VOLKTEK

5100-24GT2GS

Managed 24 x 10/100/1000 RJ45 & 2 x FX/GbE SFP Switch

IGMP Snooping | WEB Management | Console Port | 0°C 50°C | Fanless | VLAN 802.1Q

RoHS

CE FC

Description

5100-24GT2GS is a high port density managed access switch designed to deliver Gigabit Ethernet speeds with exceptional performance for high density subscriber base with high ARPU. A variety of traffic-shaping QoS mechanisms and rich software features of 5100-24GT2GS increase overall efficiency and reliability of the network. Easy-to-use management and monitoring capabilities significantly reduces IT overhead by eliminating the need to manually configure policies on the switch, saving valuable time and effort, and avoids unnecessary OPEX.

The switch is equipped with 24 multi-rate (10/100/1000Mbps) copper and 2 dural-rate (100/1000Mbps) SFP ports to deliver selectable transmission speeds for enterprise and FTTX networks. Using its fiber ports, 5100-24GT2GS quickly uplinks to the aggregation switches in the network to provide high bandwidth uplinks over variable distances. Thereby, service providers can take advantage of the switch's high port density to extend their reach within LAN areas and also offer high-speed connectivity to their subscribers.

Features Highlight

Faster Data Transmissions

Providing faster data transmissions over the network is no longer a difficult task to service providers. 5100-24GT2GS offers a best solution to improve the responsiveness of applications and increase file transfer speeds with its features that deliver high performance. Its high port density provides a 52Gbps non-blocking switching capacity that reduces transmission bottlenecks and increases the bandwidth. Service providers can create a high-performance network infrastructure using 5100-24GT2GS and fuel their businesses.

Multicast Video Service Support

Deploying multicast applications such as IPTV has never been easier than before with comprehensive multicast traffic functions, IGMP snooping and MVR, in 5100-24GT2GS. IGMP snooping regulates multicast traffic in a given VLAN and MVR operates with hosts on different VLANs in a Layer 2 network. These features on isolate the multicast streams and significantly reduce traffic from streaming media and other bandwidth-intensive IP multicast applications for better bandwidth. Thereby, 5100-24GT2GS supports applications that use multi-traffic in large scale across the network, saves network bandwidth, reduces operational burden and enhances the overall network performance.

Comprehensive QoS Mechanisms to Assign Priority

Network applications need different levels of services delivered to them reliably without any transmission delays and interruptions. 5100-24GT2GS has comprehensive QoS mechanisms that assign priority to applications and send only specific dedicated traffic to them. In addition, bandwidth management functions of the switch allocate greater bandwidth for mission-critical communications. With increased control, administrators can prevent unpredictable errors and utilize the bandwidth more effectively.

Robust Network Security

5100-24GT2GS implements complete Layer 2 to Layer 4 ACLs to restrict access to your sensitive network resources by filtering specific packets based on TCP/UDP ports, source and destination IP addresses or particular network devices. Furthermore, DHCP snooping, ARP Inspection, IEEE 802.1X and Port Security provide additional tools to manage access and levels of use of network. These defence mechanisms of 5100-24GT2GS deliver robust network security and enables service providers to offer more stable services on a more secure network.

Efficient Network Monitoring and Management Tools

Issues that impact network performance can be quickly identify with enhanced traffic management, monitoring and analysis tools including SNMP and RMON. Designed to improve management efficiency, SNMP allows end users to centrally manage different levels in a network and RMON gives the capability to monitor the network performance. Service providers can ensure a reliable network by identifying connectivity and performance issues, and isolating the problem remotely on individual switches. This avoids high OPEX and manage a healthy and efficient network.

