Inexpensive 10-Mbps Ethernet Switching for small and medium workgroups

IBM 8275 Ethernet Workgroup Switch Models 217 and 225

- ***Sixteen 10BASE-T Ethernet ports providing wire-speed connectivity (Model 217)***
- ***Twenty-four 10BASE-T Ethernet ports providing wire-speed connectivity (Model 225)***
- ***One Fast Ethernet (10/100BASE-TX) port and two module slots for additional Fast Ethernet 10/100BASE-TX or 100BASE-FX ports***
- ***Simple-to-use, graphical Web-based management interface for both in-band and out-of-band access from a Web browser running on a client workstation***
- ***Illuminated control panel equipped with display and ergonomic menu buttons for easy configuration and at-a-glance status updates***
- ***Port-mirroring capabilities***
- ***Virtual local area network support for up to 31 VLANs***
- ***Port trunking capabilities allowing high-speed ports to be connected as one logical link to another 8275 Model 217 or 225, providing increased bandwidth between switches***
- ***802.1p Static Multicast Filtering and 802.1q support***
- ***Support for Web-based, Simple Network Management Protocol (SNMP) and Remote Network Monitoring (RMON) management capabilities (events, alarms, history and statistics)***
- ***V.24 management port for local and remote out-of-band management***
- ***Flexible, uplink configuration***

Model 217

Model 225

Workgroup/desktop solutions for Ethernet architecture

IBM offers end-to-end connectivity solutions for Ethernet-based networks with the IBM 8275 Ethernet Workgroup Switch Models 217 and 225. With standard 10-Mbps data transmission rate to the desktop and 100-Mbps capabilities for connecting to network servers or backbones, the 8275 Ethernet Workgroup Switch was engineered to meet the demands of small- and medium-range networking applications. The 8275 offers the flexibility needed to meet the demands of growing workgroups and expanding network backbones.

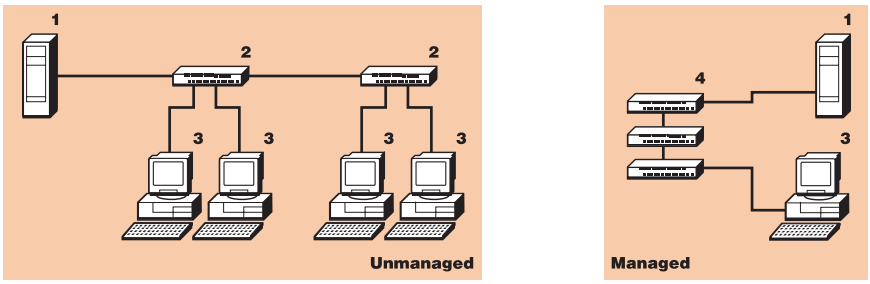
Positioning and Benefits

The IBM Ethernet Workgroup Switch 8275 Models 217 and 225 offer end-to-end connectivity solutions for Ethernet networks. With its affordable, standard 10-Mbps data transmission rate to the desktop and powerful 100-Mbps capabilities for connecting to network servers or backbones, the 8275 has been engineered to meet the demands of small and medium-range networking environments. The 8275 also provides the flexibility to offer 10-Mbps shared hub aggregation to increase bandwidth by segmenting small networks.

Problem: Need for additional bandwidth and switching performance to the desktop.

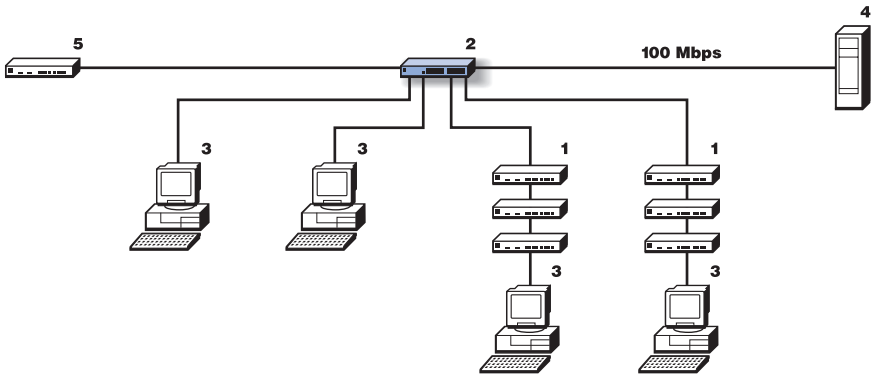
Environment: Shared Ethernet networks requiring additional bandwidth to the server and desktop. Manageability is becoming a requirement for the network. Adding new users with network growth.

