



OVERVIEW

VTA39 Series is a new generation of aggregation 10G switches introduced by Voltan Technology. It is targeted at the IP MAN (metropolitan area network), campus networks and enterprise networks. It is developed on the basis of high performance hardware and VROS software platform with Voltan own independent intellectual property rights. It supports multiple services like IPv6, VPN and network security based on L2/L3/L4 wire-speed switching service. It also supports non stop upgrade, continuous forwarding, graceful restarting and redundancy protection.

VTA39 Series has 1 model: VTA39-48P6X. It supports 48 gigabit PoE+ ports and 6 10GE ports

CHARACTERISTICS

Innovative Virtual Cluster Switching Technique

Voltan Virtual Switch System: makes full use of each link in the physical devices, which avoids STP blocking the link and protects the original link to the maximum extent.

Improved Performance: virtualize multiple physical devices into one. The performance, reliability and management of the virtual system are superior to the physical ones.

High Reliability: Based on the advanced distribution mechanism and efficient cross-physical link aggregation link function, the logic control plane, service control plane and service data plane are separated. Thus, VTA39 Series can support continuous layer-3 routing forwarding, avoiding service interruption as a result of a single point of failure.

Easy Management: Voltan Virtual Switch System realizes single IP management, greatly improving the networking efficiency and lowering the operating cost.

Carrier-Level QoS Policies

Supports priority retagging and complicated flow classification based on VLAN, MAC, source address, destination address, IP or priority to better streamline carrier's services. Supports flexible bandwidth control policies and supports port-/flow-based flow limit, and ensuring the line speed forwarding of each port to make sure the high quality of video, audio and data services.

Supports 8 priority queues by each port. Supports multiple queue schedule algorithms such as SP, WRR, and SP+WRR.

Varied Service Characteristics

Supports the IPv6 protocol suite, IPv6 neighbor discovery, ICMPv6, path MTU discovery, DHCPv6, etc. Supports Ping, Traceroute, Telnet, SSH, ACL. Supports MLD, MLD Snooping, IPv6 static routing, RIPng, OSPFv3 and BGP4+, etc. Supports IPv6 tunnel: manual tunnel, automatic tunnel, GRE tunnel, 6to4, ISATAP Supports IPv4 transits to IPv6: IPv6 manual tunnel, automatic tunnel, 6 to 4 tunnel, ISATAP tunnel.

Industrial Ethernet Ring with Zero Delay and Zero Packet Loss

Supports industry-level EAPS and ERPS, and their protection recovery time is less than 50ms. Their high reliability is represented by the null packet loss, which has been proved by many years of application in the Grid, rail transportation and defense systems.

Intelligent PoE+

VTA39-48P6X supports IEEE 802.3af/at PoE standard, and power mapping scales up to a maximum of 760W of PoE+ power; VTA39-48P6X supports PoE non-stop power supply. The PoE+ power is maintained during a switch reload; VTA39-48P6X supports manual and dynamic PoE power allocation; VTA39-48P6X supports up to 6KV thunder-proof of the PoE port and power supply;

CHARACTERISTICS

Complete Security Mechanism

Equipment-Level Security: The advanced hardware infrastructure design realizes the level-based packet schedule and packet protection, prevents DoS-/TCP related SYN Flood, UDP Flood, Broadcast Storm or large traffic attacks, and supports level-based command line protection, endowing different levels of users with different management permissions. **Security Authentication Mechanism:** IEEE 802.1x, Radius and Tacacs+ **Enhanced Service Security Mechanism:** supports the plain text or MD5 authentication of relevant routing protocol, URPF, deep inspection of hardware packet, control packet and data packet and filtering technology.

Innovative Energy-Saving Design

Intelligent power management: The power system of VTA39 series supports real-time monitoring the device and the slow-start. It is also power-saving. **Intelligent fan management system:** The fan system of VTA39 Series supports automatic speed regulation, which efficiently slow the fan speed and mitigate the noise. Complies with the international standard IEEE 802.3a.

Flexible and Convenient Management and Maintenance

Supports management modes such as the console port, Telnet, SSH, etc. Supports the WEB management mode, which is easy and efficient so that it makes installation and debugging convenient. Supports TFTP-patterned file upload/download management.

Supports ISSU (In-Service Software Upgrade).

Supports SNMP and Voltan NMS smart network management platform to realize automatic equipment discovery, network topology management, equipment configuration management, performance data statistics and analysis and trouble management.

