

24-Port 10/100/1000Mbps TP with 4-Port mini-GBIC Layer 3 Managed Ethernet Switch



Cost-effective solution

The PLANET WGS3-24000 is a 24-Port 10/100/1000Mbps Gigabit Layer 3 Managed Ethernet Switch. It essentials Layer 3 functionality multimedia switch that brings high-end security and traffic control to the edge of the network. With IP routing capability and flexible management tools, the PLANET Managed Multi-Layer Switch Solution performs a cost-effective solution for today with the ability to expend as network demands grow.

High Performance

PLANET WGS3-24000 boasts a high performance switch architecture that is capable of providing non-blocking switch fabric and wire-speed throughput as high as 48Gbps. Its four built-in Fiber uplink ports also offer incredible extensibility, flexibility and connectivity to the other core switch or Servers.

Excellent Traffic Control

PLANET WGS3-24000 is loaded with powerful traffic management and QoS features to enhance services offered by telecoms. The functionality includes QoS features such as wire-speed Layer 4 traffic classifiers, bandwidth limiting, Policy-Based DiffServ that are particular useful for multi-tenant unit, multi business unit, Telco, or Network Service Provide applications. It also empowering the enterprise to take full advantages of the limited network resources and guarantee the best performance at VoIP and Video conferencing transmission.

Powerful Security

PLANET WGS3-24000 offers comprehensive Access Control List (ACL) for enforcing security to the edge. Its protection mechanisms comprised of port-based 802.1x user and device authentication. The port-security is effective in limit the numbers of clients pass through. The administrators can now construct highly secured corporate networks with time and effort considerably less then before.

Flexibility and Extension solution

The four mini-GBIC slots compatible with 1000Base-SX/LX and WDM SFP (Small Factor Pluggable) fiber-optic modules. The distance can be extended from 550 meters (Multi-Mode fiber), up to above 10/50/70/120 kilometers (Single-Mode fiber or WDM fiber). They are well suited for use within the enterprise data center and distribution.

Efficient Management

With its built-in web-based management, the PLANET WGS3-24000 offers an easy-to-use, platform-independent management and configuration facility. The PLANET WGS3-24000 supports standard Simple Network Management Protocol (SNMP) and can be managed via any standard-based management software. For text-based management, the WGS3-24000 can also be accessed via Telnet and the console port. For secure remote management, the WGS3-24000 support SSL and SSH connection which encrypt the packet content at each session.

KEY FEATURE

Layer 2 Features

- The 10/100/1000Base-T ports support auto-sensing, auto-negotiation
- Support Jumbo frame up to 9KB
- Provide wire speed of L2 switching performance
- Support up to 16K MAC address entries
- IEEE 802.3x Flow Control for Full-Duplex mode and Back-Pressure in Half-Duplex mode
- Provide Store-and-Forward forwarding scheme
- Provide Broadcast storm protection
- Support IGMP snooping v1, v2 and V3
- Support 802.1Q Tagged VLAN, Protocol-Based VLAN and GVRP protocol for dynamic VLAN Management
- Support Spanning Tree Protocol with 802.1d STP, 802.1w RSTP and 802.1s MSTP
- Link Aggregation bandwidth gathering supports 802.3ad LACP and Static Port Trunk
- Provide Port Mirror (many-to-1)

IP Routing Features

- IP Routing protocol supports RIP v1/v2, OSPF v2
- Routing interface provides Per-Port routing and VLAN routing mode
- Support router discovery (IRDP)
- VRRP protocol for redundant routing deploy
- Support route redistribution

Multicast Routing Features

- Support PIM-DM and PIM-SM
- Support DVMRP
- Support IGMP v1/v2/v3

Security

- User/Password protected system management
- L2/L3/L4 ACL (access control list)
- RADIUS and TACACS client
- IEEE 802.1x Port-Based Authentication for network access control
- Port MAC lock

Quality of Service

- IEEE 802.1p based CoS
- IP TOS/Precedence and DSCP based Cos
- 8 priority queues per port
- Policy based DiffServ per port
- Supports for strict priority and weighted round robin (WRR) CoS policies

Management

- Provide 1 male DB9 RS-232C console interface
- Support Command Line Interface switch management
- Support Web switch management
- Support SNMP v1, v2c, and v3 switch management
- Support BOOTP and DHCP for IP address assignment
- Support DHCP relay function
- Support software and configuration upload/download via XMODEM or TFTP
- Support SSH v1/v2 and SSL v3/TLS v1 switch management
- Support SSH/SSL/TLS keys download via XMODEM or TFTP
- Support SNTP (Simple Network Time Protocol)
- Support Ping and telnet function
- Support message/event/error/trap logs
- Support logging to local file and syslog server
- Support Private Enterprise MIB
- Support RMON groups 1, 2, 3, 9

