44 Ports 10/100/1000M SMART Industrial switch with 12x 10/100/1000M RJ45(1-8Ports POE), 28x 1G SFP & 4x 1/10G SFP+

SMART Industrial switch Fiber Switch LIMPOX44-28SFP-4TG is a 8x 10/100/1000M RJ45(1-8Port PoE), 4x10/100/1000Base-T RJ45 , 28x 1G SFP and 4x 1/10G SFP+ Managed Industrial Switch with 1x console port. It consumes low power consumption, supports wide operating temperature (-40 to +80°C). These switches are specially designed for harsh industrial environments. It is suitable for wind power, subway PIS, power SCADA, sewage treatment, intelligent transportation systems applications.

FEATURES

- 8x 1G POE RJ45, 4x 1G RJ45 , 28x 1G SFP and 4x 1/10G SFP+ and 1 console port
- L2+ features provide better manageability, security, QoS, and performance.
- L2+ Switching features including 802.1Q VLAN, Mirroring, Port isolation, IGMP Snooping, DHCP Snooping, LLDP, IP Source Guard, ARP inspection, ACLs etc.
- Support spanning tree STP(802.1D) and RSTP(802.1W).
- Jumbo frames support up to 9.6K kilobytes.
- Support enhanced management through WEB, CLI, TELNET, SSH, SNMP and cable diagnosis
- G.8032, ERPS Ethernet Ring Protection Switching (<50ms)

SPECIFICATIONS

Number of RJ45 ports (10/100/1000BaseT)	12 (1-8 Port PoE RJ45)
Number of 1G SFP ports	28
Number of 1/10G SFP+ ports	4
Console port	YES (RJ45-RS232)
Reset Button	YES
Performance Specifications	
Network Protocol and Standards	IIEEE802.3 10BASE-T; IEEE802.3i 10Base-T; IEEE802.3u 100Base-TX; IEEE802.3ab 1000Base-T;
	IEEE802.3z 1000Base-X ; IEEE802.3ae 10GBase-SR/LR ; IEEE802.3x; IEEE802.3af/at(PoE Standard)
Ethernet Port Feature	10/100/1000Base-T,Auto-sensing,Full/half duplex MDI/MDI-X, self-adaption
Fiber Port Feature	Gigabit SFP /10G SFP+ fiber interface, default matching optical modules
	(optional order single-mode / multi-mode, single fiber / dual fiber optical module. LC)
Forwarding Mode	Store and Forward(Full Wire Speed)
Switching Capacity	598Gbps
Forwarding Rate@64byte	119.04Mpps
MAC	32K
Buffer Memory	32M
Twisted Pair Transmission	10BASE-T:Cat3,4,5 UTP(≤100 meter) ;100BASE-TX: Cat5 or later UTP(≤100 meter) ;
	1000BASE-T:Cat5e or later UTP(≤100 meter)
Optical Fiber Cable	Multi-mode:850nm 0~300M(10G) ,850nm 0~500M (1.25G);
	Single-mode:1310nm 0~40KM,1550nm 0~120KM.
PowerConsumption (Max Power Per Port)	Standby<20W; Full Load<130W (30W)
Power Supply	Built-in power supply, AC100~240V 50-60Hz 2.3A
Power Input Interface	Dual input power interface, AC power supply priority,connection; 2 sets of DC48-57V input interface;
	support anti-reverse protection, power-off automatic switching DC ;
	connection; 2 sets of DC48-57V input interface; alarm switch ; 1 set of AC power input interface
LED Indicator	Power:PWR(yellow); system:SYS(yellow);network;Link(yellow);PoE:PoE (green);Fiber port:L/A(green)
Heat Dissipation	Low noise; fan active cooling
Operation /Storage TEMP (Humidity)	-40~+80°C / -40~+85°C (5%~90% RH Non condensing)
Dimension (LxWxH)	440x 290x 44.5mm
Net /Gross Weight	<4.0kg / <4.8kg