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Features Highlight

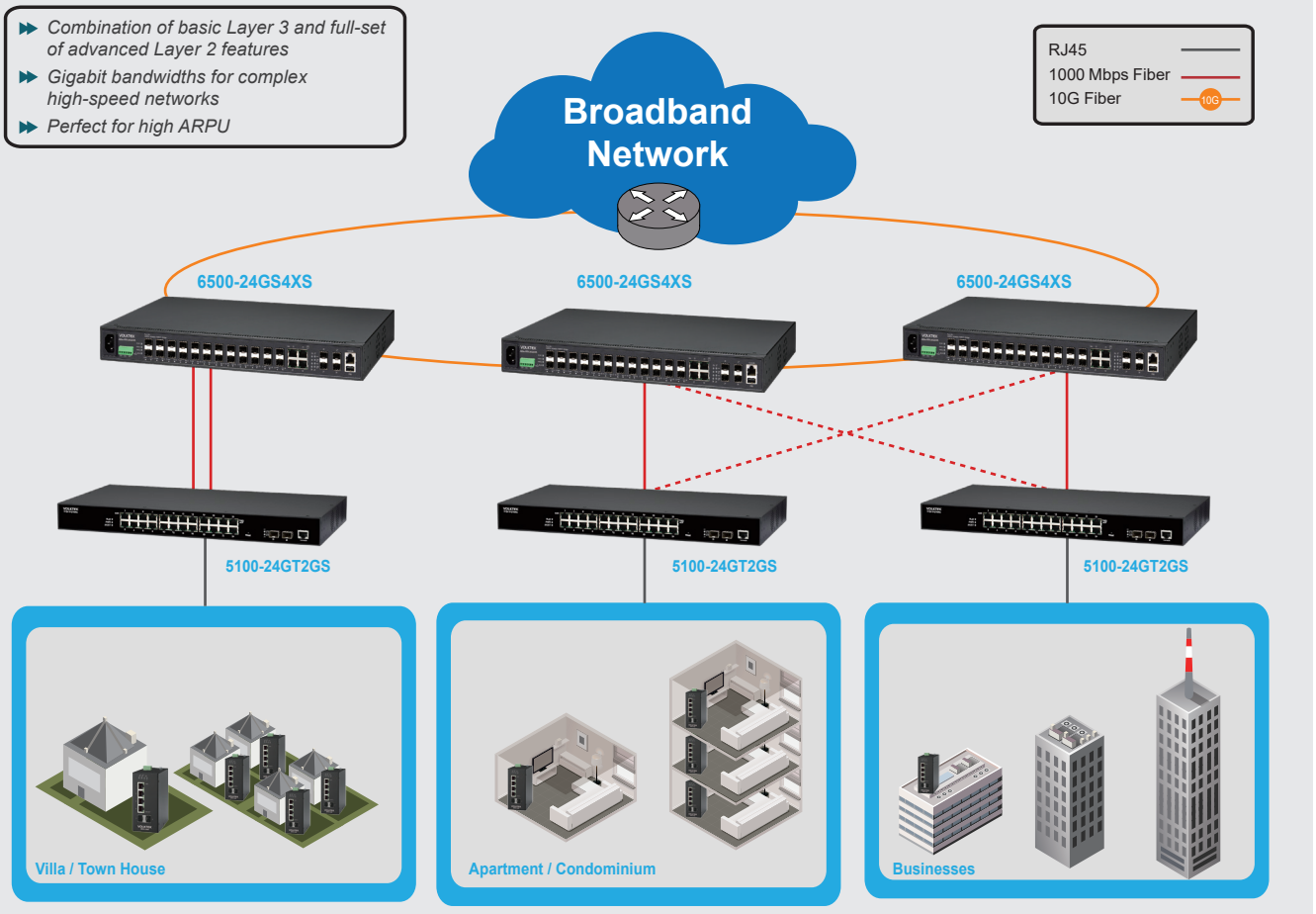
Fine-grained Service Management

Beside basic port-based VLAN function, 5100-24GT2GS provides higher and flexible levels of VLAN configuration related to MAC and Protocol-based. While MAC-based comprises of defining a virtual network according to the MAC addresses of stations, the Protocol-based VLAN makes it possible to create a virtual network by protocol type. These features along with VLAN stacking enable ISPs to flexibly deliver services with extra security and separation. As a result, ISPs using 5100-24GT2GS can experience fine-grained service management fulfilling the requirements of their subscribers.

Delivers Enhanced Ring/Path Redundancy and Bandwidth Aggregation

Short spans of missed communication due to link failures can have a negative impact on the network. Recovery and redundancy features are critical for networks handling heavy video and data traffic. Dual Homing, LACP and RSTP provide a highly reliable network with redundancy connections whenever required and guarantee continuous network uptime.

