

FMX-0248K 48Ports 10M/100M Intelligent Switch



▶ Feature

The FMX-0248K provides 48 10/100BASE-TX ports and 2 "combo slots" supporting both 1000BASE-T connectivity and miniGBIC slot, allowing flexible implementation of a Gigabit network that best matches user environment. Its VLAN and QoS technologies flexibly support a variety of network layouts, while the product's various Intelligent management features enable truly effective network management.

■ Gigabit-Ready Combo Slots

The two "Combo Slots" on the product support Gigabit connectivity. A combo slot consists of a 1000BASE-T (RJ-45) port and a MiniGBIC (1000BASE-SX/1000BASE-LX, LC Connector) slot. When combined with the optional MiniGBIC module, the product allows implementation of fiber optic Gigabit networking environment. By using the product's GBIC and 1000BASE-T connectivity appropriately and differentially for various applications, the user can establish a highly flexible 1000Mbps broadband networking environment.

■ Intelligent management features

The product supports SNMP, RMON as well as a protocol for controlling multicast packets. When combined with other intelligent switch products, the switch allows the construction of networks supporting superior management functions. Network configuration can be performed via Telnet, WWW browser as well as the product's console serial port. The web browser interface eases network management via its GUI-based configuration screens.

*SNMP(simple network management protocol)

A set of protocols used to manage TCP/IP-based networks. It is used as a standard protocol for sending management information stored at network devices (agents) such as routers and switches to management systems (managers).

Supported Protocols:

MIB II/Interface MIB/Ether-Link MIB/Bridge MIB/Extended Bridge MIB

Entity MIB/RADIUS MIB

*RMON(remote network monitoring)

A network management protocol used to collect and analyze information on network traffic. The network management protocol

SNMP has been expanded to cover functions for managing data traffic on remote networks.

Supported RMON Functions: Statistics/History/Alarm/Event

*Multicast Control

A system for sending data simultaneously to multiple users who are connected to a LAN or the Internet. Unlike broadcast, it sends data only to a specific group of users to reduce network traffic.

Supported Control Protocols: IGMP (v1/v2), Snooping

■ VLAN and QoS Improve Network Availability

Fully compliant with IEEE802.1Q VLAN technology, the product supports up to 256 VLAN groups to allow the formation of large-scale logical network groups that consist of multiple nodes (PC's). Furthermore, the switch's IEEE802.1p QoS functionality for prioritizing network traffic enables 4-level priority management of data being transmitted on the network.

■ Trunk technology establishes a broadband link between two switches

Its Trunk feature combines several physical ports (links) to form one logical link, achieving up to 800Mbps of broadband transmission (uses 4 ports, full duplex) between two switches.

* 2 to 4 ports on the FMX-0248K may be used as Trunk ports. The product supports up to 6 Trunk groups.

■ Link Aggregation

Fully compliant with IEEE802.3ad Link Aggregation, the product supports Trunk connection to switches from other vendors that comply with the Link Aggregation feature. (Supports 1 Trunk group)

■ Complies with IEEE802.1d Spanning Tree

Since the product supports IEEE802.1d Spanning Tree, it prevents the formation of endless data loop even in networks that contain physical loops. This feature not only eliminates the need to physically re-organize the existing network to avoid endless loops, but also provides redundant paths whenever the main data path fails.

■ Supports Port Mirroring

The FMX-0248K supports port mirroring, a function that copies packets sent or received on a specific port to another port. Using this feature, the user can attach a monitoring device such as Sniffer or Rmon probe to analyze the details of the packets that pass the source port.

■ Higher Network Efficiency Achieved via Flow Control

The product supports Flow Control (Full Duplex: IEEE802.3x, Half Duplex: Back Pressure) which prevents packet losses caused by mismatches between the sending and the receiving speeds (bandwidth). The switch utilizes this technology to allow the establishment of a highly efficient and reliable networking environment.

