Industrial Ethernet Switching

PIGE-4T-2S-G

Industrial Gigabit Ethernet Switch, with 4 x 10/100/1000Mbps PoE Ports and 2 x SFP Ports.

- **Supports 4 x 10/100/1000 Base-TX-PoE Ports and 2 Gigabit SFP Ports and 1 x Console Port.**

- **Supports Spanning Tree (802.1D), Rapid Spanning Tree (802.1W), 802.1s (MSTP, ERPS (G.8032))**

- **Supports PoE 15 Watts to 30 Watts on 4 Tx Ports (bt version supports 60 watts)**

- **Management, Web, CLI, Telnet SNMP v1 / V2 / V3**

- **Support for IGMP Snooping, Static Multicast filtering and MLD Snooping**

- **Support for 802.1x Port Authentication and AAA authentication to ensure network security.**

- **Support for Port based and IEEE802.1Q VLANS**

- **Operates from -40C to +85C (5% - 95% Non-Condensing)**

Overview

The Case Communications PIGE-4T-2S-G Industrial Ethernet Switch, has 4 Gigabit auto-sensing RJ45 PoE Ports providing 15.4 watts (IEEE 802.3af) / PoE+ 30 Watts (IEEE 802.3at) with a maximum switch consumption of 60 watts, on its 4 Tx ports and 2x Gigabit SFP optical ports. The 'bt' version can provide 60 watts per port (IEEE 802.3bt) with a total switch power consumption of 250 watts.

The PIGE-4T-2S-G has been designed with high levels of security and reliability in mind. Resilience is provided by Ring redundancy using STP, RSTP or ERPS (G.8032). In addition, other benefits such as VLAN Trunking, Quality of Service, Data Rate Control, Port Mirroring, Fault Alarms and online firmware upgrades make the PIGE-4T-2S-G a highly functional switch. The PIGE-4T-2S-G has been built using industrial grade components ensuring high levels of resilience, and its IP40 housing allows it to operate in the hardest of conditions, operating from -40C to +85C without the use of fans. The PIGE 4T-2S-G is supplied with dual power supply inputs taking in 48vdc to 55vdc via its 4-pin terminal block.

Industrial Ethernet Switching

PIGE-4T-2S-G

Description	6-Port Gigabit Industrial Managed PoE Switch
Model Number	PIGE-4T-2S-G
PoE Ports	4 x 10/100/1000Tx RJ45 PoE / PoE+ Ports (bt-Option for PoE++ (60 watts))
Fibre Ports	2 x 100 / 1000Mbps SFP Optical Ports.
Console Port	1 x Console Port
Network Standards	IEEE802.3, IEEE802.3u, IEEE 802.3z, IEEE802.3ab, IEEE802.3x, IEEE802.1d, IEEE802.1w
Network Media	10BASE-T: UTP Cat 3, 4, 5 (≤100 Meters) 100BASE-TX: UTP Cat 5 or more (≤100 Meters) 1000BASE-T: UTP Cat 5 or more (≤100 Meters)
Layer 2 Switching	
Port Management	Enable / Disable Port Speed, duplex, MTU Settings Flow-Control, control set-up Support for Port Mirroring Support Port Access direction, VLAN image. Port data rate limiting Port isolation settings Unknown unicast, multicast, broadcast storm suppression Keep Alive watchdog timer
Spanning Tree Protocols	Spanning Tree Protocol (STP) 802.1s Rapid Spanning Tree Protocol (802.1w) Multiple Spanning Tree Protocol (MSTP) 802.1s
Ring Protocols	ERPS (based on ITU-T G. 8032)
Link Aggregation	Static Manual aggregation LACP Dynamic Aggregation IEEE 802.3ad
VLAN	Port based VLAN and IEEE 802.1Q Tag Based VLANS
IGMP Snooping	Static add / delete Support for V1 / V2 / V3 Dynamic multicast listener
GMRP	Supports GARP multicast registration protocol
MAC	MAC Address learning limit Support for dynamic aging time settings Static add / delete

