16*10/100/1000Base-T + 4*1G/2.5GBase-X SFP

L2+ Managed Industrial Ethernet Switch

LT-IS6320G-4GX16GT Series

Features:

➤ 16*10/100/1000Base-T RJ45, 4*1G/2.5GBase-X SFP

➤ 12-75V redundant DC power supply with polarity reverse/over-voltage/over-current protection

➤ Support USB one key configuration & upgrading

➤ DI/DO/RS485 are optional

➤ Layer 3 features: Support IPv4/IPv6 static routing, DHCP server

➤ Layer 2 features: VLAN; ERPS, STP/RSTP/MSTP; Link aggregation, IGMP snooping, port mirroring, QinQ, 802.1X, port isolation, RMON, NTP client, DHCP snooping/client, Ping/Tracert test, ACL, QoS and SFP DDM function

➤ Management and maintenance: IPv4 and IPv6 management; Support Web, SNMP, CLI, Telnet/SSH management method; Support user management, system log, configuration upload/download through web interface, firmware upgrade via HTTP/TFTP/USB

➤ Support G.8032 ERPS protocol, recovery time ≤20ms

➤ Support 6KV surge protection and ESD: Air-15kV, Contact-8kV Protection

➤ IP40 fan-less and Din-rail hardware design

➤ Operation temperature: -40 ℃ ~+ 80 ℃

Overview

The SmartByte LT-IS6320G-4GX16GT series are the highly reliable Layer 2+ managed industrial Ethernet switches with 16-port 10/100/1000Base-T RJ45 and 4-port 1G/2.5GBase-X SFP. With full gigabit capability, it can provide high performance and the ability to quickly transfer large amounts of video, voice, and data across a network. They supports DI/DO/RS485, G.8032 ERPS, MSTP/RSTP/STP redundancy technologies, IPv4/IPv6 static routing, DHCP server and robust Layer 2 management and secure function, which all making them ideal for large-scale industrial networks.

LT-IS6320G-4GX16GT series are also high cost-effective easy-to-use devices, which provide essential industrial Ethernet networking function, including redundant power supply with DC12-75V input, robust IP40 fan-less housing with Din-rail installation, wide operation temperature from -40°C to 80 °C as well as high-level EMI/EMC capability. They are the best choices for heavy industrial factory, transportation, oil & gas, chemical, IP Surveillance and processing automation area where environmental conditions are harsh and critical.

Technical specification

Model No.	LT-IS6320G-4GX16GT / LT-IS6320G-4GX16GT-D	
Interface	Fiber ports	Copper RJ45 ports
	4	16
Ethernet	16*10/100/1000Base-T RJ45 4*1000/2500Base-X SFP	
Management port	1*RJ45 Console port (115200,8,N,1), 1*USB 2.0 for configuration and firmware update	
Data & Alarm channel (optional)	1 channel RS485 1 channel DI(digital input) 1 channel DO(digital output)	
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		
P1/P2 (Power indicator)	Off: the device is power off or failed	On: the device power on is normal
SYS(System status indicator)	Blinking: device initialization	On: device on normal operation
USB (USB status indicator) Green	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	
ALM(Fault status indicator) Red	Off: Device on normal working state	On: Fault alarm
Ring(Ring network indicator)	Off: Ring network disable	On: Ring network enable
1-16 (Copper ports indicators) Green	Off: ports link down	
	On: ports link up	
	Blinking: data on TX/RX	
1-16 (Copper speed indicators) Yellow	Off: ports on 10/100M	
	On: ports on 1000M	
17-20 (Fiber ports indicators) Green	Off: ports link down	
	On: ports link up	
	Blinking: data on TX/RX	
Power parameter		
Input voltage	12-75V DC redundant power input	
Input current	2A DC/DC input Max	
Total power consumption	Full loading ≤22W	
Connector	Removable 2*2-pin terminal block	
Reverse polarity protection	Support	
Over-voltage protection	Support	
Over-current protection	Support	

