

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

### **Layer 2+ Managed Ethernet Switch**

### LT-S8312G-4GX8GT

#### Overview

SmartByte LT-S8312G-4GX8GT is a Layer 2+ full gigabit managed switch, which features 8-port 10/100/1000Base-T RJ45 and 4\*1G/2.5G SFP ports. It supports Layer 3 static routing with a high-performance switching architecture and offers wire-speed transportation capability for delivering a cost effective Gigabit Ethernet solution to meet the converged applications for enterprise customer's networks. More and more corporations are adapting new IT technologies over the network such as voice over IP, video conference to improve productivity and save operation expenditure. The LT-S8312G-4GX8GT series provide 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.

#### **Picture**





#### **Features**

- 4\*1G/2.5G SFP slots uplink, 8\*10/100/1000M RJ45 ports downlink, 1\*RJ45 console port for switch basic management and setup
- > Layer 3 features: Supports IPv4/IPv6 static routing, DHCP server
- > Port aggregation: Supports GE ports, 2.5GE port aggregation, static and dynamic aggregation
- VLAN: Supports access, truck, 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/Engress 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 and alarm grading; 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**

Model No.	LT-S8312G-4GX8GT	
Interface	Fiber ports	Copper RJ45 ports
	4	8
Ethernet	8*10/100/1000Base-T RJ45 4*1000/2500Base-X SFP	
Management port	1*RJ45 Console port (115200,8,N,1)	
Standard	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	
LED Indicators		
P (Power indicator)	Off: the device is power off or failed	On: the device power on is normal
<b>S</b> (System status indicator)	Blinking: device initialization	On: device on normal operation
<b>1-8</b> (Copper ports indicators) Green	Off: ports link down On: ports link up Blinking: data on TX/RX	
1-8 (Copper speed indicators) Yellow	Off: ports on 10/100M On: ports on 1000M	
<b>9-12</b> (Fiber ports indicators) Green	Off: ports link down On: ports link up Blinking: data on TX/RX	
Power parameter		

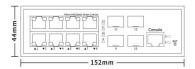
Input voltage	DC 5-16V
Total power consumption	Full loading ≤10W
Over-current protection	Support
Layer 2 functions	
Port aggregation	Support GE port aggregation Support 2.5GE aggregation Support static aggregation Support LACP dynamic aggregation
Port features	Up to 64 aggregation groups and up to 8 ports per group  Support IEEE802.3x flow control  Support interface counters  Support port isolation  Port mirroring ( One-to-One, Many-to-One)  Support loop detection(Port-based; VLAN-based)  Support broadcast storm suppression(broadcast; unknown multicast; unknown unicast)
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 (VLAN-stacking; VLAN-mapping) Flow-based QinQ
LLDP	LLDP (Link Layer Discovery Protocol)
Ring network protocol	Support IEEE802.1D-STP Support IEEE802.1W-RSTP Support IEEE802.1S-MSTP

	Support G.8032 ERPS protocol, single ring, sub Ring and major ring	
	Recovery time ≤20ms	
L2 Multicast		
IGMP snooping	Support IGMP snooping	
Group address	Support group address	
Security functions		
	IP Standard ACL	
ACL	MAC extend ACL	
ACL	IP extend ACL	
	IPv6 ACL	
	Support QoS Class, remarking	
	Support SP, WRR queue scheduling	
QoS	Ingress port-based rate-limit	
	Egress port-based rate-limit	
	Support policy-based QoS	
	Port access control	
802.1x	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	
Management & Maintena	ance functions	
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	
	Capport optical danscerver Dominancion	

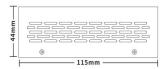
Cable detection	Support copper port cable detection		
NTP	Network Time Protocol		
Syslog/Debug	Syslog/Debug Syslog send to three servers		
Configuration import/export	Support FTP/TFTP remote import/export		
Dual partition management	Support dual partition switching		
Application Protocol Functions			
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		
Layer 3 functions	Layer 3 functions		
ARP	ARP table aging		
DHCP server			
IPv4 / IPv6	static routing		
Switching features	Switching features		
Switching capacity	36Gbps		
Packet forwarding rate	53.5Mpps		
MAC address table	16K		
VLAN	4K		
Buffer	12Mbit		
Forwarding delay	<5us		
Jumbo Frame	Support 10Kbytes		

MDX/MIDX	Support	
IVIDA IVIDA	зарроге	
Watchdog	Support	
Mechanical structure		
Installation method	Desktop; Rack-mount optional	
Dimension(W*D*H)mm	152*115*44mm	
Weight	0.66kg	
Operating environment		
Operating temperature	0℃~+50℃	
Storage/transportation temperature	-10°C~+70°C	
Relative humidity	Operation humidity: 10%-90%RH	
	Storage humidity: 5%-95%RH	
Certification	CCC/CE/UKCA/RoHS/REACH/FCC	
MTBF	> 100,000 hours	

# Structure diagram







## **Order information**

Model	Description
LT-S8312G-4GX8GT	Layer 2+ managed Ethernet switch with 4*1G/2.5G SFP slots +
	8*10/100/1000M RJ45 ports, DC 5-16V