

**16\*10/100/1000Base-T + 8\*1G SFP/RJ45 Combo + 4\*1G/2.5G/10G**

**SFP+ Layer 3 Managed Ethernet Switch**

**LT-S8528XG-4XS16GT8GC**

### Overview

SmartByte LT-S8528XG-4XS16GT8GC is a Layer 3 Managed Gigabit Switch that provides high-density performance, Layer 3 static and dynamic routing, RIP (Routing Information Protocol) and OSPF (Open Shortest Path First). With 128 Gbps switching capacity and 4 \*1G/2.5G/10Gbps flexible and high performance uplink capability . The LT-S8528XG-4XS16GT8GC provides comprehensive end to end QoS as well as flexible and rich management , security settings, which can meet the high speed, secure and smart requirement for small and medium-size enterprise networks based on cost effective price. The powerful WRR (Weighted Round Robin) and network security features also make the LT-S8528XG-4XS16GT8GC perform effective data traffic control for ISP and enterprise VoIP, video streaming, and multicast applications.

### Picture



## Features

- 4\*1G/2.5G/10G SFP+ slots uplink, 16\*10/100/1000M RJ45 ports + 8\*1G SFP/RJ45 COMBO ports downlink, 1\* RJ45 console interface for switch basic management and setup
- Layer 3 features: Supports static and dynamic routing, RIP, OSPF, BGP4, ECMP, VRRP
- Port aggregation: Supports GE ports, 2.5GE and 10GE port aggregation, static and dynamic aggregation
- VLAN : Supports access, trunk, hybrid mode and VLAN classification, including the Mac based VLAN, IP based VLAN and protocol based VLAN
- QinQ: Supports port-based, VLAN-based and flow-based QinQ
- Port Mirroring: Many to one port mirroring
- Layer 2 ring network protocol: Supports STP, RSTP, MSTP, G.8032 ERPS protocol, single ring, sub ring
- Multicast: Supports IGMP snooping
- QoS: QoS class, remarking, Supports SP, WRR queue scheduling, Ingress/Egress port-based rate-limit and policy-based QoS
- Security: Support Dot1x, port authentication, mac authentication, RADIUS service; Support port-security, ip source guard, IP/Port/MAC binding, arp-check and ARP packet filtering for illegal users and port isolation
- Management : Supports LLDP, user management and login authentication; SNMPV1/V2C/V3; web management, HTTP1.1, HTTPS; Syslog ; RMON (Remote Monitoring) alarm, event and history record; NTP, temperature monitoring; Ping、Tracert and optical transceiver DDM function; Supports TFTP Client, Telnet Server, SSH Server and IPv6 Management
- Firmware update, configure backup/restore through Web GUI, FTP and TFTP

## Technical Specification

<b>Model No.</b>	LT-S8528XG-4XS16GT8GC		
<b>Interface</b>	Fiber ports	Copper RJ45 ports	Gigabit Combo
	4	16	8
<b>Ethernet</b>	16*10/100/1000Base-T RJ45 8*COMBO SFP/RJ45 4*1G/2.5G/10GBase-X SFP+		
<b>Management port</b>	1*RJ45 Console port (115200,8,N,1) , 1*USB 2.0 for configuration and firmware update		
<b>Standard</b>	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Ethernet IEEE 802.3ab 1000Base-T Ethernet IEEE 802.3z 1000Base-X Ethernet IEEE802.3x Flow Control and Back Pressure IEEE 802.1D Spanning Tree Protocol IEEE 802.1w Rapid Spanning Tree Protocol IEEE 802.1Q VLAN ITU-T G.8032 ERPS IEEE 802.1X Port Authentication Network Control IEEE 802.1ab LLDP IEEE 802.3ad LACP		
<b>LED Indicators</b>			
<b>PWR</b> (Power indicator)	Off: the device is power off or failed	On: the device power on is normal	
<b>SYS</b> (System status indicator)	Blinking: device initialization	On: device on normal operation	
<b>USB</b> (USB status indicator)	Off: USB flash drive not insert or not detected by device		
	On: USB flash drive is detected by device		
	Blinking: the device is reading and writing the data from USB flash drive		
<b>1-16</b> (Copper ports indicators) Green	Off: ports link down		
	On: ports link up		
	Blinking: data on TX/RX		
<b>17-24</b> (Copper speed indicators) Yellow	Off: ports on 10/100M		
	On: ports on 1000M		

17-24 (Fiber ports indicators) Green	Off: ports link down
	On: ports link up
	Blinking: data on TX/RX
25-28 (Fiber ports indicators) Green	Off: ports link down
	On: ports link up
	Blinking: data on TX/RX
<b>Power parameter</b>	
Input voltage	AC 100-240V
Total power consumption	Full loading ≤25W
Over-current protection	Support
<b>Layer 2 functions</b>	
Port aggregation	Support GE port aggregation Support 2.5GE aggregation Support 10GE aggregation Support LACP dynamic aggregation Up to 64 aggregation groups and up to 8 ports per group
Port features	Support IEEE802.3x flow control, Support interface counters, Support port isolation, Support storm control, Support network storm suppression based on port bandwidth percentage, Support Combo ports (RJ45/SFP) adaptive
Mac-address table management	Support static Mac-address management Support dynamic Mac-address Management Support filtering Mac-address Support MAC limit based on port and VLAN Support MAC flapping based on port and VLAN
VLAN	Support access mode Support trunk mode Support hybrid mode
VLAN classification	Mac Based VLAN IP Based VLAN Protocol Based VLAN
GVRP	Normal mode Fixed mode

