

Industrial Switches

PIXE L3 8BT 4SX



Key Features

- Layer 3 switch supporting OSPF v2/V3, RIP v1/v2, BGP4 & Static Routes
- Support both IPv4/IPv6 applications
- LLDP, LLDP-MED protocol suitable for IoT Applications
- HTTPS/SSLv2v3, TLSv1, RADIUS, TACACS+, AAA, SSHv1/v2
- Port-based VLAN, IEEE 802.1Q VLAN, and GVRP for network planning
- Support for Voice VLAN's and Surveillance VLAN's
- Link Aggregation, STP /RSTP / MSTP / EAPS / ERPS v2 for network redundancy
- SNMP & RMON for proactive and efficient network monitoring
- Fanless, IP30 Rating, -40 ° C ~ 75°C operation temperature
- Dual DC power supplies with anti-reverse connection, over and under voltage protection
- Quick 1 switch ring establishment
- Real-time system of crucial voltage monitoring and alarm output function
- Wide voltage alarm input at a range of DC5-57V
- 1 group of alarm and relay output, can define various custom condition triggers
- Environmental temperature and humidity detection, allows real-time monitoring of the environment



Fact sheet

Specifications	Hardware		
Fixed Ports	8*10/100/1000Base-TX PoE port(Data/Power) 4*100/1000 / 2500/ 10000M SFP		
Power Over Ethernet	Ports 1~2 support IEEE802.3af/at/PoE++/bt, Max 90W PoE out Ports 3-8 support IEEE802.3af/at, Max 30W PoE out		
PoE Pin	af (15.4w) /at (30w): 12+ 36- PoE++/bt (90W) : 12+ 45+ 36- 78-		
PoE Bridge	Max 360W		
CPU	MIPS-34Kc 800MHz	DDR	2G DDR3
FLASH	512MBytes	RAM	256Gbyte
Backplane	128Gbps	Packet Forwarding	71.42Mpps
MAC Addresses	16K	Buffer	12Mbit SRAM Packet Buffer
Jumbo Frames	Jumbo frame up to 12KB		
VLAN Address	4K	QoS Queue	8
Link Aggregation	Supports 32 trunk groups with up to 8 members per group		
Layer 3 Routing	IPV4 supports 6K; IPV6 supports 2K;		
LED Indicators	Port:1-8 LINK LED V1: DC 1 IN V2: DC 2 IN	Port:1-8 PoE LED SYS: PoE DOG on/off	Port: 9-12 SFP LED PW: POWER LED
Power Input	Dual DC POWER Input	Consumption	DC48-57V MAX 400W
Temperature	Operating Temperature-40~+75°C; 5%~90% RH Non coagulation, Storage Temperature -45~+85°C; 5%~95% RH Non coagulation		
Dimensions	160mm*130mm*50mm Packaging 310mm*210mm*60mm		
Net Weight / Packaged	1.1kg/1.6kg	Protection Level	IP30
Lightning Protection	6KV 8/20us;	Installation	DIN Rail
Certifications			
FCC Part 15 Class B; RoHS;		IEC61000-4-6 (Radio Frequency): Level 3	
CE-EMC EN55032;		IEC 61000-4-8 (PFMP): Level 5	
CE-LVD EN62368;		IEC 60068-2-27 (Shock)	
IEC61000-4-2 (ESD): Level 4		IEC 60068-2-6 Vibration	
IEC61000-4-3 (RS): Level 4		IEC 60068-2-32 Freefall	
IEC61000-4-4 (EFT): Level 4		EN60950-1, UL 60950-1,	
IEC61000-4-5 (Surge): Level 4		CSA C22.2 NO 60950-1, UL 508	

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Features	Port Features
Port Shutdown	Supported
Port Speed	Supports auto-negotiate, full-1000, full-100, half-100, full-10, half-10
Control	Support full-duplex IEEE 802.3x, half-duplex back pressure
Storm Control	Supports rate limit for broadcast, multicast, and DLF packets
Storm Constrain	Supports the detection of broadcast packets, multicast packets, or unicast packets on the port, shutdown the port if the rate is over the threshold.
Port Mirror	Supported
Port Rate Limit	Supports port ingress and egress rate limit
Link Aggregation	Support for manual link aggregation Support for LACP dynamic link aggregation Supports up to 32 aggregation groups, each group up to 8 ports Support for source MAC, destination MAC, source destination MAC, source IP, destination IP, source destination IP routing strategy
Port Isolate	Supported
Jumbo Frame	Support for up to 16KB packet
Redundant Port	Supported
The DDM of fiber ports	Supported
MAC Addresses	
MAC Table Capacity	16K
MAC Table Management	Supported
Forwarding mode	Support IVL forwarding mode
Static MAC Address	Supported
MAC Address Binding	Supported
MAC Address Filtering	Supported
MAC Learning Control	Controls the MAC learning based on port
VLAN	
Number of VLANs	4K
802.1q-based VLAN	Supported
MAC-based VLAN	Supported
IP-based VLAN	Supported
Protocol-based VLAN	Supported
PVLAN	Supported
Voice VLAN	Supported
VLAN Mapping	Support for 1:1 mapping
Q in Q	Support for basic Q in Q and Support for flexible Q in Q
Reliability	
Spanning Tree Protocol	Support for STP/RSTP/MSTP
Port Loop Detection	Supported
EAPS	Supports RFC3619
ERPS	Supports G.8032/Y.1344 Ring Technology
LLDP	Supports LLDP & LLDP-MED
UDLD	Fully compatible with CISCO's UDLD protocol
VLLP (VRRP Layer-2 Loop Protection)	Supported, only used with VRRP
L3 Features	
ARP	Supports static and dynamic ARP
Static Route	Supports static route based on IPv4 and IPv6
VLAN Interface	Supports 32 VLAN interfaces
RIP	Supports RIP v1/v2 & IPv6 RIPng
OSPF	Supports OSPFv2 & IPv6 OSPFv3
BGP	Supports BGP4 & IPv6 BGP4+
Policy Routing	Supported
VRRP	Supported

