VOLKTEK

Atthis 6500-24GS4XS

Managed 20 x FX/GbE SFP & 4 x FE/GbE Combo RJ45/SFP & 4 x 1G/10G SFP+ Switch

Description

Atthis 6500-24GS4XS series is a Managed L2+ Aggregation switch designed to meet the requirements of ISPs (internet service providers), MSOs (multiple system operators), and enterprise class networks. Atthis 6500-24GS4XS is equipped with 20 multi-rate (100/1000M) SFP slots plus four gigabit combo ports. Especially, this model supports 4-ports 1G/10G fiber uplink slots for high bandwidth demand.

It is designed to deliver a flexible and reliable network for management and monitoring which can increase the efficiency and performance. The switch is equipped with powerful and easy-to-use management functions to deliver efficiently controlled services on a highly secured network.

Features Highlight

10G Uplink Interface

4 slots SFP+ for 1G/10G fiber uplinks can deliver wire-speed throughput with low latency for data-intensive application. 10G networking is less expensive than highly specialized Fiber Channel (SAN) and do not needs a specialized skill set for installation and management. To compare with aggregating multiple Gigabit Ethernet links, it can help reducing the cost and increasing manageability efficiently.

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Multicast Video Service Support

IGMP (Internet Group Management Protocol) snooping for regulation of multicast traffic and MVR (Multicast VLAN Registration) for communication with hosts residing on different VLANs in a Layer 2 network.

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Redundant Ring for Fast Network Recovery

Even a few seconds of missed communications due to link failures can cause inconvenience, and recovery can become critical. Volktek's proprietary Xpress Ring in Atthis 6500-24GS4XS rapidly reacts to such link failures and recovers in less than 50ms, a much faster fail-over time to support nonstop transmissions. This is critical for networks handling heavy video and data traffic. In addition, ERPS, Dual Homing, LACP and RSTP/MSTP provide a highly reliable network with redundancy connections whenever required and guarantee continuous network uptime.

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Efficient Traffic Prioritization

Network applications need different levels of services delivered to them reliably without any transmission delays and interruptions. Atthis 6500-24GS4XS 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.

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Enhanced Control and Security

Atthis 6500-24GS4XS implements several defense mechanisms such as ACL, DHCP snooping, ARP, IEEE 802.1X and Port Security to deliver robust network security and enables service providers to offer more stable services on a more secure network.

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Efficient Network Monitoring and Management

It is designed with SNMP (Simple Network Management Protocol) v1/v2c/v3 and RMON (Remote Monitoring) for real-time traffic analysis, flexible network management and monitoring options which increased efficiency and performance. Whether managing from an 'in-band' SNMP management station or Internet web browser, or 'out-of-band' on console port, Atthis 6500-24GS4XS makes network monitoring and troubleshooting easy. SNMP is used for collecting information from, and configuring network devices on an Internet Protocol (IP) network. Volktek Managed switch provides SNMP agent that works with third-party SNMP management software to monitor the device status.

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Specifications

Unparalleled Network Performance

Storm Control and traffic monitoring to limit unwanted incoming traffic based on defined parameters for prevention of LAN disruption.

