

# Managed 1G/10G Ethernet Switch LK5000 Series Managed Gigabit Ethernet Switch — LK5018GSM

#### **Product Description:**

LK5018GSM, a Layer 2+ Managed Gigabit Switches support both IPv4 and IPv6 protocols software Layer 3 static routing capability, and provide 16 10/100/1000Mbps Gigabit Ethernet ports, 2 Gigabit SFP slots.

The LK5018GSM is programmed for advanced switch management functions such as **802.1Q VLAN** and **Q-in-Q VLAN**, **Multiple Spanning Tree protocol (MSTP)**, **loop** and **BPDU guard**, **IGMP snooping**, and **MLD snooping**. Also, the **Link Layer Discovery Protocol (LLDP)** is the Layer 2 protocol included to help discover basic information about neighboring devices on the local broadcast domain.



#### Feature:

◆ Support L2+ Switching features including 802.1Q VLAN, Mirroring, Port isolation, IGMP ,Snoop ing, 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 backup 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 software based static routing functions
- Support memory and CPU monitoring



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# Hardware Specification:

Model	LK5018GSM
Copper Ports	16 10/100/1000BASE-T RJ45 auto-MDI/MDI-X ports
Fiber Ports	2-100/1000BASE-X SFP interfaces, supports 100/1000Mbps dual mode
Console Ports	1 x RS-232-to-RJ45 serial port (115200, 8, N, 1)
Switch Architecture	Store-and-Forward
Switch Fabric	36Gbps/non-blocking
Throughput	23.81Mpps @64 bytes
Address Table	8K entries
Share Data Buffer	4.0 Mb
Jumbo Frame	9600 Bytes
SDRAM	1Gb
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	12V, 45watts/1122 BTU
LED Indicators	Power: GreenSolid on- power work normal, off- power disconnectedSystem: GreenBlink-work normally, solid on- soft work abnormal, fast blink- soft upgrade10/100/1000T RJ45 Interfaces (Port 1 to Port 16): 1000 LNK/ACT (Green), 10/100LNK/ACT (yellow)
	Blink- port connected with data transmission; Solid on- port connected wit hout data transmission 100/1000Mbps SFP Interfaces (Port 17 to Port 18): Green Blink- port connected with data transmission; Solid on- port connected wit hout data transmission
	Surge Immunity: IEC61000-4-5
EMC	ESD Protection: ESD IEC61000-4-2; EFT IEC61000-4-4
Dimension	440x240x44.5mm
Weight	3.2kg
Working Temperature	-10 °C to 45 °C
Storage Temperature	-20℃ to 70 ℃
MTBF	50,000hrs



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## Layer 2 functions

	Auto posstistion
Port configuration	Auto-negotiation
	Flow Control
	Port Mirror: TX/RX/BOTH; Many-to-1 monitor
	CPU Mirror
	Traffic statistics
Link Aggregation	Static link aggregation
	LACP (Dynamic Trunk/Static Trunk)
	Algorith based on Source/Destination MAC
	Algorithm based on Source/Destination IP
	Aging Time
MAC Table	Static MAC address
	Dynamic MAC address management
	4094 Active VLANs
	4094 VID
	802.1Q Tag VLAN
	Port VLAN
	Protocol VLAN
VLAN	MAC VLAN
	Voice VLAN
	802.1ad Q-in-Q tunneling
	Private VLAN (Protected port)
	GARP/GVRP
	256ACLs
	L2, L3 e L4
	Time-based ACL
ACL	IP ACL
	MAC ACL
	MAC-IP ACL
	User-Defined ACL
	ICMPv6
	802.1D Spanning Tree Protocol (STP)
	802.1w Rapid Spanning Tree Protocol (RSTP)
	802.1s Multiple Spanning Tree Protocol (MSTP)
Concerning two o	Loop Guard
Spanning tree	Root Guard
	TC-BPDU Guard
	BPDU Guard
	BPDU Filter
	<20ms G.8032 ERPS Ring
Ring Protection	Fast Ring
	256 groups
	IGMP v1/v2/v3 Snooping, Fast Leave
	MLD Snooping
Multicast	Multicast VLAN
	IGMP filter
	MVR
	Multicast Routing
QOS	8 mapping IDs to 8 level priority queues
	CoS port-based
	CoS 802.1p-based
	CoS DSCP-based



#### Managed 1G/10G Ethernet Switch LK5000 Series

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Scheduling algorithms SP, WRR, SP+WRR
Storm Control (Broadcast, Multicast, Unknown Unicast)
Bandwidth control per port
SWRR, DWRR for Scheduling
Flow Redirect
Precedence
ros
Rate Limiting (Ingress/Egress)
Stri Priority
Port Security
MAC address filter
ARP Association (Manual, ARP scanning, DHCP snooping)
ARP Protection
AA
DAI
DoS (Denial of Service)
Classification of packages based on: End.MAC, IP End, TCP / UDP Ports,
Protocol Type;
302.1x Authentication (port-based e MAC-based)
TACACS/TACACS+ Authentication
-
RADIUS Authentication
DHCP Filter
Guest VLAN
SSLv2/SSLv3/TLSv1
SSHv1/SSHv2
Restriction of WEB access based on: IP Address, And. MAC and Port;
Port Isolation
oopback detection
SNMP v1/v2c/v3 with Full Private MIBs
RMON 4 groups
NEB (HTTP/HTTPS)
CLI (Telnet, Console, SSHv1/v2)
Firmware upgrade via console/web/TFTP
Configuration Backup/Reload
Dual Firmware
Configuration Export/Import
CDP Aware
DAM (IEEE802.3ah)
CFM (IEEE802.1ag)
Flow
Felnet client
Support IEEE1588v2 transparent clock
DNS Client
DHCP Relay
DHCP Client
DHCP Snooping
DHCP Option 66
DHCP Option 67
DHCP Option 82
DHCP Option 82 NTP/SNTP Client



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## Managed 1G/10G Ethernet Switch LK5000 Series

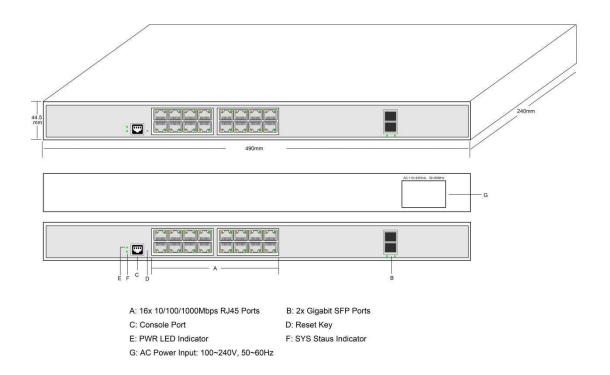
Cable Diagnostics
Ping
SFP DDM (Digital Diagnostics Monitoring)
Thermal protection
System log (Local and Remote)
Memory and CPU Monitoring
Tracert / tracert 6

# 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



## **Dimension:**



### **Order Information:**

Product Model: LK5018GSM

Product Description: L2+ Managed Switch, 16-Port 10/100/1000BASE-T +2-Port 100/1000X SFP, 1x console port

Order note: SFP module is not included, need to order it separately

Package lists	L2+ Managed Switch, 16-Port 10/100/1000BASE-T +2-Port 100/1000X SFP, 1x console port (LK5018GSM)
	Power Cable
	Mounting Kits Warranty Card
	User Guide