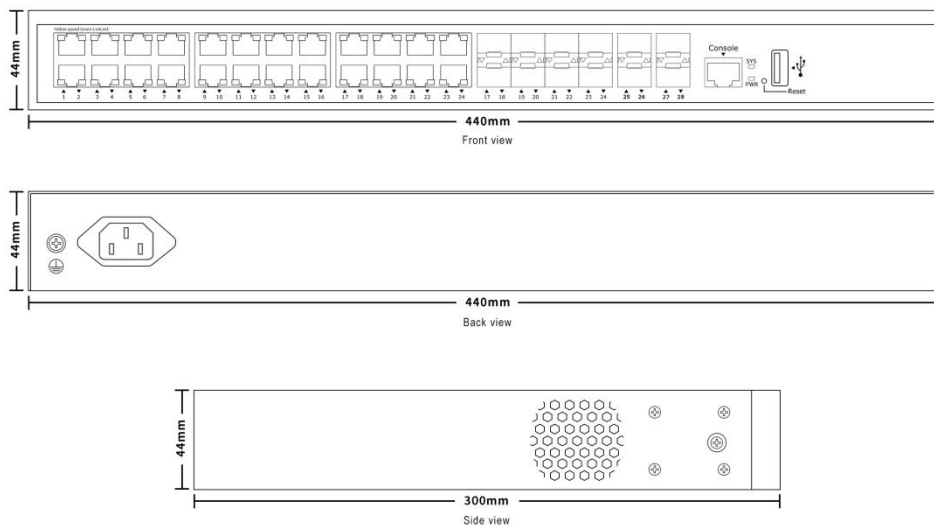
	Forbidden mode
QinQ	Port-based QinQ VLAN-based QinQ Flow-based QinQ
LLDP	LLDP (Link Layer Discovery Protocol)
Port mirroring	Many to one port mirroring
IEEE802.1w RSTP	STP RSTP MSTP
G.8032 ERPS protocol	Support G.8032 ERPS protocol, single ring, sub Ring and major ring Recovery time $\leq 20ms$
Loop detect	Loop detect based on ports Loop detect based on ports and VLAN
<b>Multicast functions</b>	
IGMP snooping	IGMP snooping
<b>Security functions</b>	
ACL	IP Standard ACL MAC extend ACL IP extend ACL L2/L3/L4 ACL IPv6 ACL
QoS	Support QoS Class, remarking Support SP, WRR queue scheduling Ingress port-based rate-limit Egress port-based rate-limit Support policy-based QoS
802.1x	Port access control Mac-address access control RADIUS server
Port-security	Port-security
IP source guard	IP Port/MAC binding
ARP-check	Support ARP-check and ARP packet filtering for illegal users
Access control	Support Telnet/SSH/HTTP/HTTPS user access control
<b>Management &amp; Maintenance functions</b>	

User Management	Support password protection Support user authorization management
SNMP	Supporting SNMP V1/V2C/V3 version
Web Management	Web Management Support HTTP V1.1 Support HTTPS
CLI management	Console/Telnet command line management
RMON	Support RMON(Remote Monitoring) alarm
Firmware upgrade	Firmware upgrade
Fault Detection	Ping/Tracerout Support optical transceiver DDM function
Cable detection	Support copper port cable detection
NTP	Network Time Protocol
Syslog/Debug	Syslog/Debug Syslog send to three servers
Configuration import/export	Support FTP/TFTP remote import/export Support USB import/export
Dual partition management	Support dual partition switching
<b>Application Protocol Functions</b>	
DHCP Snooping	DHCP snooping trust port Support remote-id/circuit-id configuration DHCP option-82
DHCP client	Support DHCP client
Telnet server	Support telnet server
Telnet client	Support telnet client
SSH server	Support SSH server
TACACS	Support TACACS(the terminal access controller accesses the control system)
sflow	Support network traffic analysis
TFTP	Support TFTP Client
<b>Layer 3 functions</b>	
ARP	ARP table aging
DHCP server	
IPv4 / IPv6	static routing

ECMP	Support ECMP (Equal-cost multi-path routing)
	Support the configuration of ECMP Max next-hop
	Support capacity balanced configuration
Route policy	IPv4 prefix-list
VRRP	Virtual Router Redundancy Protocol
<b>Routing Protocol Specification</b>	
RIP	RIPv1/v2
OSPFv2	OSPFv2
BGP4	BGP4
	BGP Support Routing Recursive ECMP
	Support to view the number of neighbors and up/down state
IS-IS	IS-ISv4
Routing entry	13K
<b>Switching features</b>	
Switching capacity	128Gbps
Packet forwarding rate	190.4Mpps
MAC address table	16K
VLAN	4K
Buffer	12M bit
Forwarding delay	<5us
Jumbo Frame	Support 10Kbytes
MDX/MIDX	Support
Watchdog	Support
<b>Mechanical structure</b>	
Installation method	Rack mountable
Dimension(W*D*H)mm	440*245*44mm
Weight	4.0kg

<b>Operating environment</b>	
Operating temperature	0°C~+50°C
Storage/transportation temperature	-10°C~+70°C
Relative humidity	Operation humidity: 10%-90%RH Storage humidity: 5%-95%RH
<b>Certification</b>	CCC/CE/UKCA/RoHS/REACH/FCC
<b>MTBF</b>	> 100,000 hours

### Structure diagram



### Order information

Model	Description
LT-S8528XG-4XS16GT8GC	Layer 3 managed Ethernet switch with 4*1G/2.5G/10G SFP+ ports + 16*10/100/1000M RJ45 ports + 8*1G SFP/RJ45 COMBO ports , AC 100-240V 50/60Hz