SPECIFICATION

Product **24-Port 10/100/1000Mbps TP with 4-Port mini-GBIC Layer 3 Managed Ethernet Switch**

Model	WGS3-24000
Hardware Specification	
10/100/1000Base-T Ports	24 RJ-45 Auto-MDI/MDI-X ports
SFP/mini-GBIC slots	4 SFP interfaces
Switch Architecture	Store-and-Forward
Switch Fabric	48Gbps Capacity
Switch Throughput	35.7Mpps
Address Table	16K MAC address table with Auto learning function
Layer 3 Routing Table	2048
Buffer Memory	2Mbits for packet buffer
Flow Control	Back pressure for Half-Duplex IEEE 802.3x Pause Frame for Full-Duplex
LED	Power, Link/Act, FDX/COL
Layer 2 Function	
Management Interface	Console, Telnet, SSH, Web, SSL, SNMP
Port Configuration	Port disable/enable. Auto-negotiation 10/100Mbps full and half duplex mode selection. Flow Control disable / enable. Bandwidth control on each port.
Port Status	Display each port's speed duplex mode, link status, Flow control status. Auto negotiation status, trunk status.
VLAN	IEEE 802.1Q Tagged Based VLAN ,up to 4041 VLAN groups

Port Trunking	Support 8 groups of 8-Port trunk support	
QoS	Traffic classification based on Port Number, 802.1p priority, DSCP/TOS field in IP Packet	
IGMP Snooping	Allow to disable or enable.	
IP Routing Protocol	Static Route, RIPv1/v2, OSPFv2, IRDP, VRRP	
Multicast Routing Protocol	DVMRP, PIM-DM/SM	
Standards Conformance		
Regulation Compliance	FCC Part 15 Class A, CE	
Standards Compliance	IEEE 802.3	10BASE-T
	IEEE 802.3u	100BASE-TX/100BASE-FX
	IEEE 802.3z	Gigabit SX/LX
	IEEE 802.3ab	Gigabit 1000T
	IEEE 802.3x	Flow Control
	IEEE 802.3ad	Port trunk with LACP
	IEEE 802.1d	Spanning tree protocol
	IEEE 802.1w	Rapid Spanning tree protocol
	IEEE 802.1s	Multiple Spanning Tree Protocol
	IEEE 802.1p	Class of service
IEEE 802.1Q	VLAN Tagging	
Physical Specifications		
Dimensions	267 x 170 x 45mm (W x D x H), 1U height	
Weight	1.2 KG	
Environment Specifications		
Operating	Temperature:	0°C ~ 50 Degree C
	Relative Humidity:	20% ~ 85% (non-condensing)
Storage	Temperature:	-40°C ~ 70 degree C
	Relative Humidity:	20% ~ 90% (non-condensing)

APPLICATIONS

Core Routing Switch

With 24 Gigabit ports with 4 shared SFP fiber interfaces and Layer 3 IP/Multicast Routing capability, the WGS3-24000 provides a cost-effective and high-performance solution for Telecom, Network Service Provider and enterprise.

Department Security and QoS Switch

With its 48 Gigabits per second, non-blocking switch fabric, the WGS3-24000 can easily provide a local, high bandwidth, and Gigabit Ethernet network for backbone of your department. With the four SFP ports, the WGS3-24000 provides the uplink to the backbone network through Gigabit Ethernet LX/SX SFP modules. With the security and QoS features, it improves the network efficiency and protects the network clients.



ORDERING INFORMATION

WGS3-24000	24-Port 10/100/1000Mbps TP with 4-Port mini-GBIC Layer 3 Managed Ethernet Switch
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AVAILABLE MODULES

MGB-GT	SFP-Port 1000Base-T Module
MGB-SX	SFP-Port 1000Base-SX mini-GBIC module
MGB-LX	SFP-Port 1000Base-LX mini-GBIC module
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 (WDM,TX:1310nm) mini-GBIC module-10KM
MGB-LB10	SFP-Port 1000Base-LX (WDM,TX:1550nm) mini-GBIC module-10KM
MGB-LA20	SFP-Port 1000Base-LX (WDM,TX:1310nm) mini-GBIC module-20KM
MGB-LB20	SFP-Port 1000Base-LX (WDM,TX:1550nm) mini-GBIC module-20KM
MGB-LA40	SFP-Port 1000Base-LX (WDM,TX:1310nm) mini-GBIC module-40KM
MGB-LB40	SFP-Port 1000Base-LX (WDM,TX:1550nm) mini-GBIC module-40KM