24-Port 10/100Mbps + 2 Gigabit TP/SFP Combo Managed Ethernet Switch

Cost-effective Managed Switch Solution for SMB Network Deployment

As a cost-effective managed Ethernet Switch, PLANET FGSW-2620VM has excellent reputation from SMB and enterprise market and been identified as a high C/P (cost / performance) product. To bring users more featured yet managed Ethernet networking, PLANET introduces the new FGSW-2620VM that with greatly promoted management functions in itself.

Remote and Centralized Management installation

Affording the current network to grow and expand, the PLANET FGSW-2620VM provides advanced WEB and SNMP management interface to fill this kind of demand. With its built-in web-based management, the FGSW-2620VM offers an easy-to-use, platform-independent management and configuration facility. The FGSW-2620VM supports standard Simple Network Management Protocol (SNMP) and 4 RMON Groups (Statistics, History, Alarm and Event) that make the managed switch able to be monitored via any standard-based management software. Moreover, it features highly secure SSL function, Telnet command line management mode besides the user-friendly WEB management interface.

Enhanced Layer 2 Features

For efficient L2 / L4 switching management, the FGSW-2620VM can be programmed for basic switch management functions such as port link aggregation, 802.1Q VLAN, Port Mirroring, Rapid Spanning Tree and IGMP Snooping for multicast media applications. Additionally, the firmware includes advanced features such as Q-in-Q (Double Tag), broadcast storm and bandwidth control. IP DSCP QoS (Quality of Service) priority is also featured to enhance the VoIP streaming in the voice communication network and bandwidth utilization.

Powerful Security

The PLANET FGSW-2620VM offers comprehensive Access Control List (ACL) for enforcing security to the edge. Its protection mechanisms comprises of Port-based 802.1X user and device authentication. Furthermore, the Switch provides port IP binding, MAC filter, Static MAC and Port Security as well. The administrators can now construct highly secured corporate networks with considerably less time and effort than before.

High Performance Wire-Speed Switching

The PLANET FGSW-2620VM boasts a high performance switch's architecture that is capable of providing non-blocking switch fabric and wire-speed throughput as high as 8.8Gbps. Its two built-in GbE uplink ports also offer incredible extensibility, flexibility and connectivity to the Core Switches or Servers. It offers 24 10/100Mbps Fast Ethernet ports with 2 Gigabit TP / SFP combo ports. These two Gigabit TP / SFP combo ports can be either 1000Base-T for 10/100/1000Mbps or 1000Base-SX / LX through SFP (Small Factor Pluggable) interface. The distance can be extended from 100 meters (TP) to 550 meters (Multi-mode fiber) or up to above 10/50/70/120 kilometers (Single-mode fiber).

