

## TNS244 L2+ Network Switch (24-Port, 10G Uplink)

Article No. 309733



### Product overview:

The **TNS244** is a fully managed **Layer 2+ Ethernet switch** featuring an intuitive web-based management interface. It supports advanced routing functionalities, including dynamic routing for IPv4 and IPv6, RIP v1/v2, OSPF v2, and VRRP, as well as static routing with full line-rate forwarding performance.

Designed for high availability and secure network operation, the TNS244 integrates robust security mechanisms, a comprehensive **ACL and QoS policy framework**, and extensive VLAN capabilities to ensure efficient traffic prioritization and network segmentation. It supports multiple redundancy and protection protocols, including **STP/RSTP/MSTP** (with failover times below 50ms) and **ITU-T G.8032 ERPS**, significantly enhancing link backup and overall network resilience. In the event of a link or node failure, these mechanisms enable rapid recovery, ensuring uninterrupted operation of mission-critical applications.

To address a wide range of deployment scenarios, the TNS244 offers flexible configuration options for port management, traffic control, VLAN segmentation, and SNMP monitoring through its user-friendly web management interface. This makes the TNS244 easy to deploy, manage, and maintain, even in complex or large-scale network environments.

### Features

- **Interfaces:** 24 × 10/100/1000 Mbps RJ45 Ethernet ports and 4 × SFP+ slots supporting 1G / 2.5G / 10G speeds
- **Performance:** Switching capacity of 128 Gbps; MAC address table supporting up to 32K entries
- **Advanced Layer 2 features:** Support for STP/RSTP/MSTP, VLAN, MAC management, ACL, QoS, multicast, storm control, DHCP, ring network topology with speed detection and self-healing capabilities
- **Security and protection:** IEEE 802.1X authentication, ARP intrusion detection, IP source guard, DoS protection, advanced security policies, and static link aggregation
- **Management and administration:** Web-based management, Telnet, CLI and SSH access, with dedicated management and maintenance modes
- **Layer 2+ Functionality:** the TNS244 incorporates advanced Layer 2+ switching capabilities, enabling efficient traffic management, network segmentation, and simplified routing within professional network environments
- **Layer 3+ capabilities:** Dynamic routing support for IPv4 and IPv6, including RIP v1/v2, OSPF v2, and VRRP
- **Power supply:** Total available power budget of 400 W

### Ordering information

Product Name	Article No.	Port Description	Power Configuration	Accessories
TNS244, 24- Port Managed L2 Switch	309733	24*GE(RJ45) + 4*SFP 1/2.5/10GE 1*RS232	1*AC power (UK plug power cord)	SFP module to be ordered separately

### General specifications

Model	TNS244
Art. Number	309733
EAN	5061038088779
Interface	24*10/100/1000M RJ45 ports (Data) 4*1G/2.5G/10G uplink SFP+ fiber slot ports (Data) 1*Console RS232 port (115200, N,8,1)
Network Management Type	L2 +
Ethernet Port	Port 1-24 support 10/100/1000BaseT(X) auto detect, full/half duplex MDI/MDI-X adaptive
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T IEEE802.3u 100Base-TX, IEEE802.3ab 1000Base-T IEEE802.3z 1000Base-X, IEEE802.3ae 10GBase-SR/LR, IEEE802.3x
Fiber Port Feature	1G/2.5G/10G SFP Fibre interface (Fibre module is not included, to be ordered separately module options include single/multi-mode, single/dual fiber, LC)
Forwarding Mode	Store and Forward
Switching Capacity	128Gbps (non-blocking)
Forwarding Rate	125.01Mpps
MAC	32K
Buffer Memory	32M
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP (≤100 meter) 100BASE-TX: Cat5 or later UTP (≤100 meter) 1000BASE-T: Cat5e or later UTP (≤100 meter)
Optical Fiber Cable	Multimode: 850nm 0~300M(10G), 850nm 0~500M (1.25G) Single-mode :1310nm 0~40KM, 1550nm 0~120KM
Power Supply Pin	Default: 1/2(+), 3/6(-)
Power Consumption	Standby<10W; Full Load<400W
Power Supply	Built-in power supply, AC 100~220V 50-60Hz
LED	Power: PWR (Green) Network: 1-24(Link/Act)/(Orange), 25-28(Link/Act)/(Green) SYS: (Green)
Reset Switch	Yes, One-button factory reset
Operation Temperature/Humidity	-20~+55°C;5%~90% RH Non-condensing
Storage Temperature/Humidity	-40~+80°C;5%~95% RH Non-condensing
Protection	IEC61000-4-2(ESD): ±8kV contact discharge, ±15kV air discharge IEC61000-4-5 (Lightning protection/Surge) Power:CM±4kV/DM±2kV; Port: ±4kV
Protection Level	IP30
Dimension (L*W*H)	440*290*44.5mm
Net /Gross Weight	<4.5kg / <5.5kg
Installation	Desktop, 19-inch 1U cabinet

