Industrial Ethernet Switches
R2-24TXP-4S-G

28-port Gigabit Managed Industrial PoE Switch

OVERVIEW

The Case Communications R2-24TXP-4S-G series is L2+ full Gigabit managed industrial PoE fibre switch.

It has 24*10/100/1000Base-T RJ45 ports and 4*100/1000Base-X uplink SFP fibre slot ports. Ports 1-24 support the IEEE 802.3af/at PoE standards, with PoE+ powering up to 30W with the maximum PoE output power of the switch at 600W.

As a PoE power switch, it can automatically detect and recognise the PoE, equipment and supply it with power through the network cable. It can supply power to POE terminal equipment such as wireless AP, web camera, VoIP phones, industrial sensors, intelligent building intercoms via their network cables The R2-24TXP-4S-G is suitable for hotels, campuses, parks, shopping malls, scenic spots, hospitals, banks, and small and medium-sized enterprises.

The R2-24TXP-4S-G uses L2+ network management, and supports IPV4/IPV6 management, static routes, full line-rate forwarding, a security protection mechanism, ACL/QoS policy and rich VLAN functions, and is easy to manage and maintain.

The R2-24TXP-4S-G supports multiple network redundancy protocols such as STP/RSTP/MSTP (<50ms) and (ITU-T G.8032) ERPS(<20ms) to improve network reliability.

If a network path suffers failure, communication can be quickly restored to ensure uninterrupted communication.

Depending on the application, its possible to configure multiple application services such as PoE power management, port traffic control, VLAN division, and SNMP through the Web network Management GUI.

FEATURES

Gigabit access, Gigabit SFP uplink

- A combination of Gigabit Ethernet port and Gigabit SFP ports for maximum flexibility.
- Support non-blocking wire speed forwarding
- Support full duplex based on IEEE802.3x and half duplex based on backpressure

Intelligent PoE power supply

- 24*10/100/1000Base-T RJ45 ports can support POE / POE+ to meet the needs of security and CCTV monitoring, teleconferencing system, wireless coverage, and other applications.
- IEEE 802.3af/at PoE standard, to ensure the switch does not damage non PoE devices.
- Priority system for PoE port, it will supply power to the high priority level port first if the power budget is insufficient and avoid overloading the switch.
- PoE network management, realize PoE port power allocation, priority setting, port power status viewing, time scheduling, etc.
- IEEE802.1Q VLAN, flexible VLAN division, Voice VLAN, and Q-in-Q configuration.
- QoS, Priority mode based on 802.1P, Port & DSCP, queue scheduling algorithm including EQU, SP, WRR & SP+WRR.
- ALC, filter data packet through configuring matching rules, processing operation & time permission, provides flexible and safe access control.
- IGMP V1/V2 and IGMP Snooping.
- ERPS/STP/RSTP/MSTP.
- Static and dynamic aggregation.

Security

- 802.1X authentication.
- Port Isolation - Storm control.
- IP-MAC-VLAN-Port binding.

Stable and reliable

- Low power consumption, fan active cooling , galvanized steel casing.
- High redundancy power-supply design, providing a long term and stable PoE power output.
- CCC,CE, FCC, RoHS.
- User-friendly panel, shows the device status through the LED indicator of PWR, Link ,PoE

Easy operation and maintenance management

- Web management, CLI command line (Console, Telnet), SNMP (V1/V2/V3).
- HTTPS, SSLV3, and SSHV1/V2.
- RMON, system log, LLDP and port traffic statistics.
- CPU monitoring, memory monitoring, Ping test, and cable diagnose.

