

MT-FS6000 Series

L2+ Static Routing 4*10G Switches





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Overview

MT-FS6000 series switches are L2+ 10G Switches based on new generation of high-performance hardware and Marstars Operating System Platform . It provides a large capacity, high-density GE interfaces, and 10GE uplink interfaces. MT-FS6000 series are of advanced hardware processing capabilities and the richest business characteristics. With modular design, 4 10G SFP+ ports are supported at maximum, which will have 10G extension ability for further gigabit aggregation or access. MT-FS6000 series switches could be widely used in aggregation layer for large-scale government and enterprises or as core switches for medium or small enterprises.

Appearance

	<p>MT-FS6424-2G1C-L2</p> <p>24*10/100/1000 Base-T ports; 4 * 1000 Base-X SFP ports (combo) ; 1-4 *10GB SFP+ ports(work with expansion module); 1 * Console port;</p>		<p>MT-FS6248-2G1C-L2</p> <p>24*1000 Base-X SFP ports; 8*10/100/1000 Base-T ports(Combo) 1-4 *10GB SFP+ ports(work with expansion module); 1* Console port;</p>
	<p>MT-FS6448-2G1C-L2</p> <p>48*10/100/1000 Base-T ports; 4 * 1000 Base-X SFP combo ports; 1-4 *10GB SFP+ ports(work with expansion module); 1 * Console port;</p>		<p>MT-FS6484-2G1C-L2</p> <p>48* 1000 Base-X SFP ports; 4*10/100/1000 Base-T combo ports; 1-4 *10GB SFP+ ports(work with expansion module); 1 * Console port;</p>

Features

■ Various Port Types and Flexible Port Expansion

The MT-FS6000 supports 2 pieces of 10G expansion cards and each contains one or two 10G SFP+ ports. The users can flexibly adopt 2~4 10G ports expansion. The series also provide multiple gigabit ports (24 or 48 Base-T ports and Base-X ports), which could well satisfy the demand of large-scale aggregation network or small-and-medium size core networks.

■ Excellent Processing capability

Based on V Core-III MIPS-based CPU;

Up to 256Gbps switching capacity and 96Mpps liner filtering and forwarding speed for MT-FS6424-2G1C-L2/MT-FS6248-2G1C-L2;

Up to 256Gbps switching capacity and 131Mpps liner filtering and forwarding speed for MT-FS6448-2G1C-L2/MT-FS6484-2G1C-L2;

Guarantee for non-blocking flow of data while forwarding in the backbone network.

■ Comprehensive Security Control Policies

Support address authentication based on IP +MAC addresses, 802.1x authentication, radius and TACACS+ based on user interfaces, and also support IP ACL, MAC ACL, VLAN ACL and L3 / L4 based ACL, can efficiently defend against ARP attacks and viruses. Besides, the switch can provide comprehensive storm control function by suppress broadcast, multicast, DLF flooding and ICMP flooding. The comprehensive secure controls can efficiently guarantee the real-time effectiveness of all security policies.

■ Enhanced Reliability Protection Mechanism

Support CPU packed classification and rate restriction by CPU protection policies, which can prevent against illegal

Packet attacks to CPU and reduce the resource consumption.

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Support Rapid Spanning Tree Protocol (RSTP), provide rapid convergence and improved fault-tolerant capacity. The network stable operation and load balance are well guaranteed, also improved the reasonable use network channels and redundant link;

Support Ethernet Ring Protection Switching (ERPS), can provide millisecond-level service rearrangement function, keep the continuity of services. With the simple and reliable protocols, high-performance rearrangement function, easy-to-do maintenance and flexible topology, the users can easily manage and deploy the network.

Carrier-class switching power supply, supporting functions to prevent against lightning, overpressure and surging. The device can work normally in bad natural weather and instable voltage environment, suitable for 110~240V voltage.

■ Convenient and Quick Management and Maintenance

Adopt simple visual Web-based interface (http / https), which helps users to handle various functions easily and conveniently.

Support Simple Network Management Protocol (SNMP) that the devices are convenient to configure and manage. Small and medium-sized enterprise customers can centralized manage the switch easily.

Support CLI command line management and telnet, suitable for professional network administrators.

Support SSH2.0 and other encryption, which makes management much more secured.

Support PDP/LLDP protocol for simpler management.

Support NTP protocol for time synchronization automatically.

Support resetting to factory defaults, which makes the maintenance more easily.

Support MT cloud management for innovative failure diagnose.

■ Innovative Energy Saving Design, the leader of low-carbon communication

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Support IEEE 802.3az (Energy Efficient Ethernet), port energy detection, CPU variable-frequency and device hibernate technology, greatly reducing energy consumption and noise without compromising performance and stability.

