

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

**Layer 2+ Managed Industrial Ethernet Switch**

**LT-IS6320G-4GX16GT Series**



**Features:**

- 16\*10/100/1000Base-T RJ45, 4\*1000/2500Base-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/Modbus data optional
- Layer 3 feature: Support IPv4/IPv6 static routing
- 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  $\leq 20\text{ms}$
- Support 6KV surge protection and ESD: Air-15kV, Contact-8kV Protection
- IP40 fan-less and Din-rail hardware design
- Operation temperature:  $-40\text{ }^{\circ}\text{C} \sim +80\text{ }^{\circ}\text{C}$

## 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/Modbus data, G.8032 ERPS, MSTP/RSTP/STP redundancy technologies, Layer 3 static routing features, powerful 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

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

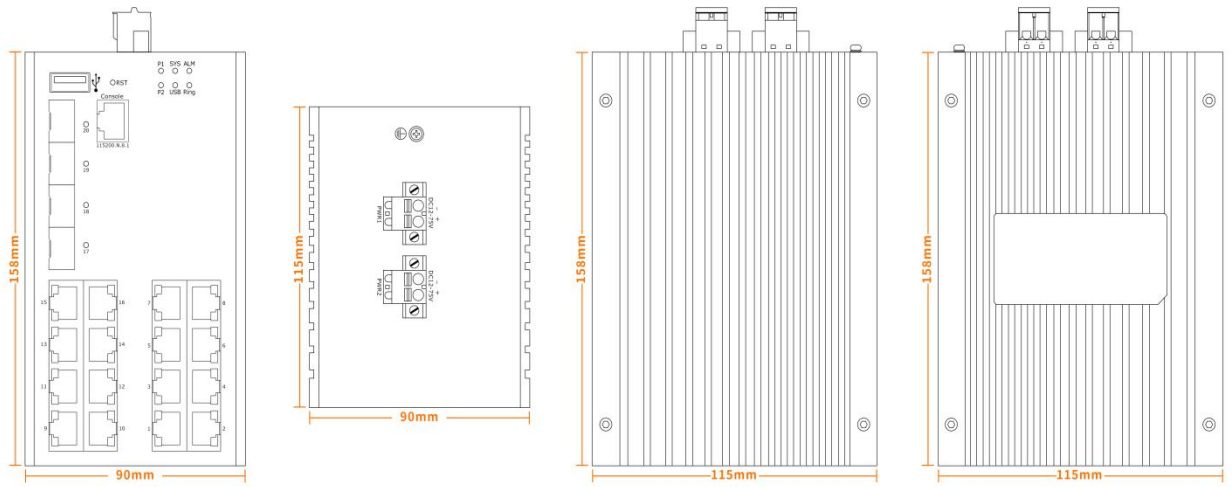
<b>Layer 2 function</b>	
Port aggregation	Support GE port aggregation Support 2.5GE aggregation Support static aggregation Support dynamic aggregation
Port features	Support IEEE802.3x flow control, Support port traffic statistics, Support port isolation Support network storm suppression based on port bandwidth percentage
VLAN	Support access mode Support trunk mode Support hybrid mode
VLAN Classification	Mac Based VLAN IP Based VLAN Protocol Based VLAN
QinQ	Port-based QinQ VLAN-based QinQ Flow-based QinQ
Port mirroring	Many to one port mirroring
Ring network protocol	Support STP、RSTP、MSTP Support G.8032 ERPS protocol, single ring, sub Ring and associated sub ring Recovery time ≤20ms
DHCP	Support DHCP Client Support DHCP Snooping
Multicast	IGMP V1,V2,V3 IGMP snooping
ACL	IP Standard ACL MAC extend ACL IP extend 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
Security	Support Dot1x, port authentication, MAC authentication, RADIUS service Support port-security Support IP Source Guard, IP/Port/MAC binding