## Data Sheet

APPLICATIONS

Workgroup / Department Switch

With 24 10/100Mbps ports and 2 Gigabit TP / SFP combo ports, the FGSW-2620VM provides a cost-effective and high-performance solution for SMB and campus networks. With its 8.8 Gigabits per second and non-blocking switch fabric, the FGSW-2620VM can easily provide a local, high bandwidth, Fast Ethernet network for departmental backbone. With these two Gigabit TP / SFP combo ports, the FGSW-2620VM provides the uplink to the backbone network through either Fast Ethernet fiber-optic or Gigabit Ethernet SX/LX modules.
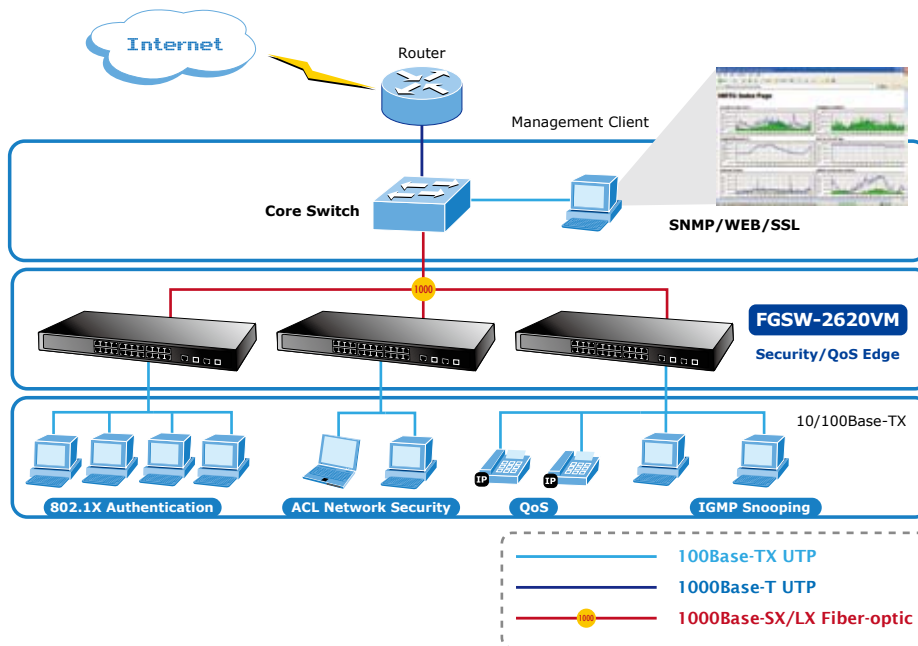
MTU Switch

In an MTU / MDU application, the advanced functionality of the FGSW-2620VM eliminates traditional issues associated with Ethernet. Using the built-in VLAN functionality can segregate users. The flexible fiber module options make the FGSW-2620VM one of the best and most cost-effective switch solutions for multi-tenant service providers.
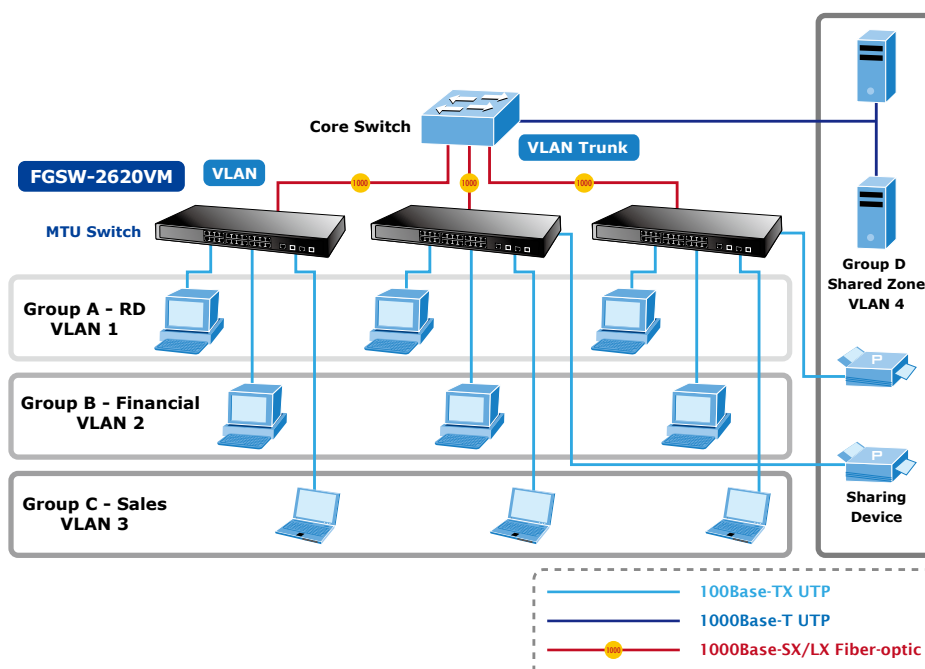
KEY FEATURES

PHYSICAL PORT

• 24-Port 10/100Base-TX RJ-45 interfaces

• 2-Port Gigabit TP / SFP combo interfaces

• Reset button for system management

LAYER 2 FEATURES

• Supports Auto-negotiation, Auto-MDI / MDI-X detection on each RJ-45 port

• Prevents packet loss Flow Control:

  – IEEE 802.3x PAUSE frame Flow Control for Full-Duplex mode

  – Back-Pressure Flow Control in Half-Duplex mode

• High performance Store and Forward architecture, broadcast storm control, runt / CRC filtering eliminates erroneous packets to optimize the network bandwidth

• 8K MAC Address Table, automatic source address learning and ageing

• VLANs:

  – IEEE 802.1Q Tag-Based VLAN

  – Port-Based VLAN

  – Q-in-Q tunneling (Double Tag VLAN)

• Link Aggregation

  – IEEE 802.3ad LACP (Link Aggregation Control Protocol)

  – Cisco ether-Channel (Static Trunk)

• Spanning Tree Protocol:

  – STP, IEEE 802.1D (Classic Spanning Tree Protocol)

  – RSTP, IEEE 802.1w (Rapid Spanning Tree Protocol)

• Port Mirroring to monitor the incoming or outgoing traffic on a particular port

QUALITY OF SERVICE

• 4 priority queues on all switch ports

• Traffic classification:

  – IEEE 802.1p Class of Service

  – IP TOS / DSCP code priority

  – Port Base priority

• Strict priority and Weighted Round Robin (WRR) CoS policies

• Ingress / Egress Bandwidth control on each port

MULTICAST

• IGMP Snooping v1 and v2

• IGMP Query mode and fast leave for Multicast Media application

• 256 multicast groups

SECURITY

• IEEE 802.1x Port-Based network access control protocol

• RADIUS users access authentication

• L2 / L3 / L4 Access Control List (ACL)

• MAC Filtering and Source IP-MAC / Port-Binding

• Port Security for Source MAC address entries filtering

MANAGEMENT

• Switch Management Interfaces

  – Web switch management

  – Telnet Command Line Interface

  – SNMP v1, v2c switch management

  – SSL switch management

• DHCP client for IP address assignment

• Built-in Trivial File Transfer Protocol (TFTP) client

• Firmware upgrade via TFTP or HTTP

• Configuration upload/download via TFTP or HTTP

• Four RMON groups 1, 2, 3, 9 (history, statistics, alarms, and events)

• SNMP trap for interface Link Up and Link Down notification

• Supports Ping function

SPECIFICATION

Product	24-Port 10/100Mbps + 2 Gigabit TP/SFP Combo Managed Ethernet Switch
Model	FGSW-2620VM
Hardware Specification	
10/100Mbps Copper Ports	24 10/100Base-TX RJ-45 Auto-MDI / MDI-X ports
1000Mbps Copper Ports	2 10/100/1000Base-T RJ-45 port
SFP/mini-GBIC Slots	2 1000Base-SX/LX/BX SFP interfaces, shared with Port-25 and Port-26
Switch Architecture	Store-and-Forward
Switch Fabric	8.8Gbps / non-blocking
Switch Throughput	6.547Mpps@64Bytes
Address Table	8K entries
Share Data Buffer	512K Bytes
Maximum Frame Size	9K Bytes
Flow Control	Back pressure for Half-Duplex IEEE 802.3x Pause Frame for Full-Duplex
LED	Power Link / Activity (Green) 1000 LNK / ACT (Green) 10/100 LNK / ACT (Green)
Dimension (W x D x H)	440 x 120 x 44 mm, 1U height
Weight	1.87kg
Power Requirement	100~240V AC, 50-60 Hz
Power Consumption	25 Watts (Full load)
Layer 2 Function	
Management Interface	Telnet, Web Browser, SSL, SNMP v1, v2c
Port Configuration	Port disable / enable Auto-negotiation 10/100Mbps full and half duplex mode selection Flow Control disable / enable Bandwidth control and broadcast storm filter on each port
Bandwidth Control	Ingress / Egress Rate Control Allow to configure in steps of 128Kbps
VLAN	Port-Based VLAN, up to 26 VLAN groups IEEE 802.1q Tagged Based VLAN, up to 255 VLANs groups, out of 4041 VLAN IDs Q-in-Q tunneling
Spanning Tree	IEEE 802.1d Spanning Tree IEEE 802.1w Rapid Spanning Tree
Link Aggregation	Static Port Trunk IEEE 802.3ad LACP (Link Aggregation Control Protocol) Supports 13 groups of 8-Port trunk support
Quality of Service	Traffic classification based on : - Port priority - 802.1p priority - DSCP/TOS field in IP Packet
IGMP Snooping	IGMP (v1/v2) Snooping, up to 256 multicast groups IGMP Querier support
Port Mirror	RX / TX / Both 1-to-1 mirroring
Security	IEEE 802.1x Port-Based Network access control Port Security Static MAC MAC Filtering MAC / IP Binding
Access Control List	IP-Based Layer 3 / Layer 4 ACL Up to 220 ACL rule entries
SNMP MIBs	RFC-1157 SNMP MIB RFC-1213 MIB-II RFC-1215 Trap RFC-2863 Interface MIB RFC-1493 Bridge MIB RFC-2665 EtherLike MIB RFC-2674 Extended Bridge MIB (Q-Bridge) RFC-2737 Entity MIB RFC-2819 RMON MIB (Group 1, 2, 3,9)