Specifications

Items	MT-FS6424-2G1C-L2	MT-FS6248-2G1C-L2	MT-FS6448-2G1C-L2	MT-FS6484-2G1C-L2
Service Ports	24*10/100/1000 Base-T ports	24*1000 Base-X SFP ports	48*10/100/1000 Base-T ports	48*1000 Base-X SFP ports
	4*1000 Base-X SFP ports (shared)	8*10/100/1000 Base-T ports (Shared)	4*1000 Base-X SFP ports (Shared)	4*10/100/1000 Base-T ports (Shared)
Console Port	1* console			
Expansion Slots	2* 10G expansion slot (rear panel)			
10G Expansion Module	Dual-port 10G SFP+ module			
Switching Capacity	256Gbps		256Gbps	
Packet Forwarding Capacity	96Mpps		131Mpps	
Operation Temperature	-20~50° C			
Storage Temperature	-40~70° C			
Operation Humidity	0%~95% non-condensing			
Storage Humidity	0%~95% non-condensing			
Dimensions	440 (L)×285(W)×44.5(H)mm			
Weight	<4Kg			
Input Voltage(AC)	AC: 110~240V/50~60Hz			
Power Consumption	<50W		<70W	
Digital Alarm	Yes		No	
Energy Saving and Environmental Protection	Conforming to IEEE 802.3az(Energy Efficient Ethernet)			

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Application

Items	MT-FS6424-2G1C-L2	MT-FS6248-2G1C-L2	MT-FS6448-2G1C-L2	MT-FS6484-2G1C-L2
Standards and Protocols	IEEE 802.3ad,Static or Dynamic Link Aggregation			
	IEEE 802.3,10BASE-T			
	IEEE 802.3u,100 BASE-TX			
	IEEE 802.3ab,1000 BASE-T			
	IEEE 802.3z,1000 BASE-X			
	IEEE 802.3ae,10G Base Ethernet			
	IEEE 802.3x,Full-Duplex Flow Control			
	IEEE 802.3az,EEE(Energy Efficient Ethernet)			
	IEEE 802.1AB-2005,LLDP(Link Layer Discovery Protocol)			
	IEEE 802.1w,Rapid Spanning Tree Protocol			
	IEEE 802.1q,VLAN			
IEEE 802.1p,QoS/CoS				
MAC Address	32K MAC addresses			
	Adding of dynamic/static MAC address			
VLAN	4096 VLANs			
	Port-based VLANs			
	VLANs based on IEEE 802.1q			
	MAC Based VLAN; Protocol Based VLAN;			
Spanning Tree	STP(Spanning Tree Protocol)			
	RSTP(Rapid Spanning Tree Protocol)			
	MSTP(Multiple Spanning Tree Protocol)			

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Port Aggregation	Max 14 aggregation groups, each supports 16 ports	Max 26 aggregation groups,each supports 8 ports
	Static aggregation and dynamic aggregation	
Port Mirroring	Many-to-one port mirroring (that is, multiple mirroring ports, and one monitor port)	
Loop Protection	Loop Protection/Avoidance	
Ring Protection	Industrial-level Ethernet Ring Protection Switching(ERPS)	
Flow Control	Back-pressure traffic control for Half-Duplex mode	
	IEEE 802.3x traffic control for Full-Duplex mode	
Flow Rate Limitation	Port-based ingress or egress rate limitation	
IP Routing	Static Routing	
Multicast	IGMP Snooping;	
	MVR (Multicast VLAN Registration)	
DHCP	DHCP Client;	
	DHCP Snooping;	
	DHCP Relay;	
	DHCP Server;	
Storm Suppression	Suppression of broadcast, multicast, DLF flooding and ICMP flooding	
Security	IP ACL, MAC ACL, Vlan ACL, Layer2/3 ACL	
	Port-Based IP+MAC Binding	
	IP Source Guard;	
	ARP Detection	
	IEEE 802.1x	
	Radius Authentication	
	TACACS+ Authentication	
	Hierarchical Management and Password Protection	
QOS	WRR (Weighted Round Robin)	
	802.1p port queueing	

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	Cos/Tos, QOS Tag
Linear Ordering	Auto-MDIX
Negotiation	Auto-negotiation for speed and duplex mode of ports
Maintenance	Uploading or downloading of the configuration data
	Uploading Updated Package
	WEB-based reset to factory defaults
	System logs
	Ping
	Cable Detection
Management	MT Cloud Management
	WEB-based interface management (http/https supported)
	CLI Management (Command Line Interface)
	Telnet
	SSH 2.0;
	SNMP
	LLDP;
	UPnP;
NTP	

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Order Information

Items	Product Information
MT-FS6424-2G1C-L2	24*10/100/1000 Base-T ports;4 *1000 Base-X SFP combo ports;2*10G expansion slots(Maximum support 4 * 10G ports);1*Console port;
MT-FS6248-2G1C-L2	24 *1000 Base-X SFP ports;8*10/100/1000 Base-T combo ports;2*10G expansion slots(Maximum support 4 * 10G ports);1*Console port;
MT-FS6448-2G1C-L2	48*10/100/1000 Base-T ports;4 *1000 Base-X SFP combo ports;2*10G expansion slots(Maximum support 4 * 10G ports);1*Console port;
MT-FS6484-2G1C-L2	48 *1000 Base-X SFP ports;4*10/100/1000 Base-T combo ports;2*10G expansion slots(Maximum support 4 * 10G ports);1*Console port;
10G Expansion slot	Expansion Card Information
MT-FS6000-2SFP+	Dual-port 10G SFP+ expansion card (work with SFP+ Optic Module)
Fiber Optic Module	Module Information
SFP+/10G-SR-0.3	10GE SFP+ Multimode Module-(850nm,0.3km,LC)
SFP+/10G-LR-10	10GE SFP+ Single Mode Module-(1310nm,10km,LC)
SFP-SX-MM	GE SFP Multimode Module-(850nm,0.55km,LC)
SFP-LX-SM-20	GE SFP Single Mode Module-(1310nm,20km,LC)
SFP-ZX-SM-80	GE SFP Single Mode Module-(1550nm,80km,LC)
SFP+-10GE-CU24-3M	Integrated SFP+ Module; 10G High Speed Cable(3Meters,NO.24 Core Diameter)