	Support ARP-check and ARP packet filtering for illegal users Support port isolation
Management & maintenance	Support LLDP Support user management and login authentication Support SNMPV1/V2C/V3 Support web management, HTTP1.1, HTTPS Support Syslog and alarm grading Support RMON(Remote Monitoring) alarm Support NTP Support temperature monitoring Support Ping , TRACERT Support optical transceiver DDM function Support TFTP Client Support Telnet Server Support SSH Server Support IPv6 Management Support TFTP, web upgrading Support USB upgrading Support USB importing configuration
<b>Layer 3 function</b>	
ARP	ARP table aging
IPv4 / IPv6	Static routing
<b>Switching features</b>	
Switching capacity	52 Gbps
Packet forwarding rate	77.3Mpps
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>	

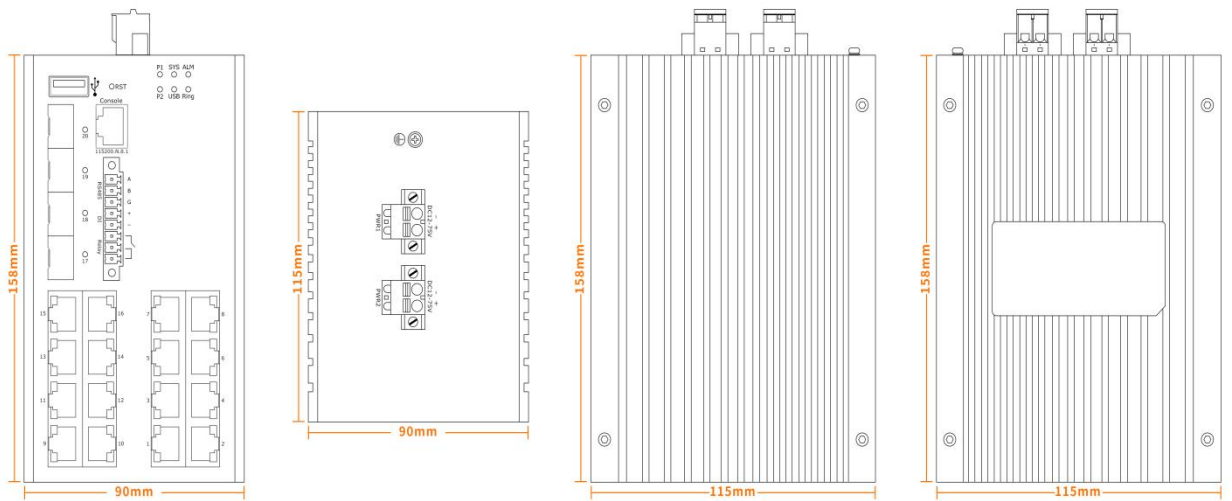
Case protection	IP40
Installation method	Din-rail
Dimension(W*D*H)mm	90*115*158mm
Weight	LT-IS6320G-4GX16GT: 1.85kg ;          LT-IS6320G-4GX16GT-D: 1.95kg
<b>Operating environment</b>	
Operating temperature	-40℃~+ 80℃
Storage/transportation temperature	-40℃~+ 85℃
Relative humidity	Operation humidity: 10%-90%RH Storage humidity: 5%-95%RH
<b>Industrial Standard</b>	
EMS	Surge protection of power: IEC 61000-4-5 DC:6KV/6KV (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 power 4K, signal 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
<b>Certification</b>	CCC/CE/FCC/RoHS
<b>Warranty</b>	5 years

**Structure diagram**

**LT-IS6320G-4GX16GT**



**LT-IS6320G-4GX16GT-D**



### Order information

Model	Description
LT-IS6320G-4GX16GT	Layer 2+ managed industrial Ethernet switch with 4*1G/2.5GBase-X SFP ports and 16*10/100/1000Base-T RJ45 ports. Dual DC 12-75V input , Din-rail installation; Operation temperature -40°C to 80 °C
LT-IS6320G-4GX16GT-D	Layer 2+ managed industrial Ethernet switch with 4*1G/2.5GBase-X SFP ports and 16*10/100/1000Base-T RJ45 ports. Support DI/DO/RS485/Modbus; Dual DC 12-75V input, Din-rail installation; Operation temperature -40°C to 80 °C