VTA39-48P6X



- 48-Port Gigabit PoE+
- 6-Port 10G/GE SFP+

SPECIFICATIONS		VTA39-48P6X
Gigabit Interface	PoE+	48
	SFP	/
10G/GE SFP+		6
Console(RJ45)		1
Backplane(Gbps)		216
Forwarding rate (Mpps with 64 bytes)		162
Chassis	Dimensions (WxDxH)(mm)	440x350x44
Package	Dimensions (WxDxH)(mm)	576x448x94
Power supply(hot-swap)	AC: 100V-240V, 50Hz±10%	≤1000W(POE)
Total output BTU (1000BTU/H=293W)		3412.96
Noise@25°C(dBA)		45
MTBF(H)		>200,000
Forwarding mode		Store-forward
Flash (MB)		16
DRAM (MB)		512
MAC		32K
Buffer size(MB)		2
Jumbo frame		9K
Routing table	IPv4	12K
	IPv6	6K
ARP table	IPv4	12K
	IPv6	2K
Total SVI		1K

FEATURES

VLAN

- 4K Active VLAN,
- QinQ & Selective QinQ,
- GVRP, Private VLAN,
- Voice VLAN

Spanning Tree

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

Multicast

- PIM-SM, PIM-DM, IGMP v1/v2/v3,
- IGMP Snooping
- IGMP Fast Leave
- IGMP Filter, MVR

IPV4

- Static routing, RIP v1/v2, OSPF, BGP, PBR, ECMP
- BFD for OSPF, BGP

DHCP

- DHCP server/relay/client
- DHCP snooping/option82

MPLS

- Multi-VRF

IPV6

- ICMPv6, DHCPv6, ACLv6 and Ipv6 Telnet
- IPv6 neighbor discovery, Path MTU discovery
- MLD V1/V2, MLD snooping
- IPv6 Static Routing, RIPng, OSPFv3, BGP4+
- Manual tunnel, ISATAP tunnel, 6 to 4 tunnel

QoS

- CAR, HQoS, MAC/IP/TCP/UDP/VLAN/COS/DSCP/TOS based QoS, 802.1P/DSCP priority re-labeling, SP, WRR, and "SP+WRR", Tail-Drop, WRED, flow monitoring and traffic shaping

Security

- Port isolation, Port security, and "IP+MAC+port" binding, MAC sticky DHCP Snooping and option 82, DAI& IP source guard, PPPoE+,
- IEEE 802.1x, Radius and Tacacs+ L2/L3/L4 ACL flow identification and filtration Anti-attack from DDoS, TCP's SYN Flood, UDP, Flood, etc.
- Broadcast/multicast/unknown unicast storm-control
- Md5, SHA-256, RSA-1024, AES256, etc.

Reliability

- Static/LACP link aggregation, Interface backup
- VVSS virtual-stacking
- EAPS and ERPS
- URPF, LLDP
- ISSU
- VRRP
- 1+1 power backup

Management

- Console, Telnet, SSH v1/2, HTTP, HTTPS,SNMP v1/v2/v3, RMON
- TFTP, FTP, SFTP
- NTP, SPAN, RSPAN
- sFlow

Accessories

- Power cord, rackmount kits, console cable

Environment

- Operating temperature/humidity: 0°C -50°C ,10%-90% non-condensing
- Storage temperature/humidity: -20°C -70°C , 5%-95% non condensing

Certification

- CE, FCC, ROHS

ORDERING INFORMATION

Part.No	Description
VTA39-48P6X	48-Port Gigabit PoE+ 6-Port 10G SFP+ L3 Stackable Managed Switch (2 power slots with one hot swap AC-220V power supply; with cooling fan; 1U; standard 19-inch rack-mounted installation)

10GE Optical Modules

VTSFP+TX	10GE SFP+ to RJ45 port module (10M/100M/1000M/2.5G/5G/10G)
VTSFP+SX	TE SFP+ multi-mode (300m, 850nm, LC)
VTSFP+LX-10	TE SFP+ single-mode (20Km, 1310nm, LC, DDM)
VTSFP+LX-20	100M SFP single-mode (15Km, 1310nm, LC, DDM)
VTSFP+LX-40-1310	TE SFP+ single-mode (40Km, 1310nm, LC, DDM)
VTSFP+LX-40-1550	TE SFP+ single-mode (40Km, 1550nm, LC, DDM)
VTSFP+LX-80	TE SFP+ single-mode (80Km, 1550nm, LC, DDM)

GE Optical Modules

VTGSFP-TX-B	GE SFP-to-RJ45 module
VTGSFP-SX-D	GE SFP multi-mode (500m, 850nm, LC, DDM)
VTGSFP-LX-10-D	GE SFP single-mode (10Km, 1310nm, LC, DDM)
VTGSFP-LX-20-D	GE SFP single-mode (20Km, 1310nm, LC, DDM)
VTGSFP-LX-40-D	GE SFP single-mode (40Km, 1310nm, LC, DDM)
VTGSFP-ZX-80-D	GE SFP single-mode (80Km, 1550nm, LC, DDM)
VTGSFP-ZX-120-D	Gigabit SFP single-mode (120Km, 1550nm, LC, DDM)