Withe the Recovery Timer for Loop Detection; Instead of being re-opened manually, a configurable timer is provided to automatically recover a port blocked by the loop detection function.
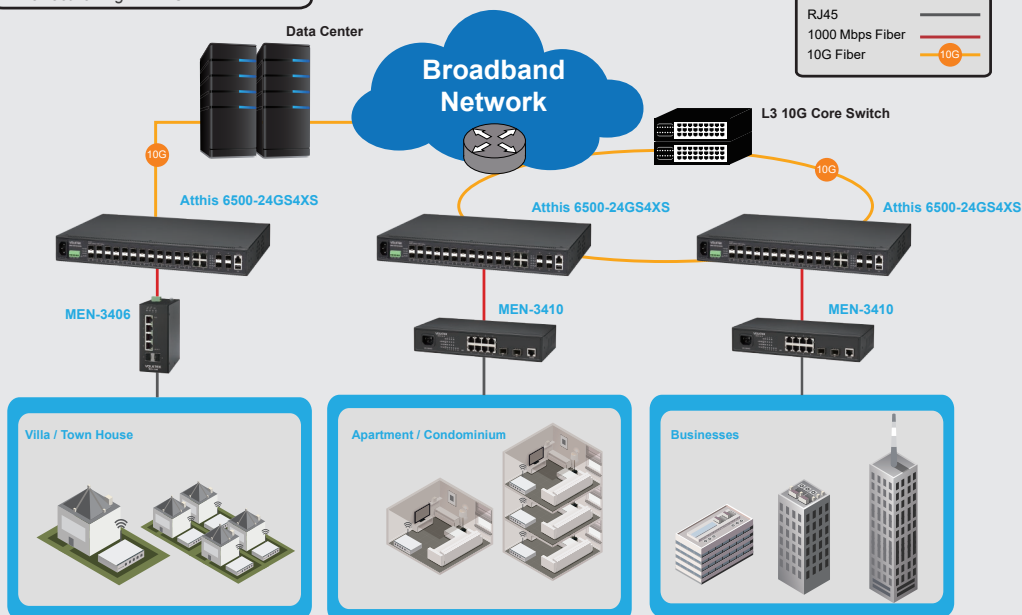
Auto-Provisioning

The switch can be configured and connected to a pre-designated Volktek support server for automatic firmware upgrade. Without the need of a field engineer's intervention, this real-time automatic provisioning helps in reduce labor costs, especially in upgrading multiple devices in a large field deployment.

Applications

Experience superior performance and massive bandwidths that deliver remarkable quality services.

- Combination of basic Layer 3 and full-set of advanced Layer 2 features
- Gigabit bandwidths for complex high-speed networks
- Perfect for high ARPU

Data Center

Broadband Network

RJ45
1000 Mbps Fiber
10G Fiber

L3 10G Core Switch

Atthis 6500-24GS4XS

Atthis 6500-24GS4XS

Atthis 6500-24GS4XS

MEN-3406

MEN-3410

MEN-3410

Villa / Town House

Apartment / Condominium

Businesses

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

Access Level
MEN-3410: 8 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
IEEE 802.3ab	1000BASE-T
IEEE 802.3u	100BASE-FX
IEEE 802.3z	1000BASE-SX/LX
IEEE 802.3ae	10GBASE-SR/LR/ER
IEEE 802.3	Nway Auto-negotiation
IEEE 802.3x	Flow Control
IEEE 802.3ad	Link Aggregation
IEEE 802.1AB	LLDP
IEEE 802.1ad	QinQ
IEEE 802.1D	STP
IEEE 802.1w	RSTP
IEEE 802.1s	MSTP
IEEE 802.1p	Class of service, priority protocols
IEEE 802.1Q	VLAN tagging
IEEE 802.1X	Port Authentication
IEEE 1588v2	PTP

Interface	
Ports	20 x 100/1000 SFP Slots
	4 x 100/1000 Combo Ports
	4 x 1G/10G SFP+ Slots
	1 x RS232 Console Port
	1 x USB 2.0 Port
LED Panel	PWR1, PWR2, ALM, POST, 100/1000Mbps, 1/10G, LNK/ACT
Digital Input	2 x pairs, Dry Contact
Digital Output	Alarm Relay output 24VDC, 1A

