





# V5828

# Carrier-Level Aggregation L3 Ethernet Switch

## **Key Features:**



Supports 24 10G SFP+ ports and 4 100GE QSFP28 ports



Carrier-Level High Reliability Data-center TOR switches Full Layer-3 Functions



Advanced Hardware Architecture and Industryleading Port Density



Varied Service
Characteristics
Versatile IPv6 Solution
Complete Security Mechanism

#### Introduction:

V5828 is a new generation high-performance data center full 10GbE TOR switch launched by VSOL for high-performance cloud computing, data centers and high-end parks. It adopts advanced hardware architecture design, and provides high-level switching performance and rich data center business features in the industry. The V5828 has 24 downlink 10GE ports and 4 100GE uplink ports. The backplane bandwidth is up to 800Gbps, and the throughput is up to 600Mpps. The V5828 software platform is developed based on independent intellectual property rights, integrating IPv6, MPLS VPN, network security, traffic analysis, virtualization stack and other network services. While providing high-performance L2/L3/L4 line speed switching capabilities, it also combines multiple data center high reliability technologies such as uninterrupted upgrade/forwarding, elegant restart, redundancy protection, etc., to ensure the network's uninterrupted communication capability for the longest time.



# **Model Lists**

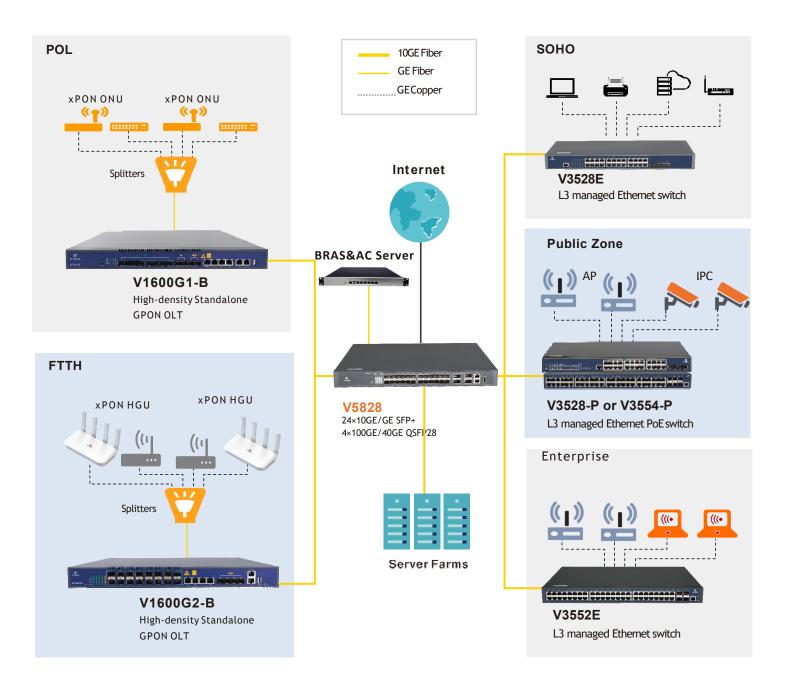




### V5828

- 24\*10GE/GE (SFP+) ports
- 4\*100GE/40GE (QSFP28) ports

# **Application Diagram**



## **Specifications**



Parameter		V5828
Interfaces		24*10GE/GE (SFP+)+
		4*100GE/40GE (QSFP28)
Console		1 RJ45, 1 MGMT
Backplane		800Gbps
Forwarding rate		600Mpps
Chassis	Dimensions(WxDxH)(mm)	440x350x44
	Weight(KG)(empty)	7.1
Package	Dimensions(WxDxH)(mm)	576x448x94
	Weight(KG)	8.3
Power consumption	no-load	45W
	full-load	70W
Power supply(hot-swop)	AC:100V-240V, 50Hz±10%	2
Power status monitoring		Support
Total output BTU (1000BTU/H=293W)		238.91
Fan number		4
Noise@25°C(dBA)		57
MTBF(H)		>200,000
Forwarding mode		Store-forward
FLASH(MB)		64
DRAM(MB)		1024
MAC		32K
Jumbo frame		16K
ARP table	IPv4	16K
	IPv6	12K
	IPv4	10K
	IPv6	10K
Total SVI		1K

### **Features**

#### VI AN

- Support 4K VLAN
- Support GVRP
- Support 1:1 VLAN and N:1 VLAN Mapping
- Support Basic/Flexible QinQ VLAN and and Private VLAN

#### **Multicast**

- Support IGMP v1/v2/v3/Snooping/Fast Leave
- Support multicast group policy and multicast number limit
- Support multicast traffic replication across VLANs
- · Support PIM-SM, PIM-DM

#### IPv4

- Support static routes, RIPv1/v2, OSPF, BGP
- · Support policy routing
- Support Equivalent Routing for Load Balancing
- · Support BFD for OSPF, BGP

#### IPv6

- Support ICMPv6, DHCPv6, ACLv6 and IPv6 Telnet:
- Support IPv6 neighbor discovery, Path MTU discovery;
- Support MLD, MLD Listening;
- Support IPv6 static route, RIPng, OSPFv3, BGP4+;
- Support manual tunnel, ISATAP tunnel, 6to4 tunnel

#### **Spanning Tree**

- Support 802.1D (STP), 802.1W (RSTP) and 802.1S (MSTP)
- Support BPDU guard, root guard and loopback guard.

#### **MPLS**

- · Support LDP protocol
- Support MCE
- Support P/PE function of MPLS VPN
- Support MPLS TE, MPLS OAM

#### QoS

- Support traffic classification based on each field of L2/L3/L4 protocol header
- · Support CAR traffic restriction
- Support 802.1P/DSCP priority re-tagging
- Support SP, WRR, SP+WRR and other queue scheduling methods
- Supports Tail-Drop, WRED and other congestion avoidance mechanisms
- Support traffic supervision and traffic shaping Reliablity
- Support power supply 1+1 backup
- · Support power supply and fan hot-swapping
- Support static/LACP way link aggregation, support cross-device link aggregation
- · Support EAPS and other ring protection
- Support VRRP
- Support Ethernet OAM 802.3ah/802.1ag/ITU-Y.1731
- · Support GR for OSPF, BGP
- Support BFD for OSPD, BGP
- Support ISSU service without interruption system upgrade

#### Security

- Support L2/L3/L4 based ACL flow identification and filtering security mechanism
- Support anti-DDoS attack, TCP SYN Flood attack, UDP Flood attack, etc.
- Supports suppression of multicast, broadcast, and unknown unicast messages
- · Support port isolation
- Support port security, IP+MAC+port binding
- Support DHCP Snooping, DHCP Option 82
- Support IEEE 802.1x authentication
- Support Radius, BDTacacs+ authentication
- Support uRPF
- Support hierarchical protection of command line

#### Management

- Support Console, Telnet, SSH, SNMP v1/v2/v3, RMON;
- Support TFTP file upload and download management
- Support sFLOW, Netflow traffic statistics analysis

#### **Environment**

- Operating temperature/humidity: -10°C -50°C, 10%-90%, non-condensing
- Storage temperature/humidity: -20°C-70°C, 5%-95%, non-condensing

### **Green Energy Saving**

 Supports IEEE 802.3az Green Energy Efficient Ethernet