24*10/100/1000Base-T + 4*1G/2.5/10GBase-X SFP+

Layer 3 Managed Industrial Ethernet Switch

LT-IS6528XG-4XS24GT Series

Features:

➤ 24*10/100/1000Base-T RJ45, 4*1G/2.5G/10GBase-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 static routing and dynamic 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 ≤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-IS6528XG-4XS24GT series are the highly reliable Layer 3 managed industrial Ethernet switches with 24-port 10/100/1000Base-T RJ45 and 4-port 1G/2.5G/10GBase-X SFP+. With full gigabit downlink and 10G uplink capability, they can provide high performance and the ability to quickly transfer large amounts of video, voice, and data across a network. They support DI/DO/RS485/Modbus data, G.8032 ERPS, MSTP/RSTP/STP redundancy technologies, Layer 3 static routing & dynamic routing features, powerful Layer 2 management and secure function, which all making them ideal for large-scale industrial networks.

LT-IS6528XG-4XS24GT series are also the 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-IS6528XG-4XS24GT / LT-IS6528XG-4XS24GT-D	
Interface	Fiber ports	Copper ports
	4	24
Ethernet	24*10/100/1000Base-T RJ45 4*1G/2.5G/10GBase-X SFP+	
Management port	1*RJ45 Console port，1*USB 2.0 for configuration and firmware update	
Data 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 IEEE 802.3ae 10GBase-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) Green	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
1-24 (Copper ports indicators) Green	Off: ports link down	
	On: ports link up	
	Blinking: data on TX/RX	
1-24(Copper speed indicators) Yellow	Off: ports on 10/100M	
	On: ports on 1000M	
25-28 (Fiber ports indicators) Green	Off: ports link down	
	On: ports link up	
	Blinking: data on TX/RX	
Power parameter		
Input voltage	12-75VDC redundant power input	
Input current	2.5A DC/DC input Max	
Total power consumption	Full loading ≤30W	
Connector	Removable 2-pin terminal block	
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
	Support USB upgrading
	Support USB importing configuration

Layer 3 function	
ARP	ARP table aging
IPv4 / IPv6	Static routing
ECMP	ECMP; Support the configuration of ECMP Max next-hop; Support capacity balanced configuration;
Route policy	IPv4 prefix-list
VRRP	virtual router redundancy protocol
Routing Entry	13K
IP routing protocol	RIPv1/v2; OSPFv2; BGP4; BGP supports Routing recursive ECMP; Support to view the number of neighbors and up/down state IS-ISv4
Switching features	

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Switching capacity	128Gbps
Packet forwarding rate	190Mpps
MAC address table	16K
VLAN	4K
Buffer	12M bit
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	90*115*158mm
Weight	LT-IS6528XG-4XS24GT: 1.9kg LT-IS6528XG-4XS24GT-D:2kg
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 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
Certification	CCC/CE/FCC/RoHS
Warranty	5 years

Structure diagram

LT-IS6528XG-4XS24GT

LT-IS6528XG-4XS24GT-D

SmartByte
The Real Source Factory of Ethernet Switches
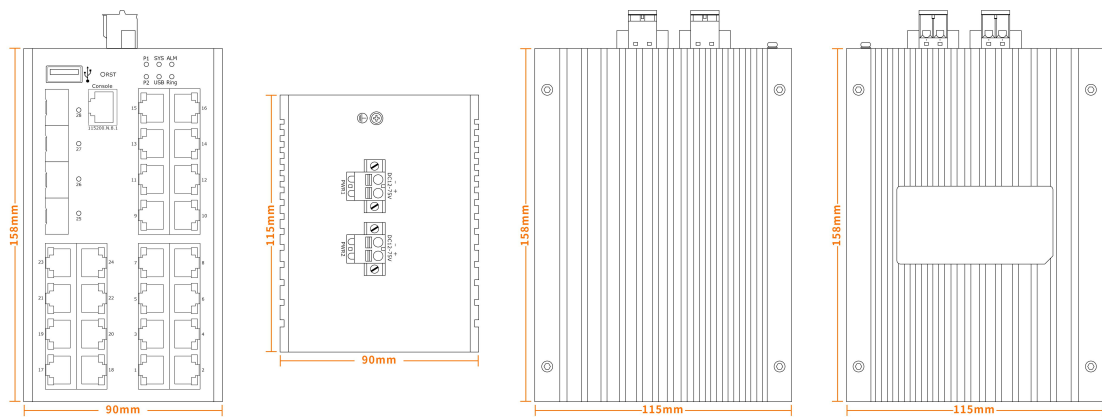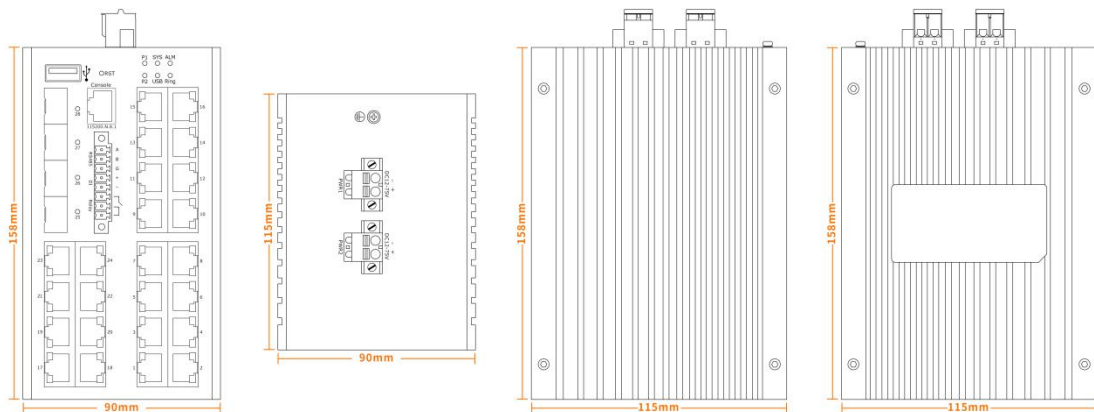
Order information

Model	Description
LT-IS6528XG-4XS24GT	Layer 3 managed industrial Ethernet switch with 4*1G/2.5G/10GBase-X SFP+ ports and 24*10/100/1000Base-T RJ45 ports. Dual DC 12-75V input，Din-rail installation；Operation temperature -40°C to 80 °C
LT-IS6528XG-4XS24GT-D	Layer 3 managed industrial Ethernet switch with 4*1G/2.5G/10GBase-X SFP+ ports and 24*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