Industrial Ethernet Switches
PIXE-12T 4SX-G   40Gbps Industrial Switch

Key Features

- 4 x 10Gbps SFP trunks (Support 1Gbps / 2.5 / 5G)
- 8 x 10/100/1000M Base-TX RJ45 – PoE+ Ports
- 4 x 10/100/1000M Base-TX RJ45 ports
- IEEE 802.3af and 802.3at PoE per port
- G.8032 (ERPS) Ring protection
- Managed via CLI, Telnet, SSH,Web & SNMP
- Jumbo frame (9.6Kbytes) Support
- Backplane 386Gbps – 131 Mpps
- 802.1Q VLAN, Port Mirroring and Isolation
- IGMP Snooping, DHCP Snooping

Overview

The Case Communications PIXE 12T-4SX-G is a new generation of layer 2 managed PoE / PoE+ switches, with 4 x 10Gbps ports (also capable of running 1.25 / 2.5 / 5Gbps), 8 10/100/1000 TX-RJ45 x PoE / PoE+ ports and 4 x 10/100/1000Mbps TX-RJ 45 ports. The PIXE 12T-4SX G supports ring technology in the form of STP and RSTP and G.8032 (ERPS) with the ability to supress Broadcast Storms.

The PIXE 12T 4SX G operates without fans from -40C to +75C and operates from a 48vdc power supply.

Security

Security is provided by the use of Access Control Lists (ACL's), RADIUS (IEEE 802.1x) and TACAS Servers, IP and MAC Source guarding and both port and tag based VLANS.

Quality of Service

A comprehensive suite of Quality of Service features allows multiple QoS policies to be implemented

Management

CLI, Telnet, SSH, Web Interface and SNMP management for the switch.

Diagnostics

The PIXE 12T 4SX-G provides comprehensive diagnostics with built in cable diagnostics, a built in 'ping' tester, CPU Load monitoring, and port mirroring.

Applications

The PIXE 12T 4SX –G with its 8 x PoE Ports is an ideal switch to provide Wi-Fi Access Points, provide access to IP Phones or CCTV devices. Using the embedded security, the users can work with confidence and authorised users can have access to the network and network devices.

Technical Specifications	
Product Number	**PIXE-12T-4SX-G**
Connector Type	8 x 10/100/1000Base-T PoE / PoE+ Ports, 4 x 10/100/1000Base-T Ports 4 x 10G (1.25 / 2.5 / 5G) SFP Slots
Network Media	10Base-T: Cat 3/4/5 UTP ($\leq$100m) 100Base-TX: Cat 3/4/5 or more UTP ($\leq$100m) 1000Base-TX: Cat 3/4/5 or more UTP ($\leq$100m)
Switching Capacity	130.94 Million packets per second (64 Byte)
Bandwidth	368 Gbps
Layer 2 Switching	
Spanning Tree	Standard Spanning Tree 802.1d
Rapid Spanning Tree	Rapid Spanning tree (RSTP) 802.1w
G.8032 ERPS	Ring protection for rapid self-healing
Aggregation	LACP (Link Aggregation Control Protocol) IEEE 802.3ad
	Up to 8 Groups
	Up to 16 ports per group
DHCP Snooping (Layer 2)	Prevents unauthorised configuration and use of IP Addresses, while also supporting IP Source Guard and ARP Detection
IGMP v1 / v2 snooping	IGMP Limits bandwidth-intensive multicast traffic to only the requester. Support for 1024 multicast groups
Security	
SSH (Secure Shell)	SSH v1 and v2 are supported to provide secure Telnet to the switch
HTTPS (SSL) Secure Sockets Layer	SSL encrypts the http traffic, allowing advance secure access to the browser-based management GUI in the switch
Port Security	Locks MAC Addresses to ports, and limits the number of learned MAC Addresses
IP Source Guard	Prevents traffic on a LAN from being disrupted by a broadcast, multicast or unicast storm on a port
VLANS	Support for up to 4,0000 simultaneous VLANS out of 4096 VLAN ID's
	Port Based VLANS
	802.1Q tag-based VLANS
ACL's	Supports up to 2566 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, ICMP, IGMP packets, TCP Flags
Quality of Service	
Hardware Scheduling	Support for 8 Hardware queues
	8 COS Queues per port strict priority and weighted round robin (WRR)
Classification	Port based: 802.1P (PCP) VLAN Priority
Rate Limiting	Ingress Policies: egress shaping and rate control per VLAN Port and flow based
Management	
Management tools	Web / SSL / Telnet / SSH, Ping / Trivial File Transfer Protocol (TFTP) port and flow based
Web Gui Interface	Switch configuration utility for browser-based device configuration (HTTP / HTTPS). Supports configuration, system dashboard, maintenance and monitoring
Dual Image	Provides independent primary &secondary Files for backup while upgrading
Firmware upgrade	Web browser upgrade (HTTP / HTTPS) and TFTP. Upgrade through console port as well
Port Mirroring	Traffic on one port can be mirrored to another for analysis using an analyser or RMON Probe. Any port can be mirrored to a single destination port
Other management	Single IP management: HTTP / HTTPs: SSH, RADIUS, DHCP Client; SNTP; cable diagnostics; ping, syslog; Telnet client (SSH Secure support)

