8*10/100/1000Base-T+ 4*100/1000Base-X SFP+ 4*1G/2.5G/10GBase-X

SFP+ Layer 2+ Managed Industrial Ethernet Switch

LT-IS6316XG-4XS4GX8GT

Features:

➤ 8*10/100/1000Base-T RJ45 ports, 4*100/1000Base-X SFP, 4*1G/2.5G/10GBase-X SFP+ slots

➤ Redundant power 12-58V input with polarity reverse/over-voltage/over-current protection

➤ Support one digital output for relay alarm (terminal block Pin 5/6)

➤ Layer 3 feature: Support IPv4/IPv6 static routing

➤ Support Layer 2 management function: VLAN/VLAN Classification/QinQ/STP, RSTP,

  MSTP/Port Mirroring/DHCP/Multicast/ACL/IGMP/QoS/LLDP/802.1X/Dying Gasp/SFP

  DDM/IPV6 management/Web/SNMP/Telnet/TFTP/Web upgrading

➤ 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 ℃ ~+75℃

Overview

The SmartByte LT-IS6316XG-4XS4GX8GT is the highly reliable managed industrial Ethernet switches with 8-port 10/100/1000-T RJ45, 4-port 100/1000Base-X SFP and 4-port 1G/2.5G/10GBase-X SFP+ interfaces. It supports ERPS redundant network and the self-recovery mechanism is less than 20ms on full load which allows you to scheme a reliable Ethernet network by building a redundant ring topology as your back-up solution. LT-IS6316XG-4XS4GX8GT supports Layer 3 static routing features and robust layer 2 management function, which can fulfill the special needs of industrial automation applications.

LT-IS6316XG-4XS4GX8GT is also high cost-effective easy-to-use device, which provides essential industrial Ethernet networking function, including wide range power input 12-58VDC, redundant power design with polarity reverse/over-voltage/over-current protection, robust IP40 fan-less housing with Din-rail installation, wide operation temperature from -40°C to 75°C as well as high-level EMI/EMC capability. It is the best choice for heavy industrial factory, transportation, oil & gas, chemical, IP Surveillance and processing automation area where environmental conditions are harsh and critical.

Technical specification

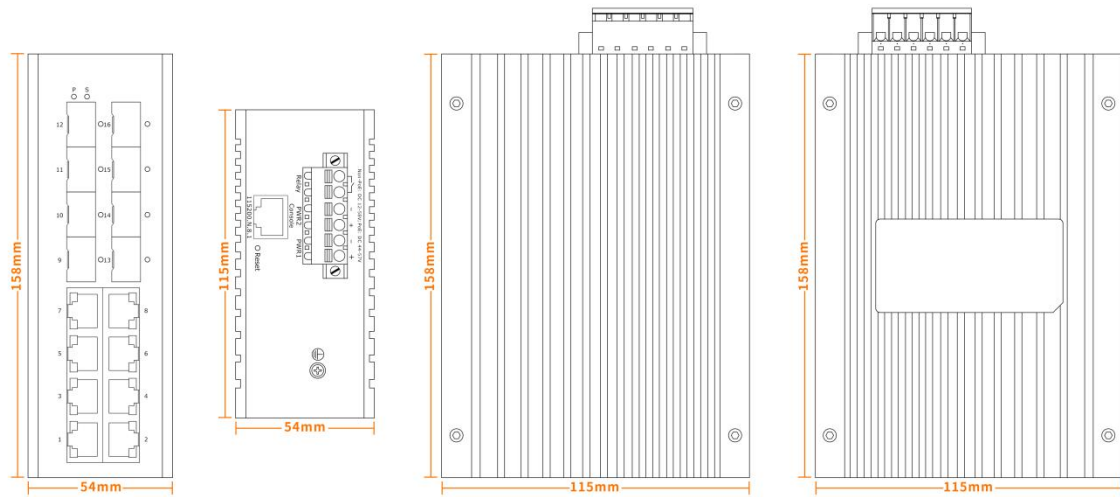| Model No.	LT-IS6316XG-4XS4GX8GT	
Interface	Fiber ports	Copper RJ45 ports
	8	8
Ethernet	8*10/100/1000Base-T RJ45 4*100/1000Base-X SFP (13-16 ports) 4*1G/2.5G/10GBase-X SFP+ (9-12 ports)	
Management port	1*RJ45 Console port	
Alarm port	One digital output for relay alarm, alarm relay current carry ability: 1A@24VDC	
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 IEEE 802.3ae 10Gb/s 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) Green	Off: the device is power off or failed	On: the device power on is normal
S(System status indicator)	Blinking: device initialization	On: device on normal operation
1-8 (Copper ports indicators) Green	Off: ports link down	
	On: ports link up	
	Blinking: data on TX/RX	
1-8 (Port speed indicators) Yellow	Off: ports on 10/100M	
	On: ports on 1000M	
9-16(Fiber ports indicators) Green	Off: ports link down	
	On: ports link up	
	Blinking: data on TX/RX	
Power parameter		
Input voltage	12-58VDC, redundant power input	
Input current	1.6A Max	
Total power consumption	Full loading ≤20W	
Connector	Removable 6-pin terminal block, Pin 5/6 for relay alarm output	
Reverse polarity protection	Support	
Over-voltage protection	Support	
Over-current protection	Support	
Layer 2 function		
Port aggregation	Support GE port aggregation Support 2.5GE aggregation Support 10GE 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
Layer 3 function	
ARP	ARP table aging
IPv4 / IPv6	Static routing
Switching features	
Switching capacity	104Gbps
Packet forwarding rate	154.7Mpps
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	54*115*158mm
Weight	1.45 kg
Operating environment	

Operating temperature	-40℃~+75℃
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/FCC/RoHS
Warranty	5 years

Structure diagram

Order information

Model	Description
LT-IS6316XG-4XS4GX8GT	Layer 2+ Managed industrial Ethernet switch with 8*10/100/1000Base-T RJ45 ports, 4*100/1000Base-X SFP and 4*1G/2.5G/10GBase-X SFP+ slots, DC12-58V input, redundant dual power supply, Din-rail installation. Operation temperature: -40℃～+75℃