

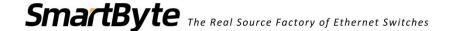
# 48\*10/100/1000Base-T + 4\*1G/2.5/10GBase-X SFP+

# LT-IS6352XG-4XS48GT-U



#### **Features:**

- 48\*10/100/1000Base-T, 4\*1G/2.5/10GGBase-X SFP+
- > AC/DC redundant power supply with polarity reverse/over-voltage/over-current protection
- Support USB one key configuration and upgrading
- 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 rack-mount hardware design
- > Operation temperature: -40  $^{\circ}$ C  $^{\circ}$ + 70  $^{\circ}$ C



#### Overview

The SmartByte LT-IS6352XG-4XS48GT-U is the highly reliable Layer 2+ managed industrial Ethernet switch with 48-port 10/100/1000Base-T RJ45 and 4-port 1G/2.5G/10GBase-X SFP+. With full gigabit downlink and 10G uplink capability, it can provide high performance and the ability to quickly transfer large amounts of video, voice, and data across a network. It supports 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-IS6352XG-4XS48GT-U is also a high cost-effective easy-to-use device, which provides essential industrial Ethernet networking function, including wide range voltage input with redundant power design AC 、 DC or AC/DC selection, robust IP40 fan-less housing with rack-mount installation, wide operation temperature from -40°C to 70 °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-IS6352XG-4XS48GT-U			
Interface	Fiber ports	Copper RJ45 ports		
	4	48		
Ethernet	48*10/100/1000Base-T RJ45 4*1G/2.5G/10GBase-X SFP+			
Management port	1*RJ45 Console port (115200,8,N,1) , 1*USB 2.0 for configuration and firmware update			
	IEEE 802.3 10Base-T Ethernet			
	IEEE 802.3u 100Base-TX Ethernet			
	IEEE 802.3ab 1000Base-T Ethernet			
	IEEE 802.3z 1000Base-X Ethernet			
Standard	IEEE802.3x Flow Control and Back Pressure			
Standard	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)	Off: the device is power off or failed	On: the device power on is normal			
<b>S</b> (System status indicator)	Blinking: device initialization On: device on normal operat				
	Off: USB flash drive not insert or not detected by device				
USB (USB status indicator)	On: USB flash drive is detected by device				
	Blinking: the device is reading and writing the data from USB flash drive				
	Off: ports link down				
<b>1-48</b> (Copper ports indicators) Green	On: ports link up				
,	Blinking: data on TX/RX				
1-48(Copper speed indicators) Yellow	Off: ports on 10/100M				
	On: ports on 1000M				
	Off: ports link down				
<b>49-52</b> (Fiber ports indicators) Green	On: ports link up				
	Blinking: data on TX/RX				
Power parameter					
Input voltage	36-75VDC 100~240VAC redundant power input				
Input current	2A DC/AC input Max				
Total power consumption	Full loading ≤60W				
Connector	Removable 2*2-pin terminal block(DC/DC) 3-pin AC socket(AC/AC)				
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 10GE aggregation			
	Support 10GE 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	Support filtering Mac-address			
table 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			
	Support IEEE802.1W-RSTP			
Ring network protocol	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			

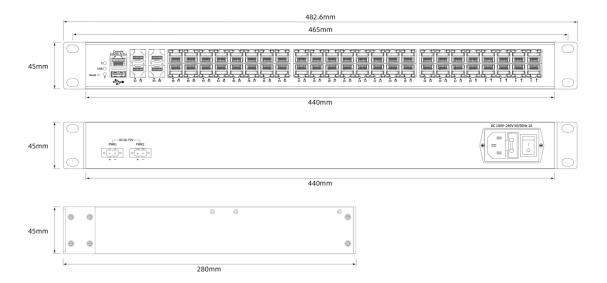
Security functions					
	IP Standard ACL				
ACL	MAC extend ACL				
	IP extend ACL				
	IPv6 ACL				
QoS	Support QoS Class, remarking				
	Support SP, WRR queue scheduling				
	Ingress port-based rate-limit				
	Egress port-based rate-limit				
	Support policy-based QoS				
	Port access control				
802.1x	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 & Maintenance	functions				
User Management	Support password protection				
Osci Wanagement	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				
	Ping/Tracerout				
Fault Detection	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				
	Support FTP/TFTP remote import/export				
Configuration 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	336Gbps		
Packet forwarding rate	499.9Mpps		
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		

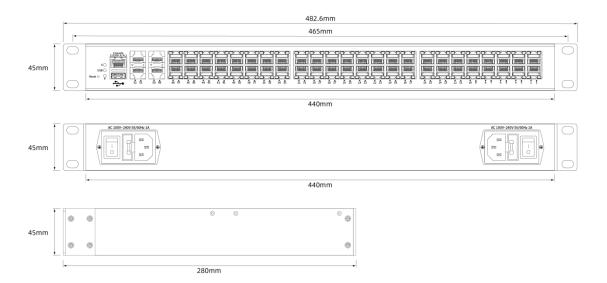
Installation method	Rack mountable		
Dimension(W*D*H)mm	440*44*280mm		
Weight	6 kg		
Operating environment			
Operating temperature	-40°C~+ 70°C		
Storage/transportation temperature	-40°C~+ 85°C		
Relative humidity	Operation humidity: 10%-90%RH Storage humidity: 5%-95%RH		
Industrial Standard			
EMS	Surge protection of power: IEC 61000-4-5 DC:6KV/6KV (8/20us), AC: 4K/2K  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/UKCA/RoHS/REACH/FCC		
MTBF	> 200,000 hours		
Warranty	5 years		

## Structure diagram

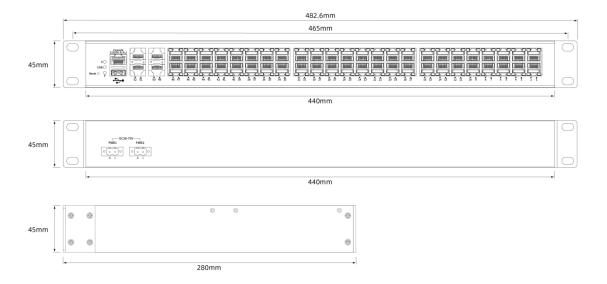
## LT-IS6352XG-4XS48GT-U-AC/DC



#### LT-IS6352XG-4XS48GT-U-2AC



## LT-IS6352XG-4XS48GT-U-2DC



#### **Order information**

Model	Desci	ription					
	L2+	Managed	rack-mount	industrial	Ethernet	switch	with
LT-IS6352XG-4XS48GT-U-2AC	4*1G	/2.5G/10GBas	se-X SFP+ ports,	48*10/100	/1000Base-T	RJ45 ports	s. Dual
	AC 100-240V 50/60Hz input; Operation temperature -40°C to 70 °C						
	L2+	Managed	rack-mount	industrial	Ethernet	switch	with
LT-IS6352XG-4XS48GT-U-AC/DC	4*1G	/2.5G/10GBas	se-X SFP+ ports	, 48*10/10	0/1000Base-	T RJ45 poi	ts. AC
	100-2	240V 50/60Hz	and DC 36-75	V input; Ope	eration temp	erature -4	0°C to
	70 °C						
	L2+	Managed	rack-mount	industrial	Ethernet	switch	with
LT-IS6352XG-4XS48GT-U-2DC	4*1G	/2.5G/10GBas	se-X SFP+ ports ,	, 48*10/100	/1000Base-T	RJ45 ports	s. Dual
	DC 36	5-75V input; C	peration tempe	erature -40°C	to 70 °C		