TECHNICAL SPECIFICATION

	R2-24TXP-4S-G	
Interface	24*10/100/1000Base-T POE ports (Data /Power); 4*100/1000Base-X uplink SFP ports (2*combo ports. (Data) 1*RS232 Console port (115200, N,8,1)	
POE Ports	Port 1 - 24	
Network Protocols	IEEE802.3 10BASE-T; IEEE802.3i 10Base-T; IEEE802.3u 100Base-TX IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-X, IEEE802.3x	
PoE Standard	IEEE802.3af/at	
Ethernet Port	10/100/1000Base-T, Auto-Sensing, Full/half duplex MDI/MDI-X self-adaption	
Fibre Port Feature	Gigabit SFP optical fibre interface, default matching optical modules (optional order single-mode / multi-mode, single fibre / dual fibre optical module. LC)	
Forwarding Mode	Store and Forward (Full wire speed)	
Switching Capacity	256Gbps (Non-blocking)	
Forwarding Rate@64byte	38.69Mpps	
MAC / Buffer Memory	MAC Addresses 8K	Buffer Memory 8M
Jumbo Frame	9.6K	
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP($\leq$100 meter) ; 100BASE-TX: Cat5 or later UTP($\leq$100 meter) ; 1000BASE-X: Cat5e or later UTP($\leq$100 meter)	
Optical Fibre Cable	Multi Mode: 850nm 0-550M;Single Mode: 1310nm 0-40KM,1550nm 0-120KM.	
Power Supply Pin	Default: 1/2(+), 3/6(-);	
MAX / Average Pwr per Port	30W/30W	
Power Consumption	Standby: <22W; Full Load: <600W	
Power Supply	Built-in power supply. **AC:** AC100~240V 50-60Hz 6.6A: **DC** 12~48vdc	
Power Input Interface	Dual input power interface, AC power supply priority, Support for anti-reverse protection, power-off automatic switching DC connection; alarm switch; 2 sets of DC12-48V input interface; 1 set of AC power input	
LED Indicator	Power: PWR (yellow); system: SYS (yellow) ; Network: 100M Link (yellow), 1000M Speed (green); SFP Fibre Port : L/A (green); POE: PoE (green);	
Reset Button	Support one button to restore to factory default settings	
Heat Dissipation	Low noise; fan active cooling	
Operation TEMP / Humidity	-40~+75°C; 5%~90% RH Non-condensing (Storage -40C ~ +75°C)	
Dimension	440x 298 x44.5mm	
Net /Gross Weight	<4.6kg / <5.3kg	
Installation	Desktop ,19 inch 1U cabinet	

Port lightning protection / protection level	• **Lightning protection**: 6KV 8/20us; • **Protection level: IP30** • **IEC61000-4-2(ESD**): ±8kV contact discharge,±15kV air discharge • **IEC61000-4-3(RS):** 10V/m(80~1000MHz) • **IEC61000-4-4(EFT**): power cable: ±4kV; data cable: ±2kV • **IEC61000-4-5 (Surge):** power cable: CM±4kV/DM±2kV; data cable: ±4kV • **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	• CE mark, commercial; CE/LVD • EN60950; • FCC Part 15 Class B; • RoHS;
Interface	IEEE802.3X (Full-Duplex) Broadcast storm control based on port speed Bandwidth reduction in the ingress port access port. The minimum packet size is 64Kbps. Port temperature protection setting Port green Ethernet Energy-saving setting
PoE Management	Total power limit of PoE power supply PoE output power allocation, off& af &at PoE output priority configuration PoE working status Delay start of power supply Scheduling of PoE operation and time
VLAN	4K VLAN based on port, IEEE802.1q VLAN based on the protocol, VLAN based on MAC Voice VLAN, Q-in-Q configuration Port configuration of Access, Trunk, Hybrid
Port Aggregation	LACP, Static aggregation Max 13 aggregation groups and 8 ports per group.
Spanning Tree	STP (IEEE802.1d), RSTP (IEEE802.1w), MSTP (IEEE802.1s)
Industrial Ring Network Protocol	G.8032 (ERPS),Recovery time less than 50ms, Max Ring size 1024 devices per ring

