

DATA CENTER SWITCH

VF1010-48S



VF1010-48S Data center switch delivers high performance, high port density, and low latency for cloud- oriented data center networks and high-end campus networks. It supports an extensive range of data center features, Software-Defined Networking (SDN) capabilities, and high-performance stacking technologies.

KEY FEATURES

- ▶ 48 × 10G SFP+ ports and 8 × 40/100G QSFP28 uplink ports.
- ▶ 1U compact design with hot-swappable power supplies and fans.
- ▶ High switching capacity up to 2.56 Tbps with low latency.
- ▶ Supports advanced Layer 2 and Layer 3 features like OSPF, BGP, and VRRP.
- ▶ Data center ready with VXLAN and EVPN.
- ▶ Enhanced security with 802.1X, ACLs, DHCP snooping, and SSH management.

FEATURES AND BENEFITS

■ HIGH RELIABILITY

The VF1010-48S provides enhanced Ethernet reliability technologies such as STP/RSTP/MSTP, R-link at millisecond-level protection switchover, as well as LB(loopback check) to ensure link level reliability. VF1010-48S model support 1+1 redundant hot swappable power supply and an AC power supply and a DC power can be used simultaneously. Moreover, the switch supports fault detection and alarms for power modules and fan, fan speed can be automatically adjusted according to temperature variations.

■ HIGH SWITCHING CAPACITY

The backplane capacity of VF1010-48S is up to 2.56Tbps to provide all ports with non-stop forwarding. The VF1010-48S high performance makes sure to build a reliable, sustainable high speed IP networks. The VF1010-48S provided high density 1/10/40/100GE port. It can meet the high density, high band width access and aggregation application scenarios of data center and campus network.

■ POWERFUL SERVICES SUPPORT

The VF1010-48S supports IGMP snooping, IGMP proxy, IGMP filter, and IGMP fast leave for robust multicast. It offers wire-speed replication of multicast packets between VLANs, and multicast load balancing among trunk member interfaces to meet requirements for IP TV services and other multicast services.

■ SUPERIOR QUALITY OF SERVICE

The VF1010-48S offers Gigabit Ethernet with intelligent services that keep everything flowing smoothly with mechanisms for marking, classification, and scheduling. It supports traffic classification based on abundant criteria such as MAC/IP address, Layer4TCP/UDP port number, protocol, port and VLAN. Each port supports 8 priority queues with multiple queue scheduling algorithms such as SP/PQ, DRR, SP/PQ+DRR to ensure the highest-priority packets are processed ahead of all other traffic.

■ SUPERIOR QUALITY OF SERVICE

The VF1010-48S offers Gigabit Ethernet with intelligent services that keep everything flowing smoothly with mechanisms for marking, classification, and scheduling. It supports traffic classification based on abundant criteria such as MAC/IP address, Layer4TCP/UDP port number, protocol, port and VLAN. Each port supports 8 priority queues with multiple queue scheduling algorithms such as SP/PQ, DRR, SP/PQ+DRR to ensure the highest-priority packets are processed ahead of all other traffic.

■ POWERFUL SERVICES SUPPORT

The VF1010-48S offers a comprehensive security solution by providing service security in three aspects: subscriber, switch and network. Subscriber security helps create protections among customers with multiple features. DHCP Snooping, ARP Inspection, and IP Source Guard help to identify each customer based on MAC, IP address and port information to help prevent malicious attack. Switch security means CPU can be protected from DoS attack and storm. The port security feature allows controlling the number of MAC addresses against overwhelming the switch memory. Network security is to filter all incoming traffic for ensuring only valid traffic passing through by applying different ACL rules and IEEE 802.1x authentication prevents insecure terminals to intrude illegally into the entire network.

Technical details

Ports	48x1/10GE SFP+ 8x40/100GE QSFP28
Throughput	1000Mpps
Switching capacity	2.56Tbps
VLAN	4K VLANs; 1:1 & 2:2 VLAN Mapping; QinQ, selective QinQ; MAC based VLAN; ProtocolsbasedVLANGuest VLAN; Voice VLAN
Port trunk	LACP; 32 trunk groups at most, up to 8 ports in each group
MAC	128K MAC; Static MAC; Dynamic MAC;
IP routing	Static routing; OSPF;ISIS;BGP;ECMP; Policy based routing
Multicast	IGMP snooping, IGMP filter, IGMP Proxy and IGMP fast leave;Multicast replication between VLANs; PIM-SM; Source Specific Multicast (SSM)
Reliability	STP, RSTP, MSTP;R-Link protection, VRRP, Trunk, Redundancy powerBPDUGuard, Loop protection, Root protection;
QoS/ACL	Packet filtering at Layer 2 to Layer 4, filtering out invalid frames based on source MAC address, destination MAC address, source IP address, destination IP address, TCP/UDP port number , protocol type and VLAN ID Time range ACL Rate limiting with granularity at 64Kbps Port-based traffic policing and two-rate three-color CAR 8 queues on each port Flexible scheduling algorithms, including SP/PQ、DRR、SP/PQ+DRR Re-marking of the 802.1p priority and DSCP priority
Data Center feature	EVPN,VXLAN,M-Lag
Energy saving	Dynamic fan speed adjusting
Security	User privilege management and password protection DoS attack defense, ARP attack defense, IP source guard Binding of the IP address, MAC address, interface Port isolation, Port security Black hole MAC address entries Limit on number of learned MAC addresses 802.1x authentication, RADIUS authentication SSH v2.0 CPU protection

Technical details

Management & maintenance	Port mirroring and Flow-based mirroring Configuration via CLI, Telnet, Console port SNMP v1/v2/v3, RMON, LLDP, Cluster network, Syslog, Traplog Third-Party GUI management platform based on SNMP Loading and upgrade via FTP、TFTP Port loopback detection
Operating environment	Operation temperature: 0°C to 40°CRelative humidity:10%-90% (non-condensing)
Input voltage	AC: Rated voltage range:100V to 240V AC, 50/60Hz DC: Rated voltage range: -40V to -57V DC
Operating environment	Operation temperature: 0°C to 40°CRelative humidity:10%-90% (non-condensing)
Dimensions(W×D× H) mm	440×400×44
Power consumption	≤200W
Weight(GW)	<9 kg

Recommended support

24x7 - 4 hours Response, Next Business Day Call to Resolution CTR

24x7 - 4 hours Response, 24 Hours Call to Resolution CTR

24x7 - 4 Hours Response, 6 Hours Call to Resolution CTR

Default support Next Business Day Consulting and deployment offerings are also available. Contact Vantageo representative for the more information.

Disclaimer: Technical data is subject to modification and delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded. Designations may be trademarks and/or copyrights of the respective manufacturer, the use of which by third parties for their own purposes may infringe the rights of such owner.