Lightning protection	Lightning protection: 6KV 8/20us;Protection level: IP30 ; IEC61000-4-2(ESD):±8kV contact discharge,±15kV air discharge
/ protection level	IEC61000-4-3(RS):10V/m(80~1000MHz) ; IEC61000-4-4(EFT): power cable:±4kV; data cable:±2kV; cable:±4kV;
	IEC61000-4-5(Surge):power cable:CM±4kV/DM±2kV; data; IEC61000-4-6(radio frequency transmission):10V(150kHz~80MHz)
	IEC61000-4-8(power frequency magnetic field):100A/m;1000A/m ,1s to 3s ;
	IEC61000-4-9(pulsed magnet field):1000A/m ; IEC61000-4-10(damped oscillation):30A/m 1MHz
	IEC61000-4-12/18(shockwave):CM 2.5kV,DM 1kV ; IEC61000-4-16(common-mode transmission):30V; 300V,1s
	FCC Part 15/CISPR22(EN55022):Class A ; IEC61000-6-2(Common Industrial Standard)
Mechanical Properties	IEC60068-2-6 (anti vibration) ; IEC60068-2-27 (anti shock) ; IEC60068-2-32 (free fall)
Certification	CCC; CE mark, commercial; CE/LVD EN60950; FCC Part 15 Class B; RoHS;

Managed Series Feature	
Interface	IEEE802.3x flow control (full duplex) ; Broadcast storm suppression for port rate
	support speed limit for incoming and offline message traffic, with a minimum particle size of 64Kbps.
	Temperature protection setting ; Energy saving configuration of port EEE Ethernet
PoE Management	Total power limit of PoE power supply ; PoE output power allocation per port, close /af/at ;
	PoE output priority configuration for each port ; PoE working state display per port;
	Power delay start ; PoE work and time scheduling
Layer3 Function	Support L2+ managed function,Support IPV4/IPV6 management, support layer3 soft routing (weak three tier)
	forwarding, Support different network segments, communication between different VLAN, Support static routing/
	default routing 128, 1024 ARP software forwarding
VLAN	Support port based VLAN (4K), IEEE802.1q ; Support protocol based VLAN ;
	Support Access, Trunk, Hybrid three types of port configuration ; Support QinQ configuration
Port Aggregation	Support LACP ; Support static polymerization;
	Support the largest 8 aggregation groups, each aggregation group supports 8 ports.
Spanning Tree	STP (IEEE802.1d) ; RSTP (IEEE802.1w) ; MSTP (IEEE802.1s)
Industrial Ring Network Protocol	Support G.8032 (ERPS), support 255 loops at most, and supports 1024 devices per ring;
Multicast	The self healing time of the ring network is less than 20ms
	Support IGMP Snooping V1/V2 and support 1024 multicast groups at most;
	Support the user's quick departure mechanism ; Support MLD Snooping V1/V2 ; Support multicast VLAN
Image	Bi-directional traffic mirroring supporting the basic port
QoS	Diff-Serv QoS ; Each port supports 8 output queues; Support 802.1p/DSCP priority mapping ;
	Support queue scheduling mechanism (SP, WRR, SP+WRR) ; priority tag Mark/Remark ;
	stream based packet filtering ; Support for stream based redirection ; Support flow based speed limit
ACL	Support L2 to L4 packet filtering function, can match the first 80 bytes of the message,
	provide based on the source MAC address, destination MAC address, source IP address, destination IP address,
	IP protocol type, TCP/UDP port, TCP/UDP port range, VLAN and other definition ACL. ;
	Support ACL based on port and VLAN

TELECOM/DATACOM SYSTEM

Safety Characteristics	Support user grading management and password protection ; Support AAA&RADIUS authentication;
	Support IEEE802.1X authentication / centralized MAC address authentication ; Support port isolation ;
	Support the number of MAC address learning restrictions ; Support MAC address black hole
	Support SSH 2 to provide secure passwords for user login ; Support SSL to ensure data transmission security
	Support the speed limit function of ARP message ; Support IP source address protection
	Support ARP intrusion detection function ; Support against DoS attacks; Support port broadcast message suppression
	Support host data backup mechanism ; Binding capabilities of IP+MAC+VLAN+ ports
DHCP	Support DHCP Client ; Support DHCP Snooping ; Suport DHCP Serve ; Suport DHCP Relay
Management And Maintenance	Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome V42 or higher, Microsoft Internet Explorer10 or later;
	Cat5e or later Ethernet cable;TCP/ IP, installed on on every computer in the network.;
	network adapter and network operating system (Microsoft Windows, Linux or Mac OS X)

FUNCTIONAL DIAGRAM

ORDERING INFORMATION

PN	Description
LIMPOX44-28SFP-4TG-x	44 Ports 10/100/1000M SMART Industrial switch with 12x 10/100/1000M RJ45(1-8Port PoE), 28x 1G SFP & 4x 1/10G SFP+
x	F: IEEE802.3af (154W per port)
	T- IEEE802.3at (25.5W per port)