8*10/100/1000Base-T+ 4*100/1000Base-X SFP

+ 4*1G/2.5G/10GBase-X SFP+

L2+ Managed Industrial PoE Switch

LT-IS6316XGP-4XS4GX8GT



Features:

> 8*10/100/1000Base-T RJ45 PoE ports, 4*100/1000Base-X SFP,

4*1G/2.5G/10GBase-X SFP+ slots

- > Redundant power 44-57V input with polarity reverse/over-voltage/over-current protection
- > Support one digital output for relay alarm (terminal block Pin 5/6)
- Complies with IEEE802.3af PoE and IEEE802.3at PoE+ standard
- > Layer 3 feature: Support IPv4/IPv6 static routing, DHCP server
- 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/PoE 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 $^{\circ}$ C ~+75 $^{\circ}$ C

Overview

The SmartByte LT-IS6316XGP-4XS4GX8GT is the highly reliable managed industrial PoE switch 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 complies with IEEE802.3af, IEEE802.3at standard PoE protocol, the Max power consumption can reach 30W (PoE+) per port. 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-IS6316XGP-4XS4GX8GT also supports Layer 3 IPv4/IPv6 static routing features and powerful Layer 2 management and secure function, which all making them ideal for large-scale industrial networks.

LT-IS6316XGP-4XS4GX8GT is a high cost-effective easy-to-use device, which provides essential industrial Ethernet networking function, including wide range power input 44-57VDC, 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.

Model No.	LT-IS6316XGP-4XS4GX8GT	
luto ufo co	Fiber ports	Copper RJ45 ports
Interface	8	8
Ethernet	8*10/100/1000Base-T RJ45 PoE 4*100/1000Base-X SFP (13-16 p 4*1G/2.5G/10GBase-X SFP+ (9-12 p	
Management port	1*RJ45 Console port (115200,8,N,1)	
Alarm port	One digital output for relay alarn 1A@24VDC	n, alarm relay current carry ability:
	IEEE 802.3 10Base-T Ethernet	
	IEEE 802.3u 100Base-TX Ethernet	
Standard	IEEE 802.3ab 1000Base-T Ethernet	
	IEEE 802.3z 1000Base-X Ethernet	
	IEEE802.3x Flow Control and Back Pressure	

Technical specification

IEEE 802.1 w Rapid Spanning Tree Protocol IEEE 802.1 Q. VLAN ITU-T G.8032 ERPS IEEE 802.1 ab LLDP IEEE 802.3 ad LACP IEEE 802.3 ad LACP IEEE 802.3 ad POE + LED Indicators P (Power Indicator) 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 S (system status indicator) Off: ports link down On: device on normal operation S (system status indicators) Off: ports link down On: device on normal operation S (system status indicators) Off: ports link down On: ports link up Stellow On: ports link up Imput solitators) Off: ports link down On: ports link down On: ports link up Stellow Off: ports link down On: ports link up String: data on TX/RX Imput solitage Imput solitage String: data on TX/RX Imput solitage Imput solitage String: data on TX/RX Imput solitage Imput solitage Imput solitage Inspect Imput solitage Imput solitage Imput solitage Imput		1	
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ITU-T G.8032 ERPS IEEE 802.1X Port Authentication Network Control IEEE 802.3ad LACP IEEE 802.3ad LACP IEEE 802.3ad PoE IEEE802.3at PoE IEEE802.3at PoE+LED IndicatorsOff: the device is power off or failed IEEE802.3at PoE+On: the device power on is normal on: the device on normal operationS (system status indicator)Blinking: device initialization Off: ports link down On: ports link up IBlinking: data on TX/RXOn: device on normal operation1-8 (Poper ports indicators) GreenOff: PoE not working On: PoE working On: PoE workingOff: PoE not working9-16 (Fiber ports indicators) GreenOff: ports link down On: ports link up IBlinking: data on TX/RXOff: PoE not working On: PoE working9-16 (Fiber ports indicators) GreenOff: PoE not working On: PoE workingImput voltage9-16 (Fiber ports indicators) GreenOff: ports link down On: ports link up IBlinking: data on TX/RXImput voltage9-16 (Fiber ports indicators) GreenOff: ports link down On: ports link up IBlinking: data on TX/RXImput voltage9-16 (Fiber ports indicators) Green44-57VDC(802.3af) 52-57VDC(802.3af) 52-57VDC(802.3af) redundant power inputImput voltage9-17 (and power consumption PoE power budgets 240wSupportImput voltage power budgets 240w0SupportImput voltage protectionSupport0SupportImput voltage protectionSupport0SupportImput voltage protectionSupport0SupportImput voltage protectionSupport0SupportImpu			ocol
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Reverse polarity protection Support Over-voltage protection Support Over-current protection Support	Total power consumption	C C	
Over-voltage protection Support Over-current protection Support	Connector	Removable 6-pin terminal block, Pin 5,	/6 for relay alarm output
Over-current protection Support	Reverse polarity protection	Support	
	Over-voltage protection	Support	
Layer 2 functions	Over-current protection	Support	
	Layer 2 functions		