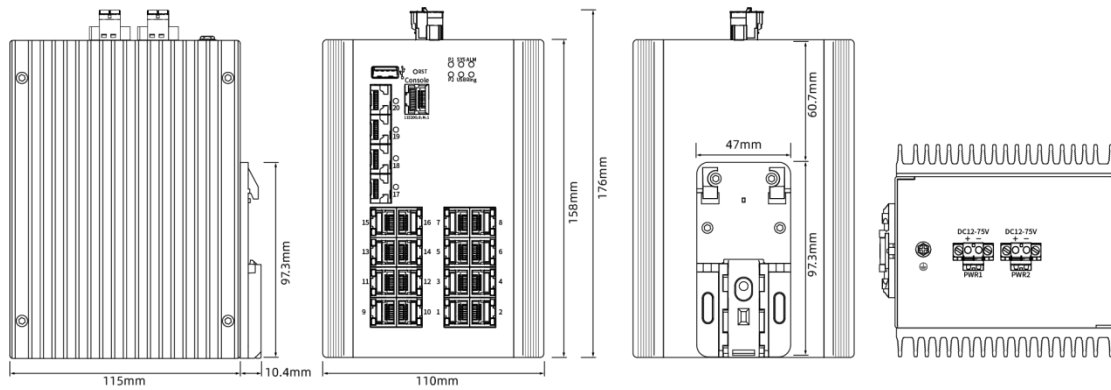| Layer 2 functions	
Port aggregation	Support GE port aggregation
	Support 2.5GE aggregation
	Support static aggregation
	Support LACP dynamic aggregation
	Up to 64 aggregation groups and up to 8 ports per group
Port features	Support IEEE802.3x flow control,
	Support interface counters,
	Support port isolation,
	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	
ACL	IP Standard ACL MAC extend ACL IP extend 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
Management & Maintenance 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 Dying gasp 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
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	
ARP	ARP table aging
DHCP server	
IPv4 / IPv6	static routing
Switching features	
Switching capacity	52 Gbps
Packet forwarding rate	77.3Mpps
MAC address table	16K
VLAN	4K
Buffer	12Mbit
Forwarding delay	<5us
Jumbo Frame	Support 10Kbytes
MDX/MIDX	Support
Watchdog	Support
Mechanical structure	

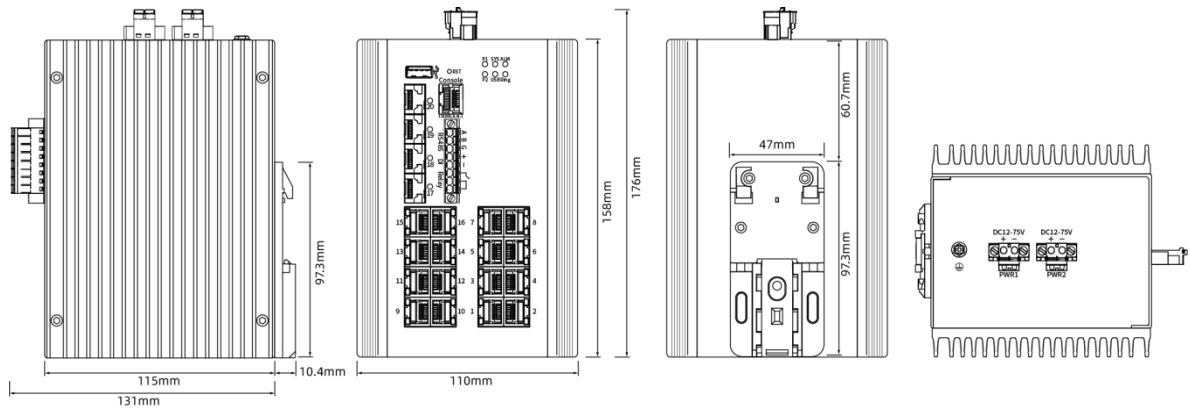|	
Case protection	IP40
Installation method	Din-rail
Dimension(W*D*H)mm	110 *115*158mm
Weight	LT-IS6320G-4GX16GT: 2.0kg; LT-IS6320G-4GX16GT-D:2.1kg
Operating environment	
Operating temperature	-40℃~+ 80℃
Storage/transportation temperature	-40℃~+ 85℃
Relative humidity	Operation humidity: 10%-90%RH Storage humidity: 5%-95%RH
Industrial Standard	
EMS	Surge protection of power: IEC 61000-4-5 6KV/4KV（8/20us） Surge protection of Ethernet ports: IEC 61000-4-5 6KV/2KV（10/700us） RS：IEC 61000-4-3 80 MHz-1 GHz：10 V/m EFT：IEC 61000-4-4 4K/2K CS：IEC 61000-4-6 10V ESD：IEC 61000-4-2 Contact: 8K；Air: 15K
EMI	FCC Part 15B Class A
Shock	IEC 60068-2-27
Free fall	IEC 60068-2-32
Vibration	IEC 60068-2-6
Certification	CCC/CE/UKCA/RoHS/REACH/FCC
MTBF	＞200,000 hours
Warranty	5 years

Structure diagram

LT-IS6320G-4GX16GT

LT-IS6320G-4GX16GT-D

Order information

Model	Description
LT-IS6320G-4GX16GT	L2+ Managed industrial Ethernet switch with 4*1G/2.5GBase-X SFP ports，16*10/100/1000Base-T RJ45 ports. Dual redundant DC 12-75V input，Din-rail installation; Operation temperature -40℃ to 80 ℃
LT-IS6320G-4GX16GT-D	L2+ Managed industrial Ethernet switch with 4*1G/2.5GBase-X SFP ports, 16*10/100/1000Base-T RJ45 ports. Support DI/DO/RS485; Dual redundant DC 12-75V input，Din-rail installation; Operation temperature -40℃ to 80 ℃