Features	
Performance	Jumbo frame Size: 10KBytes
	MAC Table Entries: 16K
	Active VLAN: 4K
	Switch Fabric: 128Gps
	L2 Forwarding Rate: 95.2Mpps
Management	CLI, Telnet/SSH, HTTP/HTTPs, SNMP v1/v2c/v3, SNMP Trap, MVLAN, Firmware Upgradable, Configuration Backup/Restore, Syslog, SNTP, PTP, LLDP, UDLD, DHCP Client, DHCP Option 66/67/82, DHCP Relay, PPPoE IA, e-mail Alarm, Server Control, Mirroring, DDM, AC Power Down Trap (Battery Required), MIB, Hardware Monitor, DDMI, Dying Gasp, RMON, FTP/TFTP, Battery Status indicator
Reliability	STP/RSTP/MSTP, Xpress Ring, ERPS v1/v2, Dual Homing, LACP, Code Redundancy, Static Trunk
VLAN	IEEE 802.1Q, GARP/GVRP, Port-based VLAN, MAC-based VLAN, IP-based VLAN, VLAN Translation, Protocol-based VLAN, Management VLAN, VLAN Stacking (QinQ)
Traffic Control	IGMP snooping/Throttling/Proxy, MLD, MVR, QoS, Flow Control, Abnormal Traffic Detection, Rate Limit, Storm Control, Traffic Monitor, Port Isolation, Loop Detection, Static Route, IGMP Querier, IGMP Message Filtering
IPv6	IPv4/IPv6 dual protocol stack, IPv6 Neighbor Discovery, IPv6 Management (TELNET, HTTP, HTTPS, SSH, PING6, TACACS+) , DHCPv6 Client, DHCPv6 Option 17/18/37, IPv6 Default Gateway, IPv6 Static Route, IPv6 Inter-VLAN Routing, IPv6 Forwarding, IPv6 SNMP, IPv6 SNMP Trap, IPv6 Syslog, IPv6 SNTP, IPv6 Auto-provisioning, IPv6 MLDv1/v2, IPv6 ACL, IPv6 ARP, IPv6 Mail Alarm

Security	ACL, SSH, Port-based 802.1x, TACACS+, Port Security, MAC Search, Refusal MAC, Sticky MAC, Static MAC, DHCP Snooping, DHCP Sever Screening, ARP Inspection, BPDU Guard/Filter, Root Guard, Management Host, HTTPs, MAC aging time, IP Source Guard, MAC Anti-spoofing

Power		
Input Voltage	AC: 100~240V, 50~60Hz	
	DC: 48V	
Power Consumption	6500-24GS4XS-A-C: 30W	
	6500-24GS4XS-AB-C: 50W	

Mechanical and Environment	
Housing	Metal Case
Mounting	Rack Mount
Cooling Fan	2
Operating Temperature	0ºC~60ºC (32ºF~140ºF)
Storage Temperature	-20°C~70°C (-4°F~158°F)
Operating Humidity	5 to 95% RH (non-condensing)
Storage Humidity	5 to 95% RH (non-condensing)
Weight	3890 g (8.77 lbs)
Dimension (WxHxD)	440 x 44 x 284 mm (17.3 x 1.73 x 11.21 in)

Certifications (Processing)	
Electromagnetic Compatibility	FCC Class A EN 62368-1 EN 55032 Class A EN 55035 EN 61000-3-2/3
Freefall	IEC 60068-2-31

Ordering Information	
6500-24GS4XS-A-C	Managed 20 x FX/GbE SFP & 4 x FE/GbE Combo RJ45/SFP & 4 x 1G/10G SFP+ Switch, with AC Power Input
6500-24GS4XS-AB-C	Managed 20 x FX/GbE SFP & 4 x FE/GbE Combo RJ45/SFP & 4 x 1G/10G SFP+ Switch, with AC Power Input, Battery Charge Function Included
6500-24GS4XS-D-C	Managed 20 x FX/GbE SFP & 4 x FE/GbE Combo RJ45/SFP & 4 x 1G/10G SFP+ Switch, with DC Power Input

Optional Accessories	
SDR-120-48	DIN-Rail, 120W, 48VDC, Industrial Power Supply with PFC Function
GBM-123TS	1000BASE-LX, Bi-Di SFP TX:1310/RX:1550, Single Mode, 10Km
GBM-123RS	1000BASE-LX, Bi-Di SFP TX:1550/RX:1310, Single Mode, 10Km
GBM-132TS	100BASE-FX, Bi-Di SFP TX:1310/RX:1550, Single mode, 20Km
GBM-132RS	100BASE-FX, Bi-Di SFP TX:1550/RX:1310, Single mode, 20Km
GBM-162	10GSR SFP+, MM, 300m, DDM
GBM-162-10	10GLR SFP+, SM, 10Km, DDM
GBM-162-40	10GER SFP+, SM, 40Km, DDM

Note :
* The SFP communication distance upon the request.
* Industrial SFP with wide operating temperature from -40°C~85°C is available upon request.
* Specifications subject to change without notice.

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Dimension