■ Store-and-Forward Blocks Error Packets

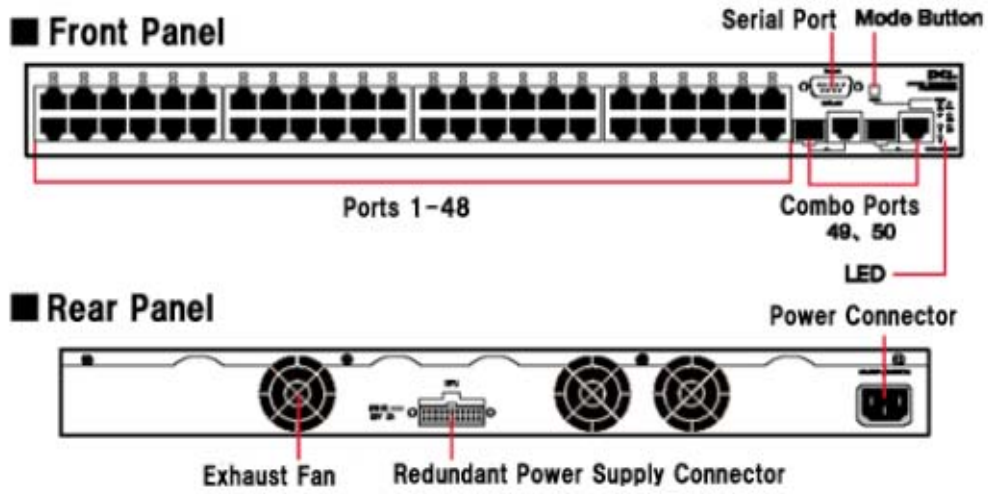
The FMX-0248K employs Store-and-Forward technology to block error packets within the switch itself, thereby preventing the generation of unwanted traffic on the network.

► Specification

Model Number	FMX-0248K
Access method	CSMA/CD 10/100/1000Mbps
Supported Standards	<p>IEEE802.3ab 1000BASE-T</p> <p>IEEE802.3u 100BASE-TX</p> <p>IEEE802.3 10BASE-T</p> <p>IEEE802.3z 1000BASE-SX/LX</p> <p>IEEE802.3x Flow Control</p> <p>IEEE802.1Q Tagging VLAN</p> <p>IEEE802.1p QoS</p> <p>IEEE802.1d Spanning Tree</p> <p>IEEE802.1ad Link Aggregation</p>
Number of Ports	<p>10/100BASE-TX x 48 Ports (Auto-Negotiation, AutoMDI/MDI-X)</p> <p>Gigabit Expansion Combo Slot x 2 Ports(1000BASE-T x 1, MiniGBIC Slot x 1)</p> <p>The two interfaces in one combo slot cannot be used simultaneously)</p>
Internal Bus Speed	13.6Gbps
Packet Buffer Memory	64MByte
MAC Address	8000 entries
Data Transfer Mode	Store-and-Forward
Packet Transfer/Filtering Speed	<p>1000BASE-T 1488,000pps per port</p> <p>100BASE-TX 148,800pps per port</p> <p>10BASE-T 14,880pps per port</p>
Flow control	Full Duplex: IEEE802.3x/Half Duplex: Back Pressure
SNMP	<p>MIB</p> <p>Interface MIB</p> <p>Ether-Link MIB</p> <p>Bridge MIB</p> <p>Extended Bridge MIB</p> <p>Entity MIB</p> <p>RADIUS MIB</p>
RMON	Statistics/History/Alarm/Event(1,2,3,9 groups)
Configuration Interface	Serial console (RS-232 D-sub 9pin), Telnet , Web browser

Console Port	RS-232 D-sub 9pin
Port Mirroring	Supported
VLAN	IEEE802.1Q Tagging VLAN (supports up to 256 groups), GVRP
Trunk	2-4 port Trunk (supports up to 6 groups, and achieves 800Mbps at full duplex)
Link Aggregation (LACP)	IEEE802.3ad 2-50 port (supports 1 group, depends on the other party's LACP configuration)
QoS(IEEE802.1p)	IEEE802.1p compliant (4-level)
Multicast Control	IGMP Snooping
Spanning Tree	IEEE802.11d compliant
Input Power	100-240 VAC, 50-60Hz, internal power supply
Power Consumption	48W Max
Operating temperature	0 to 45 degrees Celsius
Operating humidity	35 to 80% (Non-condensing)
Dimensions	440(W) x 43(H) x 324(D)mm
Weight	4.36kg
19" Rack-Mounting	Supported
Warranty period	3 years
EMI	FCC Class A CE VCCI Class A
Package Contents	FMX-0248K, RS-232C straight cable (D-SUB 9pin male/female, straight type) for system configuration, power cord, rack-mounting bracket x 2, screws, rubber footpad x 4, User's Manual (CD-ROM)

▶ **Product View**



▶ **Option Module**



1000BASE-SX(LC Connector)

Mini GBIC Module

MGBIC-SX-P



1000BASE-LX(LC Connector)

Mini GBIC Module

MGBIC-LX-P



1000BASE-SX(LC connector)

MiniGBIC-SXC



1000BASE-LX(LC connector)

MiniGBIC-LXC



FMX-0248K Redundant Power Supply Unit
(Hot Swap supported)

FMK-RPU