet ports with one 100BaseTX port

Figure 204 and Figure 205 show the Catalyst 1900 switch. Table 260 lists a summary of the Catalyst 1900 features, and Table 261 lists environmental specifications.
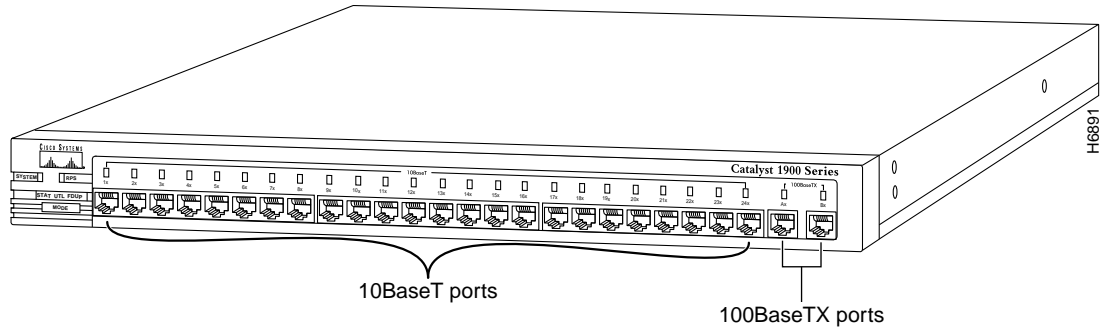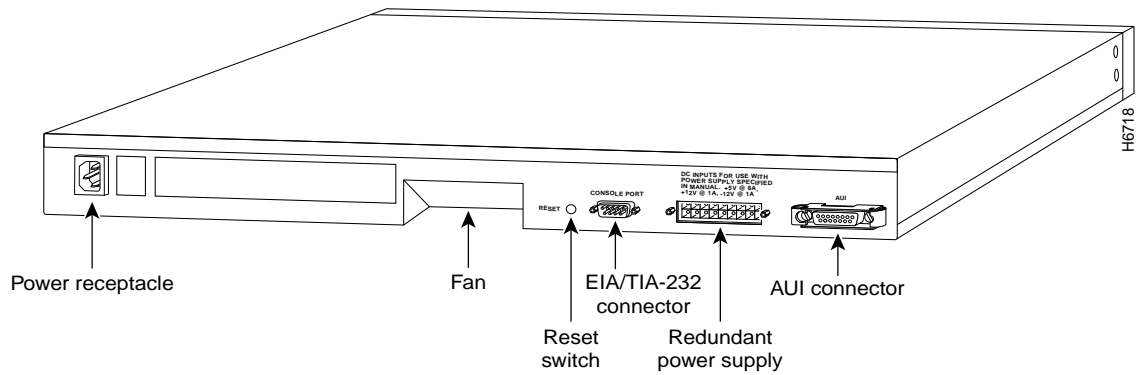
Figure 204 Catalyst 1900 Front View

10BaseT ports

100BaseTX ports

Figure 205 Catalyst 1900 Rear View

Power receptacle

Fan

EIA/TIA-232 connector

AUI connector

Reset switch

Redundant power supply

Table 260   Catalyst 1900 Summary of Features

Characteristic	Description
Reliability	165,000 hours MTBF[1]
Weight	10.5 lb (4.78 kg)
Dimensions (H x W x D)	1.73 x 17.5 x 15.3 in. (4.39 x 44.45 x 38.86 cm)

1. MTBF = mean time between failures.

Table 261   Catalyst 1900 Environmental Specifications

Characteristic	Description
Operating temperature	21 to 113˚F (-5 to 45˚C)
Operating humidity	10% to 95% noncondensing
Operating altitude	Up to 10,000 feet (3,000 m)
Power consumption	65 watts
Input voltage	90 to 250 volts, 50 to 60 Hz

Standard Features

The Catalyst 1900 includes the following features:

- 25 switched Ethernet ports: 24 10BaseT and one AUI.

  The 10BaseT ports use RJ-45 connectors to connect to single workstations, 10BaseT hubs, or any 10BaseT compatible device. The attached devices use standard 10BaseT adapters and wiring. Port 25, located on the back panel, supports an alternative AUI connection for attachment to a thick coaxial, thin coaxial, or a fiber-optic media transceiver.

- Two fixed 100BaseT ports (for server or backbone connectivity)

  One or both of these ports can be set to CollisionFree full-duplex mode for full-duplex operation. Each 100BaseT port is internally switched to the other Catalyst 1900 ports.

- Multiple MAC address support for 1024-address cache shared among all 27 ports.

- CollisionFree operation for full-duplex 100BaseT, providing up to 200-Mbps bandwidth and extended distances using fiber cabling.

- CiscoWorks device-management support.

- IEEE 802.1d Spanning-Tree Protocol.

- Up to 320-Mbps maximum forwarding bandwidth and 450,000 packets per second (pps) aggregate packet-forwarding rate.

- Shared memory architecture with 3-MB packet buffer.

- Supporting connection to a redundant power supply.

- Telnet and SNMP support for in-band management and a menu-driven out-of-band management console.

- Up to four port-configurable virtual VLANs.

- Cisco Group Multicast Protocol (CGMP).

  CGMP enables a switch to dynamically and selectively forward routed IP multicast traffic to target multimedia end stations, reducing overall network traffic.

- Port security to prevent unauthorized access to the network.

- Flooding controls.

- Broadcast storm control.

Configuring and Managing a Catalyst 1900

You can configure and manage a Catalyst 1900 using any SNMP-compatible management station, or you can connect an ASCII terminal to the switch via the EIA/TIA-232 port and use the management console. The management console is also accessible via Telnet.

- Using the management console

  The management console provides a menu-driven interface for configuring and monitoring your network. The application is password-protected and locks out a user who fails to enter the password within a definable number of attempts. In such a case, the network administrator can be alerted via in-band management.

  Most of the statistics and information generated by the switch are available through the management console. You can continue to use it even when the network is down.

- SNMP management

  The Catalyst 1900 is fully manageable by any SNMP-compatible management station. The product supports all pertinent SNMP MIB II variables, the 802.1d bridge MIB, and a comprehensive set of MIB extensions designed for maximum support of the switch's hub and switching capabilities.

- Supported network management platforms

  The Catalyst 1900 SNMP MIBs are supplied in ASCII format for compiling into any SNMP network management system using a general MIB browser. You can display switch information from the following network management platforms:

  — Castle Rock SNMPc

  — Novell NMS

  — HP OpenView

  — SunNet Manager

- CiscoWorks

  You can use the CiscoWorks graphical user interface to configure your Catalyst 1900 switch and to generate the same statistics that are available through the management console.

Product Numbers

Table 262 lists the product numbers you can use to order the Catalyst 1900 switch.

Table 262   Catalyst 1900 Product Numbers

Description	Product Number
Catalyst 1900—25 switched Ethernet ports and 2 100BaseTX ports	WS-C1900
Catalyst 1900T/FX—25 switched Ethernet ports and 1 100BaseTX and 1 100BaseFX port	WS-C1900C
Catalyst 1900 Lite—12 switched Ethernet ports and 1 100BaseTX port	WS-C1900L
SMARTnet maintenance contract	See the chapter "Service and Support," later in the catalog.