



## Product type: Sepitam-FS1628F-12GQXM

**28\*1000 BaseX SFP + 12\*10/100/1000 Base-T RJ45  
& 4\*10G SFP Ports for Uplink**



### Description:

For the growing Gigabit network and IoT (Internet of Things) demand, **Sepitam** has launched a new-generation, Gigabit switch solution, the **Sepitam-FS1628F-12GQXM** series, to meet the needs of enterprises, telecommunication and campuses for a large-scale network deployment. The **Sepitam-FS1628F-12GQXM** is a Layer 2+ Managed Gigabit Switch, which supports both IPv4 and IPv6 protocols and hardware Layer 3 static routing capability, and provides 28 100/1000BASE-X slots, 12 Gigabit RJ45 ports, 4 10G SFP+ uplink slots.

### Features:

- ◆ Support L2+ Switching features including 802.1Q VLAN, Mirroring, Port isolation, IGMP ,Snooping, DHCP Snooping, LLDP, IP Source Guard, ARP inspection, ACLs etc.
- ◆ Support spanning tree STP(802.1D) and RSTP(802.1W) and MSTP(802.1s)
- ◆ Support enhanced management through WEB, CLI, TELNET, SSH, SNMP
- ◆ Support cable diagnosis
- ◆ Support dual firmware back-up mechanism
- ◆ Support G.8032 quick ring protocol. Self-recovery time <20ms
- ◆ Support IEEE1588 v2, transparent clock(TC)
- ◆ Support DDM, SFP digital diagnostics monitoring
- ◆ Support IPV4 and IPV6 static routing functions
- ◆ Support memory and CPU monitoring



## Specification:

Model	Sepitam-FS1628F-12GQXM
Copper Ports	12x10/100/1000BASE-T RJ45 auto-MDI/MDI-X ports
Fiber Ports	28x100M/1000M BASE-X SFP interfaces, supports 100m/1000M dual mode 4x1G/10GBASE-X SFP interfaces, supports 1G/10Gbps dual mode
Console Ports	1 x RS-232-to-RJ45 serial port (115200, 8, N, 1)
Switch Architecture	Store-and-Forward
Switch Fabric	160Gbps/non-blocking
Throughput	119Mpps @64 bytes
Address Table	32K entries
Share Data Buffer	32 Mb
Jumbo Frame	9600 Bytes
SDRAM	2Gb
Flash Memory	128Mb
Flow Control	IEEE 802.3x pause frame for full-duplex, Back pressure for half-duplex
Reset Button	>2 sec.: Factory default and reset
Power Supply	100~240V AC, 50/60Hz, 4A (max.)
Power Consumption	Max. 75 watts/1122 BTU
LED Indicators	<p>Power: Green Solid on- power work normal, off- power disconnected</p> <p>System: Green Blink-work normally, solid on- soft work abnormal, fast blink- soft upgrade</p> <p>10/100/1000T RJ45 Interfaces (Port 1 to Port 12): 1000 LNK/ACT (Green), 10/100 LNK/ACT (yellow), Blink- port connected with data transmission; Solid on- port connected without data transmission</p> <p>100/1000Mbps SFP Interfaces (Port 12 to Port 40): Green Blink- port connected with data transmission; Solid on- port connected without data transmission</p> <p>1G/10G SFP Interfaces (Port 41 to Port 44): Blue Blink- port connected with data transmission; Solid on- port connected without data transmission</p>
EMC	<p>Surge Immunity: IEC61000-4-5</p> <p>ESD Protection: ESD IEC61000-4-2 EFT IEC61000-4-4</p>
Dimension	440x240x44.5mm
Weight	3.2kg
Working Temperature	-10 °C to 45°C
Storage Temperature	-20°C to 70 °C
MTBF	100,000hrs