Physical Features	
Ethernet	
Link detection	Compliant with IEEE 802.3az Energy Efficient Task Force.
	Auto-Power down
	Gigabit RJ 45 port when detecting link down or idle goes to hibernation mode.
	Active mode resumed automatically without loss of data
Cable length detection	Adjusts the signal strength based on the cable length. Reduces the power consumption for shorter cables
Jumbo Frames	Frame sizes up to 9KB on the Gigabit Interfaces
MAC Table	Up to 16K MAC Addresses.
Link Layer discovery protocol (LLDP)	Used by network devices to advertise their identities, capabilities to their neighbours on an Ethernet Network
POE	
PoE Standards	PoE Power Per Port: 30 Watts by default, can be changed via the manager
PoE Ports	End Span (Mid-Span optional)
Physical	
Dimensions	165 x 148 x 54mm
Operating Temperature	-40C ~ +75C
Storage Temperature	-40C ~ +75C
Installation	Default DIN Rail, Wall Mounting bracket also included
Power	
Input Voltage	48vdc wired to an terminal block
Switch Consumption	Power up – 60 watts
Normal running – 15 watts
PoE Plus 30 Watts per port
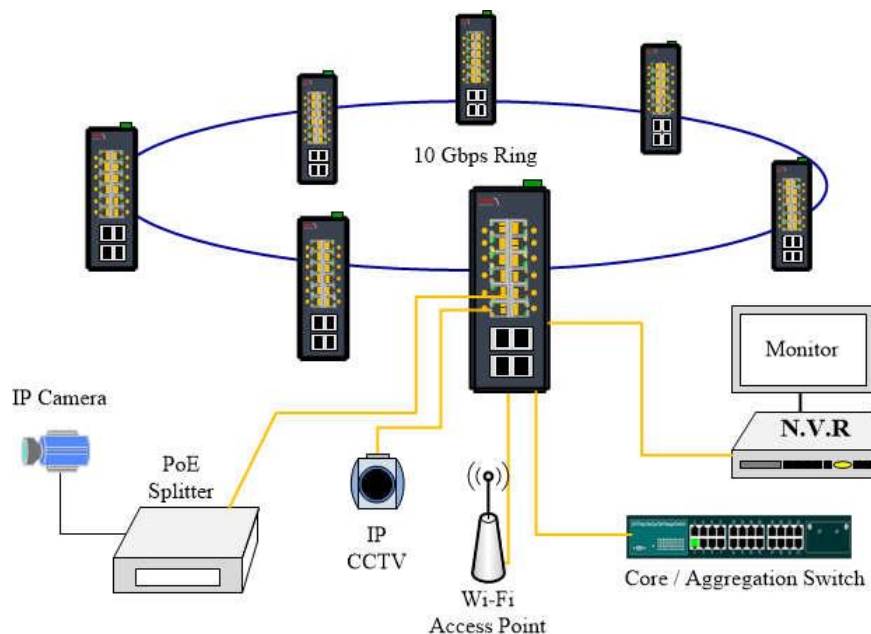
Purchasing Information	Description
PIXE 12T 4S MX-G	Industrial Ethernet Switch – -40 c~ +75C, 4 x 10Gbps SFP ports, 8 x10/100/1000Mbps PoE Ports, 4 x 10/100/1000Mps Tx ports, G.8032 ring protection, fully managed