Applications



Aggregation Level
6500-24GS4XS: Managed 20 x FX/GbE SFP & 4 x FE/GbE Combo RJ45/SFP & 4 x 1G/10G SFP+ Switch

Access Level
5100-24GT2GS: 24 x 10/100/1000 RJ45 & 2 x FX/GbE SFP Switch

Access Level
MEN-3406: Managed 4 x 10/100/1000 RJ45 & 2 x FX/GbE SFP Switch

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Specifications

Standards	
IEEE 802.3	10BASE-T
IEEE 802.3u	100BASE-TX/FX
IEEE 802.3ab	1000BASE-T
IEEE 802.3z	1000BASE-SX/LX
IEEE 802.3x	Flow Control
IEEE 802.1D	STP
IEEE 802.1w	RSTP
IEEE 802.1p	Class of Service
IEEE 802.1Q	VLAN Tagging
IEEE 802.3az	Energy Efficient Ethernet
IEEE 802.1AB	LLDP
IEEE 802.1ad	QinQ
Features	
Performance	Switching Capacity: 52Gbps
	Forwarding Rate 38.7Mpps
	Jumbo frame Size: 10KB
	Packet Buffer: 4.1Mbits
	MAC Table Entries: 8K
	Active VLAN: 4K
Management	CLI, Telnet/SSH, HTTP, SNMP v1/v2c/v3, SNMP Trap, MVLAN, Firmware Upgradable, Configuration Backup/Restore, Syslog, SNTP, LLDP, DHCP Client/Relay/Option 82, e-mail Alarm, Server Control, Mirroring, DDM, SFP Info, Auto-Provisioning, EEE, RMON Statistics, ERPS
Reliability	STP/RSTP, Dual Homing, LACP, Static Trunk
VLAN	IEEE 802.1Q, Port-based VLAN, MAC-based VLAN
Traffic Control	IGMP Snooping, QoS, Flow Control, Rate Limit, Storm Control, Traffic Monitor, Port Isolation, Loop Detection
Security	ACL, SSH, Port-based 802.1X, Port Security, MAC Search, Static MAC, DHCP Snooping, DHCP Sever Screening, ARP Inspection, BPDU Guard/Filter, Root Guard, Managed Host
Power	
Input Voltage	5100-24GT2GS-A-C: 100~240V AC, 50/60Hz
	5100-24GT2GS-D-I: 48~57V DC
Power Consumption	20W

Interface	
Ports	24 x 10/100/1000BASE-T Ports
	2 x FX/GbE SFP
	1 x Console Port
Mechanical and Environment	
Housing	Metal (IP30 Protection)
Rack Space	19"
Form Factor	Rackmount
FAN	Fanless
Operating Temperature	5100-24GT2GS-A-C: 0ºC to 50ºC (32ºF~122ºF)
	5100-24GT2GS-D-I: -40ºC to 70ºC (-40ºF~158ºF)
Storage Temperature	5100-24GT2GS-A-C: -20ºC to 70ºC (-4°F~158°F)
	5100-24GT2GS-D-I: -40°C~85°C (-40°F~185°F)
Operating Humidity	5% to 95% (non-condensing)
Storage Humidity	5% to 95% (non-condensing)
Dimension (W x H x D)	440 x 44 x 310 mm (17.3 x 1.7 x 12.3 in)
Weight	4,000 g (8.8 lb)
Standards and Certifications	
Electromagnetic Compatibility	FCC Class A
	EN 62368-1
	EN 55032 Class A
	EN 55035
	EN 61000-3-2 Class A
	EN 61000 3-3
RoHS	Present
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-31
Vibration	IEC 60068-2-6
Ordering Information	
5100-24GT2GS-A-C	Managed 24 x 10/100/1000 RJ45 & 2 x FE/GbE SFP Switch, with Internal AC Power
5100-24GT2GS-D-I	Managed 24 x 10/100/1000 RJ45 & 2 x FE/GbE SFP Switch
Optional Accessories	
GBM-104	1000BASE-SX 1.25G, Multi-mode SFP, 500m (1640.42 ft)
GBM-123TS	1000BASE-LX, Bi-Di SFP TX:1310/RX:1550 Single Mode, 10Km, 0°C~70°C (32°F~158°F)
GBM-123RS	1000BASE-LX, Bi-Di SFP TX:1550/RX:1310 Single Mode, 10Km, 0°C~70°C (32°F~158°F)

Dimension