	Support GE port aggregation Support 2.5GE aggregation
Dort aggregation	Support 10GE aggregation
Port aggregation	Support static aggregation
	Support LACP dynamic aggregation
	Up to 64 aggregation groups and up to 8 ports per group
	Support IEEE802.3x flow control,
	Support interface counters,
	Support port isolation,
Port features	Port mirroring (One-to-One, Many-to-One)
	Support loop detection(Port-based; VLAN-based)
	Support broadcast storm suppression(broadcast; unknown multicast;
	unknown unicast)
	Support static Mac-address management
	Support dynamic Mac-address Management
Mac-address table	Support filtering Mac-address
management	Support MAC limit based on port and VLAN
	Support MAC flapping based on port and VLAN
	Support access mode
VLAN	Support trunk mode
	Support hybrid mode
	Mac Based VLAN
VLAN classification	IP Based VLAN
	Protocol Based VLAN
	Normal mode
GVRP	Fixed mode
	Forbidden mode
	Port-based QinQ
QinQ	VLAN-based QinQ(VLAN-stacking; VLAN-mapping)
	Flow-based QinQ
LLDP	LLDP (Link Layer Discovery Protocol)
	Support IEEE802.1D-STP
Ring network protocol	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

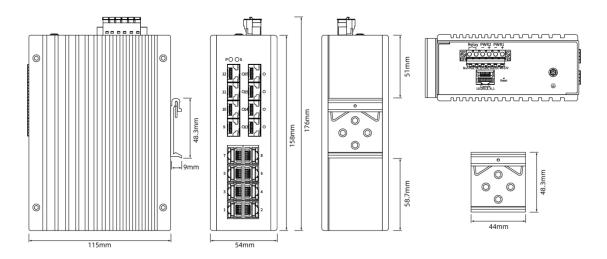
Group address	Support group address
Security functions	
	IP Standard ACL
ACL	MAC extend ACL
	IP extend ACL
	IPv6 ACL Support QoS Class, remarking
	Support SP, WRR queue scheduling
QoS	Ingress port-based rate-limit
400	Egress port-based rate-limit
	Support policy-based QoS
	Port access control
802.1x	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 & Maintenan	ce functions
User Management	Support password protection Support user authorization management
SNMP	Support user authorization management
	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
	Ping/Tracerout
Fault Detection	Dying gasp
	Support optical transceiver DDM function
Cable detection	Support copper port cable detection
PoE management	Support 802.3af/802.3at
	Support PD watchdog

	Support PoE priority management
	Support Max PoE power configuration for each port
	Support alarm waterline configuration
	Support reserved power configuration
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 Function	5
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	104Gbps
Packet forwarding rate	154.7Mpps
MAC address table	16K
VLAN	4К

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	1.55 kg
Operating environment	
Operating temperature	-40°℃~+75°℃
Storage/transportation temperature	-40°C~+85°C
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
МТВҒ	> 200,000 hours
Warranty	5 years

Structure diagram



Order information

Model	Description
LT-IS6316XGP-4XS4GX8GT	L2+ Managed industrial PoE switch with 8*10/100/1000Base-T RJ45 PoE ports, 4*100/1000Base-X SFP and 4*1G/2.5G/10GBase-X SFP+ slots, complies with IEEE802.3af, IEEE802.3at standard, DC44-57V input, redundant dual power supply, Din-rail installation. Operation temperature: $-40^{\circ}C \sim +75^{\circ}C$