

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

SMART Industrial POE switch Fiber Switch LIMPOX16-4TG is a 12x 10/100/1000M RJ45 port (1-8ports POE) and 4x 1/10G SFP+ ports. Managed Industrial POE Switch with 1x console port. It consumes low power consumption, supports wide operating temperature (-40 to +85°C). Its casing is IP40 rated and meet EMC industrial level 4 requirements. 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

- 12x RJ45port (10/100/1000M, 1-8ports POE), 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)

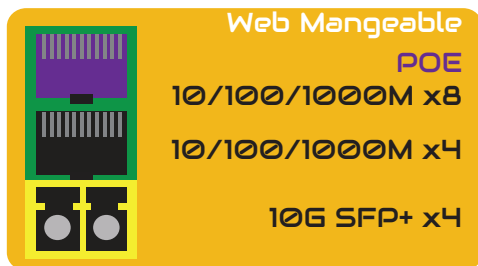
SPECIFICATIONS

| 16 Ports 10/100/1000M SMART Industrial POE switch with 12x 1G RJ45 (1-8port POE) & 4x 1/10G SFP+ | |
|--|---|
| Number of RJ45 POE ports (10/100/1000BaseT) | Total 12 ports, 1-8ports POE |
| Number of 1/10G SFP+ ports | 4 |
| Console port | YES (RJ45-RS232) |
| Performance Specifications | |
| Transmission Method | Store-And-Forward |
| Network Protocol and Standards | IEEE802.3 10BASE-T; IEEE802.3i 10Base-T; IEEE802.3u 100Base-TX; IEEE802.3ab 1000Base-T; IEEE802.3z 1000Base-X; IEEE802.3x |
| Forwarding Mode | Store and Forward(Full Wire Speed) |
| Switching Capacity | 5988Gbps |
| Forwarding Rate@64byte | 77Mpps |
| MAC | 32K |
| Buffer Memory | 32M |
| Twisted Pair Transmission | 10BASE-T: Cat3,4,5 UTP(≤100 meter) ; 100BASE-TX: Cat5e or later UTP(≤100 meter) ; 1000BASE-T: Cat5e or later UTP(≤100 meter) |
| Lightening and protection level | Lightening protection: 6KV 8/20us;Protection level: IP40 |
| POE standard | IEEE802.3af or IEEE802.3at |
| POE power | 15.4W per POE port (IEEE802.3af); 30W per POE port (IEEE802.3at) |
| Environmental | |
| Operating temperature | -40 to 80 °C |
| Storage temperature | -40 to 85 °C |
| Operating humidity | 5 ~ 95% non condensation |
| Power Supply | DC 48-57V |
| Power Consumption | Standby<15W, Full load<120W |
| LED | Power Indicator : PWR (green); System Indicator :SYS (green); Network Indicator: Link/ (yellow);SFP Indicator: L/A (green); |
| Reset switch | Yes,support one key to restore factory settings |
| Physical | |
| Dimensions | 166x 150x 75mm |
| Weight | 2kg |