Multicast	IGMP Snooping v1/v2/v3, Max 1024 multicast groups, Fast log out MLD Snooping v1/v2,Multicast VLAN
Port Mirroring	Bidirectional data mirroring based on port
QoS	Diff-Serv QoS, Priority Mark/Remark 8*Output queues of each port 802.1p/DSCP priority mapping Queue Scheduling Algorithm (SP, WRR, SP+WRR) Flow-based Packet Filtering, Flow-based Redirection, Flow-based Rate Limiting
ACL	L2 to L4 packet filtering, matching first 80 bytes message. Provide ACL based on MAC, Destination MAC address, IP Source, Destination IP, IP Protocol Type, TCP/UDP Port, TCP/UDP Port Range, and VLAN, etc. Port-based Issuing ACL. ACL based on port and VLAN
Security	User hierarchical management and password protection SSH 2.0,SSL, Port isolation, ARP message speed limit Broadcast storm control, Backup for host datum IEEE802.1X MAC address authentication, Mac black holes, IP source protection AAA & RADIUS, MAC learning limit ARP inspection, Anti-DoS attack IP-MAC-VLAN-Port binding
DHCP	DHCP Client, DHCP Snooping, DHCP Server, DHCP Relay
Management	Console/AUX Modem/Telnet/SSH2.0 CLI Web Management (HTTPS) Download & Management on FTP, TFTP, -Modem, SFTP, SNMP V1/V2C/V3 One-key recovery NTP,System work System Log,Ping Test Cable Diagnose, LLDP CPU instant utilization status view LLDP+SNMP)
System	Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome V42 or higher, Microsoft Internet Explorer10 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 a network

DIMENSIONS

A. Power Indicator
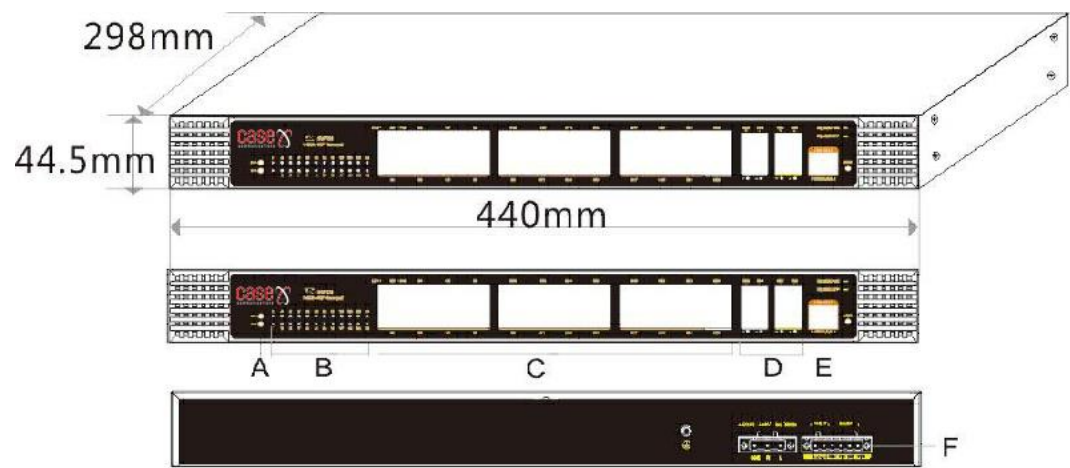
B. PoE Operational Indicator

C. 24 x PoE Ports

D. Status of 4 x Gigabit SFP Ports

E. Console Port

F. AC / DC Dual Input Port

PACKING LIST

	CONTENT	QTY	UNIT
PACKING LIST	26-port Gigabit managed industrial PoE fibre switch	1	SET
	AC Power Cable	1	PC
	RJ45-DB9 Line	1	PC
	Rackmount ears	1	SET
	User Guide	1	PC
	Warranty Card	1	PC

ORDERING INFORMATION

Model	Description
R2- 24TXP-4S-G	L2+ managed industrial PoE fibre switch with 24* 10/100/1000M RJ45 ports and 4*100/1000M uplink SFP fibre slot ports. Port 1-24 can support IEEE 802.3af/at PoE standard, Built-in 600W power supply.