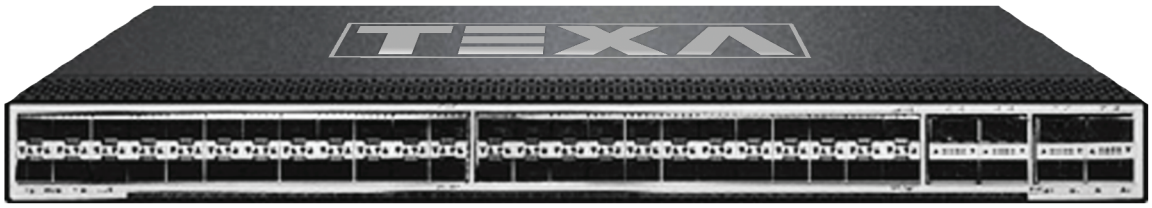
48-Port 25G Data Center Managed Ethernet Switch

(TN325G48PES)



PRODUCT INTRODUCTION

TN325G48PES is a new generation 25G Ethernet switch designed for enterprise data center and campus LAN networks,providing high-throughput, high-density 25GE interfaces, larger buffer and lower latency. It adopts advanced hardware architecture with 48*25GE access ports and multiple 100GE uplinks. It provides rich data center service features and management capability.

TN325G48PES realize large buffer of the interfaces, meeting the burst flow forwarding without packet loss; provide the M-LAG technology for virtualization scenarios; provide the modular power and fan design for high reliability. The key components adopt "overvoltage" designs to ensure that the product has the strong ability of continuous operation.

TN325G48PES can work with TN325GCS core switches to build a complete, scalable, virtualized fabric network that meets the data center requirements.

Meanwhile, TN325G48PES can also be deployed as aggregation or core switches for enterprise campus LAN networks.

MAIN FEATURES

High-density 25GE ports with 100GE uplinks

• Provide fixed 48*25GE interfaces in compact 1U device. The port combination fully satisfies the interface density requirement of data center scenarios.

• Have a maximum of 8*100GE QSFP28 uplinks, the uplink ports can be connected to TN325GCS core switches to build a non-blocking network architecture.
M-LAG for cross-device link aggregation

• Support multi-chassis link aggregation group (M-LAG), which enables links of multiple switches to aggregate into one to implement cross-device link backup. The rest of switches in the M-LAG group are working actively regardless any switch failure. During the upgrade, other switches in the system take over traffic forwarding to ensure uninterrupted services.
Complete data center features

• The TN325G48PES supports VXLAN and EVPN, which can meet the requirements for building data center overlay networks and deploying large layer 2 networks within the data center.
High reliability assurance at the telecommunications level

• TN325G48PES adopts redundant backup design scheme for key hardware components; Multiple reliability protection at both device and link levels; Adopting overcurrent protection, overvoltage protection, and overheating protection technologies; Support rapid switching of 50-200ms link failures to ensure uninterrupted transmission of critical services; Support cross device Link aggregation to facilitate the access server/switch to realize dual active link uplink. IPv4/IPv6 dual stack multi-layer switching

• The TN325G48PES supports IPv4/IPv6 dual stack multi-layer line speed switching, hardware differentiation and processing of IPv4 and IPv6 protocol packets, and supports various Tunnel tunnel technologies (such as manual configuration tunnel, automatic tunnel, and ISATAP tunnel, etc.). It can provide flexible network communication solutions based on the planning and current status of the IPv4/IPv6 network.

SPECIFICATIONS

Hardware Specification:	
Network Interface	● 4 8 * 2 5 G/ 1 0 G SFP2 8 optical interfaces ● 8 * 1 0 0 G/ 4 0 G QSFP2 8 optical interfaces ● 1 * Console port ● 1 * Management port ● 1 * USB port
Redundant Design	● Support 2 pluggable power, 1 + 1 backup mode ● Support 2 pluggable fans
Switching Capacity	● 4Tbps
Packets Forwarding	● 2 0 0 0 Mpps
RAM	● 4 GB
FLASH	● 64MB
EMMC	● 3 . 5 GB
Port Buffer	● 3 2 MB
Power Supplier	● DC: -40V~-57V, rated voltage -48V ● AC: 100V~240V, rated voltage 110V/220V ● High voltage DC: 190-400V,rated voltage 240V/336V
Dimension	● WxDxH: 440×420×44mm
Ev ironment	● Operating temperature: 0 ° C~ 4 0 °C ● Storage temperature: -40℃∽ 70℃ ● Operating humidity: 10% ~ 90% RH non condensing ● Storage humidity: 1 0 % ∽ 9 0 % RH non condensing
Safty Regulations	● CE/ ROHS/ FCC

Software Specifications:	
VLAN	Support 4K VLAN Support 1:1 and N: 1 802.1p based VLAN Mapping Support VLANs based on MAC, protocol, and IP Support Guest VLAN,Voice VLAN Support QinQ,selective QinQ
IP	Support 256K IPV4/64K IPV6 Support IPV4/IPV6 static routing Support GRE tunnel Support ECMP Support policy routing Support OSPF, IS-IS, BGP and other IPv4 Dynamic routing protocols Support OSPFv3, IS-ISv6, BGP4+ and other IPv6 Dynamic routing protocols Support IGMP， IGMP Snooping， MLD Snooping
VXLAN	Supports VXLAN Layer 2 switching, routing switching, and Layer 3 gateway Support EVPN VXLAN Support IPv6 VXLAN over IPv4
EVPN	Support EVPN Support MP-BGP,EVPN's RR function Support symmetric IRB
Reliable Features	Support STP/RSTP/MSTP Support BPDU protection, Root protection, and Loop protection; Support for BDPU Tunnel Support BPDU tunnel Support BFD session binding Static routing, VRRP, OSPF, IS-IS, BGP, RIP
Stacking	Supports horizontal virtualization technology and unified management of multiple devices
IPv6	Support ND(Neighbour Discovery) , support PMTU Support time period based ACLs Support IPV6 Ping， Traceroute Support dual stacks of IPv4 and IPv6; Support multiple tunnel technologies Supports ACLs based on source IPv6 address, destination IPv6 address, layer 4 port, protocol type, etc

Software Specifications:	
QoS	Support L2-L4 packet filtering function, providing filtering based on MAC, IP, port, protocol, IP ToS, 802.IP priority, VLAN ID, SVLAN ID, VLAN range, etc. Support time period based ACLs Support Bandwidth throttling based on stream/VLAN (single speed and dual color) Support streaming of single speed tricolor and dual speed tricolor Support flow based priority scheduling and priority mapping Support scheduling algorithms such as SP/PQ, DRR, SP/PQ+DRR, etc Supports 8 QoS hardware priority queues per port Support 802.1p， DSCP/ToS priority Support queue cache management strategies such as end of queue discarding and WRED
Security Features	Support hierarchical management of user permissions Support 802.1x,RADIUS,TACACS+ Support user level quantity limit Support user binding (port, source MAC, source IP address access control) Support SNMP login terminal restrictions Support SSH2.0 Support IP source guard Support black hole MAC Supports MAC address limit Support anti ARP and DDoS attacks
Maintenance	Support Console,Telnet,SSH protocols Support SNMP V1/V2/V3,support standard MIB Support Netconf management protocol Support Telemetry protocol Support FTP/TFTP Support unified management of logs, alarms, and debugging information Support user action logs Support RMON Supports port mirroring and stream mirroring Supports BootROM upgrade and remote online upgrade

NETWORKING APPLICATION