### Technical specifications

Features	
Interface	<ul style="list-style-type: none"> <li>IEEE802.3x flow control (full duplex)</li> <li>Broadcast storm suppression for port rate</li> <li>support speed limit for incoming and offline message traffic, with a minimum particle size of 64Kbps</li> <li>Temperature protection setting</li> <li>Energy saving configuration of port IEEE Ethernet</li> </ul>
Layer 3 Function	<ul style="list-style-type: none"> <li>Support L3 managed function</li> <li>Support IPV4/IPV6 management</li> <li>Support layer3 soft routing (weak three tier) forwarding</li> <li>Support layer3 Dynamic Routing, IPV4/IPV6, RIP v1/v2, OSPF v2&amp; VRRP etc...</li> <li>Support different network segments, communication between different VLAN</li> <li>Support static routing / default routing 128, 1024 ARP software forwarding</li> </ul>
VLAN	<ul style="list-style-type: none"> <li>Support port based VLAN (4K), IEEE802.1q</li> <li>Support protocol based VLAN</li> <li>Support Access, Trunk, Hybrid three types of port configuration</li> <li>Support QinQ configuration</li> </ul>
Port Aggregation	<ul style="list-style-type: none"> <li>Support LACP</li> <li>Support static polymerization</li> <li>Support the largest 8 aggregation groups, each aggregation group supports 8 ports</li> </ul>
Spanning Tree	<ul style="list-style-type: none"> <li>STP (IEEE802.1d)</li> <li>RSTP (IEEE802.1w)</li> <li>MSTP (IEEE802.1s)</li> </ul>
Industrial Ring Network Protocol	<ul style="list-style-type: none"> <li>Support G.8032 (ERPS), support 255 loops at most, and supports 1024 devices per ring.</li> <li>The self-healing time of the ring network is less than 20ms</li> </ul>
Multicast	<ul style="list-style-type: none"> <li>Support IGMP Snooping V1/V2 and support 1024 multicast groups at most</li> <li>Support the user's quick departure mechanism</li> <li>Support MLD Snooping V1/V2</li> <li>Support multicast VLAN</li> </ul>
Image	<ul style="list-style-type: none"> <li>Bi-directional traffic mirroring supporting the basic port</li> </ul>
QoS	<ul style="list-style-type: none"> <li>Diff-Serv QoS</li> <li>Each port supports 8 output queues</li> <li>Support 802.1p/DSCP priority mapping</li> <li>Support queue scheduling mechanism (SP, WRR, SP+WRR)</li> <li>Priority tag Mark/Remark</li> <li>stream-based packet filtering</li> <li>Support for stream-based redirection</li> <li>Support flow-based speed limit</li> </ul>
ACL	<ul style="list-style-type: none"> <li>Support L2 to L4 packet filtering function, can match the first 80 bytes of the message provide based on the source MAC address, destination MAC address, source IP address destination IP address, IP protocol type, TCP/UDP port, TCP/UDP port range, VLAN and other definition ACL</li> <li>Support ACL based on port and VLAN</li> </ul>
Safety Characteristics	<ul style="list-style-type: none"> <li>Support user grading management and password protection</li> <li>Support IEEE802.1X authentication / centralized MAC address authentication</li> <li>Support AAA&amp;RADIUS authentication</li> <li>Support the number of MAC address learning restrictions</li> <li>Support MAC address black hole</li> <li>Support SSH 2 to provide secure passwords for user login</li> <li>Support SSL to ensure data transmission security</li> <li>Support port isolation</li> <li>Support the speed limit function of ARP message</li> <li>Support IP source address protection</li> <li>Support ARP intrusion detection function</li> <li>Support against DoS attacks</li> <li>Support port broadcast message suppression</li> <li>Support host data backup mechanism</li> <li>Binding capabilities of IP+MAC+VLAN+ ports</li> </ul>

DHCP	<ul style="list-style-type: none"> <li>Support DHCP Client</li> <li>Support DHCP Snooping</li> <li>Support DHCP Serve</li> <li>Support DHCP Relay</li> </ul>
Management and Maintenance	<ul style="list-style-type: none"> <li>Support Console/AUX Modem/Telnet/SSH2.0 CLI command line configuration</li> <li>Support WEB network management (HTTPS)</li> <li>Support FTP, TFTP, Xmodem, SFTP file download management</li> <li>Support SNMP V1/V2C/V3</li> <li>Support one bond reduction</li> <li>Support NTP clock</li> <li>Support system work log</li> <li>Support Ping detection</li> <li>Support cable state detection</li> <li>Support CPU instant utilization status view</li> <li>Support link layer discovery protocol LLDP</li> </ul>
System Requirements	<ul style="list-style-type: none"> <li>Web browser: Mozilla Firefox 2.5 or higher</li> <li>Google browser chrome V42 or higher</li> <li>Microsoft Internet Explorer10 or higher</li> <li>Cat5e or later Ethernet cable</li> <li>TCP/ IP, network adapter and network operating system (Microsoft Windows, Linux or Mac OS X)</li> <li>installed on every computer in the network</li> </ul>

**Mechanical aspect**