Multicast	
Static Multicast MAC Address	Supported
IGMP SNOOPING	Support IGMP SNOOPING v1/v2/v3 Support IGMP Querier Support IGMP SNOOPING Filter
MVR	Supported
GMRP	Supported
IGMP	Support for IGMP v1/v2/v3
PIM-SM	Supported
Access Control Lists	
Standard IP-based ACL	Supported
Extended IP based ACL	Supported
MAC IP-based ACL	Supported
MAC ARP-based ACL	Supported
ACL Port Filtering	Supported
Time-based ACL	Supported
Quality of Service	
Port Queue Number	8
Port Queue Scheduling Mode	Support WRR, RR, WDRR, SP
Port-based Classification	Supported
802.1p-based Classification	Supported
DSCP-based Classification	Supported
ACL-based Classification	Supported
QoS Policy	Supports packets mapping to queue Supports COS or DSCP Remarking Supports rate limits of data flow Supports data flow statistics Supports mirroring data flow
DHCP	
DHCP Client	Supported
DHCP Snooping	Supported
DHCP Relay	Supported
DHCP Server	Supported
DHCP option 82	Supported
Security	
Switch Management Security	Supports enabling and disabling TELNET, SSH, HTTP, HTTPS and SNMP services Supports TELNET, SSH, HTTP, HTTPS and SNMP services to bind to standard IP ACLs Support for limiting the number of TELNET and SSH connections
CPU Protection	The switch's own security protection prevents large data streams from attacking the switch itself.
AAA	Supports 802.1x and Support for a RADIUS Server Supports authentication, authorization, and accounting through RADIUS server Supports port-based and MAC-based 802.1x and Support 802.1x guest VLAN
IP MAC Binding	Supports static configuration of IP, MAC and port binding
DHCP SNOOPING	Supports dynamic ARP binding to prevent ARP spoofing Supports dynamic IP, MAC and port binding Support fixed port to connect to DHCP server to prevent private connection to DHCP server
Prevent ARP Spoofing	Supports manually configured MAC ARP-based ACL rules to prevent ARP spoofing. Supports the DHCP SNOOPING function. During the process of obtaining an IP address by DHCP, the switch dynamically binds ARP to the port to prevent ARP spoofing.

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PoE	
Switch Control	Supports PoE powering of ports on and off
Power Control	Supports setting total power
Other Advanced Features	Supports PoE scheduling policy and PD online query, etc.
IPv6	
IPv4/IPv6 Dual Protocol Stack	Supports
IPv6 Address	Supports manual address configuration and stateless address auto-configuration
IPv6 Neighbor Discovery	Supported
ICMPv6	Supported
IPv6 Path MTU Discovery	Supported
Management	
CLI Management	Supports Console, Telnet and SSH Supports multiple TELNET connections based on IPv4 and IPv6 Supports multiple SSH connections based on IPv4 and IPv6
WEB Management	Supports HTTP based on IPv4 and IPv6 Supports HTTPS based on IPv4 and IPv6
SNMP Management	Supports SNMP v1, v2c, v3 Supports SNMP TRAP Supports lots of standard and private MIBs Supports SNMP and TRAP based on IPv4 and IPv6
User Management	Supports multiple user management
TACACS+	Supports switch authentication via TACACS+ server remote username and password Supports password encryption in PAP and CHAP mode Supports TACACS+ server to authorise the switch's commands Supports TACACS+ based on IPv4 and IPv6
Log Management	Supports local log management Supports SYSLOG
RMON	Supports RMON 1, 2, 3 and 9 groups
Cluster Management	Supports NDP and Support NTDP Supports manual and automatic joining of cluster groups Supports cluster unified management
Configuration File	Supports uploading and downloading configuration file Supports TFTP transmission based IPv4 and IPv6
Upgrade software	Support TFTP transmission based IPv4 and IPv6
Clock Management	Supports local clock management Supported SNTP
Diagnostics	
PING	Supported
PING6	Supported
TRACEROUTE	Supported
TELNET Client	Supports TELNET client based IPv4 and IPv6
SSH Client	Supports SSH client based IPv4 and IPv6

Feature	Description
PIXE-L3 8BT -4SX R	Industrial Ethernet Switch – -40°C~ +75°C, 4 x 10Gbps SFP Trunk ports, 8 x 10/100/1000Mbps PoE Ports, STP, RSTP & MSTP, EAPS, ERPS v2 ring protection. Fully Managed HTTP, HTTPS, SSH, (IPv4 & IPv6) SNMP V1/ V2c,/V3, Relay Alarm, Layer 3 Routing, OSPFv2, & IPv6 OSPFv3, BGP4 & IPv6 BGP4+, RIP v1/v2 & IPv6 RIPng