1. *Server*
2. *8242 10 Mbps Unmanaged Hub*
3. *Workstation*
4. *8237 Stackable Ethernet Hub 10BASE-T*



Solution: Segment the LAN by connecting power users directly to the 8275, offering 10-Mbps Ethernet to the desktop; aggregate 10-Mbps shared hubs to provide additional bandwidth and investment protection. The server or backbone connection gets the high-speed 100-Mbps link, improving network performance.

1. *8237 Stackable Ethernet Hub 10BASE-T*
2. *8275 Ethernet Workgroup Switch Models 217 and 225*
3. *Workstation*
4. *Server*
5. *8242 10 Mbps Unmanaged Hub*



Benefits

- Affordable 10-Mbps switching to the desktop, while protecting customer investment in existing infrastructure.
- In all scenarios, network capacity and performance have been improved without changing building wiring, installing new adapters, or rewriting software.
- The addition of the 8275 provides 10-Mbps switched Ethernet to the desktop and offers high-speed server and backbone links.
- Distance capabilities through the optional 100-Mbps fiber uplink.
- Remote management (ease of use) through Web-based management.
- At-a-glance status and configuration capabilities through the illuminated control panel.

Product Overview

Affordable performance to the desktop

The new 8275 Ethernet Workgroup Switch Models 217 and 225 are the latest additions to IBM's growing Ethernet family of switches delivering affordable 10-Mbps performance to the desktop. The new switches are fully featured with uplink options, Web-based management, and SNMP and RMON management capabilities. These switches replace hubs for desktop connectivity or aggregate hubs, providing high-performance and functionality at a competitive price.

The 8275 Model 225 is a 24-port 10BASE-T managed switch, whereas the 8275 Model 217 is a 16-port 10BASE-T managed switch. These high-performance 8275 Models 217 and 225 LAN switches are best for interconnecting local groups of workstations to the campus backbone network. The Ethernet switches are designed for use in small- and medium-sized workgroups or remote locations that are part of a large network. They provide 10-Mbps connectivity to the desktop or aggregation for shared media in a workgroup network. The 8275 Models 217 and 225 also offer a standard 10/100BASE-TX connection for high-speed connectivity to a backbone or server. Two optional uplinks in the rear of the switch provide 10/100BASE-TX and 100BASE-FX uplink capabilities, allowing for redundant fiber connections and increasing network reliability.

Switching capabilities

The Ethernet Workgroup Switches offer store-and-forward capabilities for Ethernet-to-Ethernet or Ethernet-to-Fast Ethernet traffic. The 802.1d Spanning Tree allows creation of redundant paths and protects against cable and equipment failures in mission-critical applications.

Illuminated control panel

The control panel and menu buttons allow easy management for configuring and viewing the status of the switch and its ports.

Management/RMON support

The Ethernet Workgroup Switches include an EIA-232 port for configuration and management. The ports can be managed through a Telnet session. RMON provides support for groups (1, 2, 3 and 9).

The IBM Ethernet Workgroup Switches support the following standard MIBs:

- MIB-II
- Repeater MIB
- RMON MIB

VLAN-ready for configurable deployments

The IBM 8275 Ethernet Workgroup Switch can be integrated into virtual local area networks (VLANs) with ease. For network applications that require traffic pattern control, heightened security or broadcast behavior control, administrators and engineers are calling upon VLANs to help users separated by geography to share information.

The IBM 8275 Ethernet Workgroup Switch defines a VLAN as a group of ports that together comprise a single multicast domain. All network end stations connected to the group of ports can communicate with one another, yet broadcast packets received on a port in a particular VLAN will not be transmitted to ports that are not designated as members of the VLAN.

Beyond the ability to configure complementary ports for data transmission, VLANs enable you to gather individual LAN resources distributed across the entire enterprise. With VLAN support from IBM, key properties of the accounting department LAN, for example, could be integrated securely into the sales department LAN. This ability to group allied enterprise assets yields powerful results—more organizational communication and well-informed workgroups.

Engineered for ease of use

The IBM 8275 Ethernet Workgroup Switch Models 217 and 225 feature an illuminated control panel with easy-to-access menu buttons, providing administrators with at-a-glance status indication. The 8275 stores configuration data in nonvolatile storage for safekeeping. For installations away from the desktop, the IBM 8275 includes a rack-mount kit as well as wall-mountable support.