## Layer 2 functions:

Port configuration	<ul style="list-style-type: none"> <li>Auto-negotiation</li> <li>Flow Control</li> <li>Port Mirror: TX/RX/BOTH; Many-to-1 monitor</li> <li>CPU Mirror</li> <li>Traffic statistics</li> </ul>
Link Aggregation	<ul style="list-style-type: none"> <li>Static link aggregation</li> <li>LACP (Dynamic Trunk/Static Trunk)</li> <li>Algorith based on Source/Destination MAC</li> <li>Algorithm based on Source/Destination IP</li> </ul>
MAC Table	<ul style="list-style-type: none"> <li>Aging Time</li> <li>Static MAC address</li> <li>Dynamic MAC address management</li> </ul>
VLAN	<ul style="list-style-type: none"> <li>4094 Active VLANs</li> <li>4094 VID</li> <li>802.1Q Tag VLAN</li> <li>Port VLAN</li> <li>Protocol VLAN</li> <li>MAC VLAN</li> <li>Voice VLAN</li> <li>802.1ad Q-in-Q tunneling</li> <li>Private VLAN (Protected port)</li> <li>GARP/GVRP</li> </ul>
ACL	<ul style="list-style-type: none"> <li>512ACLs</li> <li>L2, L3 e L4</li> <li>Time-based ACL</li> <li>IP ACL</li> <li>MAC ACL</li> <li>MAC-IP ACL</li> <li>User-Defined ACL</li> <li>ICMPv6</li> </ul>
Spanning tree	<ul style="list-style-type: none"> <li>802.1D Spanning Tree Protocol (STP)</li> <li>802.1w Rapid Spanning Tree Protocol (RSTP)</li> <li>802.1s Multiple Spanning Tree Protocol (MSTP)</li> <li>Loop Guard</li> <li>Root Guard</li> <li>TC-BPDU Guard</li> <li>BPDU Guard</li> <li>BPDU Filter</li> </ul>
Ring Protection	<ul style="list-style-type: none"> <li>&lt;20ms G.8032 ERPS Ring</li> <li>Fast Ring</li> </ul>



Multicast	<ul style="list-style-type: none"> <li>1024 groups</li> <li>IGMP v1/v2/v3 Snooping, Fast Leave</li> <li>MLD Snooping</li> <li>Multicast VLAN</li> <li>IGMP filter</li> <li>MVR</li> <li>Multicast Routing</li> </ul>
QOS	<ul style="list-style-type: none"> <li>8 mapping IDs to 8 level priority queues</li> <li>CoS port-based</li> <li>CoS 802.1p-based</li> <li>CoS DSCP-based</li> <li>Scheduling algorithms SP, WRR, SP+WRR</li> <li>Storm Control (Broadcast, Multicast, Unknown Unicast)</li> <li>Bandwidth control per port</li> <li>SWRR, DWRR for Scheduling</li> <li>Flow Redirect</li> <li>Precedence</li> <li>TOS</li> <li>Rate Limiting (Ingress/Egress)</li> <li>Stri Priority</li> </ul>
Security Features	<ul style="list-style-type: none"> <li>Port Security</li> <li>MAC address filter</li> <li>ARP Association (Manual, ARP scanning, DHCP snooping)</li> <li>ARP Protection</li> <li>AAA</li> <li>DAI</li> <li>DoS (Denial of Service)</li> <li>Classification of packages based on: End.MAC, IP End, TCP / UDP Ports, Protocol Type;</li> <li>802.1x Authentication (port-based e MAC-based)</li> <li>TACACS/TACACS+ Authentication</li> <li>RADIUS Authentication</li> <li>DHCP Filter</li> <li>Guest VLAN</li> <li>SSLv2/SSLv3/TLSv1</li> <li>SSHv1/SSHv2</li> <li>Restriction of WEB access based on: IP Address, And. MAC and Port;</li> <li>Port Isolation</li> <li>Loopback detection</li> </ul>



Management	<p>SNMP v1/v2c/v3 with Full Private MIBs</p> <p>RMON 4 groups</p> <p>WEB (HTTP/HTTPS)</p> <p>CLI (Telnet, Console, SSHv1/v2)</p> <p>Firmware upgrade via console/web/TFTP</p> <p>Configuration Backup/Reload</p> <p>Dual Firmware</p> <p>LLDP</p> <p>Configuration Export/Import</p> <p>CDP Aware</p> <p>OAM (IEEE802.3ah)</p> <p>CFM (IEEE802.1ag)</p> <p>SFlow</p> <p>Telnet client</p>
Synchronization, IEEE1588	Support IEEE1588v2 transparent clock
Other Features	<p>DNS Client</p> <p>DHCP Relay</p> <p>DHCP Client</p> <p>DHCP Snooping</p> <p>DHCP Option 66</p> <p>DHCP Option 67</p> <p>DHCP Option 82</p> <p>NTP/SNTP Client</p> <p>UPNP</p> <p>UDLD</p>
Maintenance	<p>Cable Diagnostics</p> <p>Ping</p> <p>SFP DDM (Digital Diagnostics Monitoring)</p> <p>Thermal protection</p> <p>System log (Local and Remote)</p> <p>Memory and CPU Monitoring</p> <p>Tracert /tracert 6</p>



### Layer 3 functions:

Static Routing	IPv4 Unicast: Static Routing (Software Base) IPv6 Unicast: Static Routing (Software Base)
IPV6	IPv6 neighbor discovery (ND) Path maximum transmission unit (MTU) discovery Internet Control Message Protocol (ICMP) version 6 TCPv6/UDPv6 Ping6 Telnet(v6) Http/Https Interface IPV6 ACL IPV6



# Technical Specification of Sepitam-FS1628F-12GQXM

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