| Layer2/2+ switching (SMART series only) | |
|--|--|
| <i>Spanning Tree Protocol (STP)</i> | Standard Spanning Tree 802.1d |
| | Rapid Spanning Tree (RSTP) 802.1w |
| <i>G.8032 ERPS</i> | <50ms ring protection for industrial ring application |
| <i>Aggregation</i> | Link Aggregation Control Protocol (LACP) IEEE802.3ad; up to 7 groups & 14 ports per group |
| <i>VLAN</i> | Support up to 4k VLANs simultaneously (out of 40906 VLAN IDs); Port based VLAN; 802.1Q tag based VLAN |
| <i>IGMP v1/v2 snooping</i> | IGM limits bandwidth intensive multicast traffic to only the requesters. |
| | Support 1024 multicast groups (source-specific multicasting is not supported) |
| <i>Security</i> | |
| <i>Secure Shell (SSH) Protocol</i> | SSH secures Telnet traffic in or out the switch, SSH v1 and v2 are supported |
| <i>Secure Sockets Layer (SSL), HTTPS</i> | SSL encrypts the http traffic, allowing advance secure access to the browser-based |
| | management GUI in the switch |
| <i>Port Security</i> | Locks MAC Addresses to ports, and limits the number of learned MAC addresses |
| <i>DHCP Snooping</i> | prevent unauthorized configuration and use of IP addresses, while providing |
| | support for IP Source Guard and ARP detection |
| <i>IP Source Guard</i> | Prevents datagram with spoofed addresses from being in the network |
| <i>ARP Inspection</i> | Prevent ARP spoofing attacks and ARP |
| <i>Storm Control</i> | Prevents traffic on a LAN from being disrupted by a broadcast, multicast, or unicast storm on a port |
| <i>ACLs</i> | Support for up to 256 entries; Drop or rate limitation based on source and destination MAC, VLAN ID or IP |
| | address, protocol, port, differentiated services code point (DSCP) / IP precedence, TCP/ UDP source and |
| | destination ports, 802.1p priority, Ethernet type, Internet Control Message Protocol (ICMP) packets, |
| | IGMP packets, TCP flag |
| <i>Quality of Service</i> | |
| <i>Hardware</i> | Support 8 hardware queues |
| <i>Scheduling</i> | 8 COS queues per port support strict priority and weighted round-robin (WRR) |
| <i>Classifications</i> | Port based; 802.1p(PCP) VLAN priority based; |
| <i>Rate Limiting</i> | Ingress policer; egress shaping and rate control; per VLAN, per port and flow based |
| <i>Management (Web/ SSL, Telnet/ SSH, ping, Trivial File Transfer Protocol (TFTP), SNMP, Syslog)</i> | |
| <i>Web GUI</i> | Built-in switch configuration utility for browser-based device configuration (HTTP/ HTTPS). |
| | Supports configuration, system dashboard, maintenance, and monitoring |
| <i>Dual Image</i> | Dual image provides independent primary and secondary OS files for backup while upgrading |
| <i>Firmware upgrade</i> | Web browser upgrade (HTTP/ HTTPS) and TFTP; Upgrade through console port as well |
| <i>Port mirroring</i> | Traffic on a port can be mirrored to another port for analysis with a network analyzer or RMON probe. |
| | Up to N-1 (N is Switch's Ports) ports can be mirrored to single destination port. A single session is supported. |
| <i>Others</i> | Single IP management; HTTP/HTTPS; SSH; RADIUS; DHCP Client; SNMP; cable diagnostics; ping; syslog; |
| | Telnet client (SSH secure support) |
| <i>Green Ethernet</i> | |
| <i>Green and Energy saving Ethernet (EEE)</i> | Compliant IEEE802.3az Energy Efficient Ethernet Task Force. Automatically turns off power on Gigabit |
| | Ethernet RJ-45 port when detecting link down or Idle of client. Active mode is resumed without loss of |
| | any packets when the switch detects the link up |
| <i>Cable length detection</i> | Adjusts the signal strength based on the cable length. Reduces the power consumption for cables shorter. |
| <i>General</i> | |
| <i>Jumbo frames</i> | Frame sizes up to 9KB supported on Gigabit interfaces |
| <i>Mac table</i> | Up to 8k Mac address |

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|---|--|
| <i>Discovery</i> | |
| <i>Link Layer Discovery Protocol (LLDP)</i> | Used by network devices for advertising their identities, capabilities, and neighbors on a IEEE 802 local area network, principally wired Ethernet. |
| <i>Min Requirements</i> | Web browser: Mozilla Firefox version 2.5 or later, Microsoft Internet Explorer version 6 or later; Category 5 Ethernet network cable; TCP/IP, network adapter, and network operating system (such as Microsoft Windows, Linux, or Mac OS X) installed on each computer in network |

FUNCTIONAL DIAGRAM



ORDERING INFORMATION

| PN | DESCRIPTION |
|----------------|--|
| LIMPOX16-4TG-x | 16 Ports 10/100/1000M SMART Industrial POE switch with 12x 1G RJ45 (1-8port POE) & 4x 1/10G SFP+ |
| x- | F- IEEE802.3af (15.4W per port) T- IEEE802.3at (25.5W per port) |
| PEA-52-130 | Power adaptor 220VAC~52VDC: 130W |
| PEA-52-250 | Power adaptor 220VAC~52VDC: 250W |