FACT SHEET

Industrial Ethernet Switching

PIGE-4T-2S-G

Layer 3 Functions	
Interface Configuration	Support for a virtual VLAN Interface
ARP	Support for checking ARP
Routing	Static Routing
Access Control Lists	Based on Source MAC, destination MAC, Protocol type, Source IP, destination IP, L4 port Number, Support for time-range management
QoS	Based on 802.1p (Class of Service)
	Based on DSCP Classification
	Based on the source IP, destination IP, port number classification
	Support SP, WRR, DRR scheduling strategy
	Support for data rate limiting CAR
LLDP	Link Layer Discovery Protocol
Logs	User Login, Operational Status, Event Log
User Settings	Add or delete user
Security	Denial of Service defence
	Support for CPU protection (limiting CPU message rate).
	ARP Binding (IP, MAC, Port binding)
System Management	Add or delete system managers, User login, operation, status, event log, device reset, configuration save / restore, upgrade management, time settings
Management Functions	
CLI	Support for a serial Command Line Interface
Telnet	Support for Telnet using CLI
SSH	Support for SSH v 1/2 remote management
SNMP	Support v1 / 2 / 3
	Traps for Cold-Start, Warm-Start, Link-Down, Link-Up
Web	Web based management with three layers of view
PoE	
PoE Standards	PoE supports IEEE 802.3af (15 watts) IEEE 802.3at (30 watts)
	Optional IEEE 802.3bt (60) version
Auto Detect	PoE Port Auto detect af / at / (bt if optional bt version taken)
Output voltage	PoE Port Output Voltage: 48VDC (BT:12-13+; 45+ 78-)
Performance	
Switch Bandwidth	24Gbps
Packet Buffer	4MB
Packet Forwarding Rate	1,488,000 pps / per port
Address Table	8K
Forwarding mode	Store and Forward

Industrial Ethernet Switching

PIGE-4T-2S-G

LED Displays	
Fibre ports operational	Gigabit 5 and Gigabit 6
Power Supply	PWR System Indicator: System Operational
PoE Active	PoE Active LED yellow
Gigabit Link	Gigabit Link Green-LED
Power Supply	
Input Voltage	DC: 48v (48vdc ~ 55vdc)
Input Connector	4 Pin Terminal Block (V1+ V1-, V2+ V2-)
Current Consumption	DC 52V 1.25A / DC 52V2.5A for optional second input
Environment, Protection and Standards	
Port Lightning Protection	General Mode 6KV Differential Mode: 4KV. ESD 15KV
Operating Temperature	-40C ~ +85C Relative Humidity: 5% ~ 95% (no condensation)
Industry Standards	EMI: FCC Part15, CISPR (EN55032) Class A
	EMS: EN61000-4-2 (ESD)
	EN61000-4-4 (EFT)
	EN61000-4-5 (surge)
	Shock: IEC 60068-2-27
	Free Fall: IEC 60068-2-32
	Vibration: IEC 60068-2-6
Certification	CE Mark commercial
	FCC Part 15 Class B
	VCCI Class B
	EN 55022 9CISPR22) Class B
Mechanical	Housing: IP40
Installation	Installation DIN rail or Wall Mount
Switch Weight	0.5Kg
Packaged Weight	Without Power Adapter 0.77Kg
Dimension	145mm (H) c 125mm (D) 40mm (W) When mounted vertically
Packaging	25cm(L) x 21cm (W) x 6.5cm(H)

Ordering Information	Description
PIGE-4T-2S-G	Industrial Ethernet Switch 4 x 10/100/1000Mbps PoE / PoE+ ports 2 x Gig SFP Ports (Maximum Switch PoE 65 watts)
PIGE-4T-2S-G-bt	Industrial Ethernet Switch 4 x 10/100/1000Mbps PoE / PoE+ / PoE++ ports 2 x Gig SFP Ports. Bt option allows 60 watt ports (Maximum Switch PoE 250 watts)

FACT SHEET