8275 Ethernet Workgroup Switch Models 217 and 225 Specifications

Ports	Model 217: 16-port 10BASE-T Ethernet + 1-port 10/100BASE-TX Fast Ethernet configuration Model 225: 24-port 10BASE-T Ethernet + 1-port 10/100BASE-TX Fast Ethernet configuration
Physical specifications	Width: 439.4 mm (17.3 in.) Depth: 292 mm (11.5 in.) Height: 66.5 mm (2.62 in.) including rubber foot Weight: 4.6 kg (10.2 lb)
Installation	Can be mounted in a standard 19-inch rack, on a wall or on a flat surface
Standards compliance	*Electromagnetic Standards:* FCC A (U.S.A.) VCCI Class A (Japan) EN5022 Class B (CISPR-22B) with shielded cables EN5022 Class A (CISPR-22A) with unshielded cables Korean EMI (CISPR-22A) Taiwan EMI (CISPR-22A) Australia/New Zealand EMI (CISPR-22)
VLAN	Support for up to 31 domains
Management	*Ports:* V.24 9-pin male, D-type EIA-232 port *Protocols:* SNMP, SNMP traps Telnet Web-based graphical management interface VT100 format MIBs (MIB-II, IETF Repeater, RMON MIBs) RMON (events, alarms, history, statistics) Remote, out-of-band management
Warranty	One year
Year 2000	The IBM 8275 Ethernet Workgroup Switch Models 217 and 225 are Year 2000 ready when used in accordance with their associated documentation and are capable of correctly processing, providing and receiving data within and between the 20th and 21st centuries, provided all other hardware, software, and/or firmware used with the products properly exchange accurate data with them.
ISO 9000	The IBM 8275 Ethernet Workgroup Switch Models 217 and 225 were developed and are manufactured under a registered ISO 9000 quality management system.

Ordering information

Description	Country	Feature code/Part number
Models		
8275 Ethernet Workgroup Switch Model 217 16-port 10BASE-T, 1-port 10/100BASE-TX, 2 feature slots	U.S., Canada	30L7624
8275 Ethernet Workgroup Switch Model 217 16-port 10BASE-T, 1-port 10/100BASE-TX, 2 feature slots (no power cord)	AP, LA, EMEA	30L7622
8275 Ethernet Workgroup Switch Model 225 24-port 10BASE-T, 1-port 10/100BASE-TX, 2 feature slots	U.S., Canada	30L7628
8275 Ethernet Workgroup Switch Model 225 24-port 10BASE-T, 1-port 10/100BASE-TX, 2 feature slots (no power cord)	AP, LA, EMEA	30L7626
Modules		
10/100BASE-TX Uplink Module	Worldwide	7631/30L7631
100BASE-FX Uplink Module	Worldwide	7630/30L7630
Power cords		
6-ft power cord (100V - 120V)	U.S., Canada, LA, AP	2301/6952301
6-ft power cord (250V)	Philippines, Thailand,	8576/1838576
6-ft power cord (250V)	Argentina	8800/30L8880
6-ft power cord (250V)	Liberia, Saudi Arabia	9835/6952301
6-ft power cord (250V)	Albania, Angola, Austria, Belarus, Belgium, Bosnia, Bulgaria, Croatia, Czechia, Egypt, Finland, France, Germany, Greece, Hungary, Iceland, Indonesia, Iran, Kazakhstan, Lebanon, Luxembourg, Macedonia, Mozabique, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Sudan, Sweden, Syrian Arab, Turkey, Ukraine, Yugoslavia, Zaire	9838/13F9978
6-ft power cord (250V)	China (PR), Denmark, Australia, Korea (South), New Zealand	9939/13F9939
6-ft power cord (250V)	Bahrain, Cyprus, Ghana, Hong Kong, Iraq, Ireland, Jordan, Kenya, Kuwait, Libya, Malawi, Malta, Nigeria, Oman, Quatar, Sierra Leone, Somalia, Tanzania, Brunei, Macao, Malaysia, Singapore, Sri Lanka Uganda, United Arab Emirates, U.K., Yemen, Zambia	9840/14F0032
6-ft power cord (250V)	Israel	9841/14F0086
6-ft power cord (250V)	Bangladesh, Myanmar, Namibia, Pakistan, South Africa, Swaziland, Zimbabwe	9843/14F0014
6-ft power cord (250V)	Italy, Ethiopia	9844/14F0068

Key Customer Benefits

- Offers the flexibility needed to meet the demands of growing workgroups and expanding network backbones
- Provides high-speed ports for connection to a backbone or server link
- Replaces hubs for desktop connectivity or aggregate hubs, providing high-performance and functionality at a competitive price
- Provides SNMP, Web-based and RMON management capabilities
- Comes with a V.24 9-pin male, D-type management port for local and remote out-of-band management
- Provides 10/100BASE-TX and 100BASE-FX uplink capabilities, allowing for redundant fiber connections and increasing network reliability
- Quick at-a-glance and configuration capabilities through the illuminated control panel

Supplementary Information

The following sales tools are available for the 8275:

- Specification sheet:
  IBM 8275 Ethernet Workgroup Switch Models 217 and 225, G224-4562
- Information on the IBM 8275 is available at:
  www.networking.ibm.com/275/275prod.html