Standards Conformance

Regulation Compliance	FCC Part 15 Class A, CE

Standards Compliance		
	IEEE 802.3	10Base-T
	IEEE 802.3u	100Base-TX
	IEEE 802.3z	1000Base-SX/LX
	IEEE 802.3ab	1000Base-T
	IEEE 802.3x	Flow Control and Back pressure
	IEEE 802.3ad	Port trunk with LACP
	IEEE 802.1d	Spanning tree protocol
	IEEE 802.1w	Rapid spanning tree protocol
	IEEE 802.1p	Class of service
	IEEE 802.1Q	VLAN Tagging
	IEEE 802.1x	Port Authentication Network Control

Environment Specifications

Temperature	Operating:	0~50 Degree C
	Storage:	-40~70 Degree C
Humidity	Operating:	10~90%
	Storage:	5~95% (Non-condensing)

* The specification is for FGSW-2620VM hardware version 2 only.

ORDERING INFORMATION

FGSW-2620VM	24-Port 10/100Mbps +2 Gigabit TP/SFP Combo Managed Ethernet Switch

AVAILABLE MODULES

MGB-GT	SFP-Port 1000Base-T mini-GBIC module
MGB-SX	SFP-Port 1000Base-SX mini-GBIC module-220m
MGB-LX	SFP-Port 1000Base-LX mini-GBIC module-10km
MGB-L30	SFP-Port 1000Base-LX mini-GBIC module-30km
MGB-L50	SFP-Port 1000Base-LX mini-GBIC module-50km
MGB-L70	SFP-Port 1000Base-LX mini-GBIC module-70km
MGB-L120	SFP-Port 1000Base-LX mini-GBIC module-120km
MGB-LA10	SFP-Port 1000Base-LX mini-GBIC module-LC WDM (TX:1310nm), SM, 10km
MGB-LB10	SFP-Port 1000Base-LX mini-GBIC module-LC WDM (TX:1550nm), SM, 10km
MGB-LA20	SFP-Port 1000Base-LX mini-GBIC module-LC WDM (TX:1310nm), SM, 20km
MGB-LB20	SFP-Port 1000Base-LX mini-GBIC module-LC WDM (TX:1550nm), SM, 20km
MGB-LA40	SFP-Port 1000Base-LX mini-GBIC module-LC WDM (TX:1310nm), SM, 40km
MGB-LB40	SFP-Port 1000Base-LX mini-GBIC module-LC WDM (TX:1550nm), SM, 40km

Longer distance modules (up to 120km) are available upon request.

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