

DCS-3950-28CT-POE AT PoE Switch Datasheet

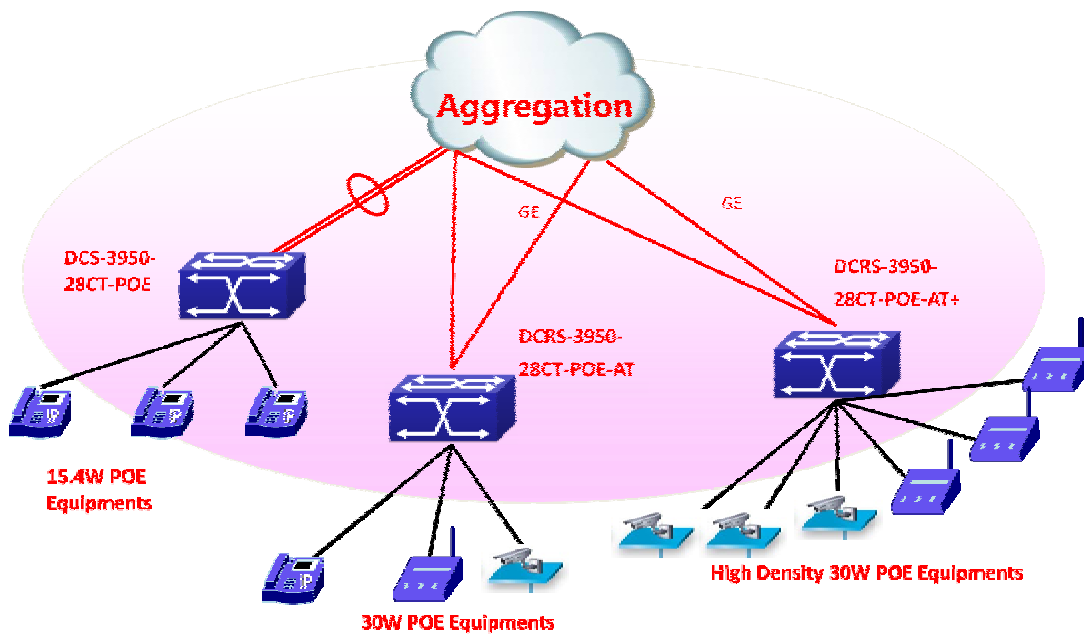


DCS-3950-28CT-POE

■ Product Overview

DCS-3950-28CT-POE is fully loaded PoE switch for carrier and enterprises. It supports comprehensive QoS, enhanced VLAN functions (Vlan VPN, Voice Vlan, QinQ, etc), classified bandwidth control, multilink aggregation, intelligent security control, which fulfill the network requirements for carrier network, MAN security access. With 802.3af and 802.at POE support, DCS-3950-POE-AT could provide power supply for large power consumption equipments as wireless AP, IP phone and Network Camera

■ Application



■ Main Features

∅ High adaptability VLAN Features

- I DCS-3950-28CT-POE support 802.1q and port based VLAN, as well as MAC based VLAN. When user move from one port to another, system can still record it as the same user through identified MAC and then keep the same VLAN for the user.
- I DCS 3950 series has unique Stacking Vlan technology, supporting up to 16 million VLAN, thus can provide one VLAN to each user. The advantages are: most small broadcast domain, with high efficiency; separate data between users on L2 with high security; unique VLAN for each user to identify the user; and VLAN for each user improves the management and operation level.
- I DCS-3950-28CT-POE Vlan VPN (QinQ) technique provide low cost, easy operation, manageable L2 VPN function, and differentiate data packets by its service and area to support more and more business.
- I Voice Vlan function enables to add IP Phone to voice VLAN to ensure effective QoS.

∅ High Reliability

- I DCS-3950-28CT-POE series support VCT, help to locate the error places in the link, make it fast to solve relative problems for network management
- I DCS-3950-POE series support STP, RSTP, MSTP based on 802.1D, 802.1W, 802.1S, to avoid loop link and configure abundant backup link in network. 802.3ad port aggregation supported, to add link bandwidth and abundant connection between equipments

∅ Enhanced Security

- I IEEE 802.1X port-based access control ensures all users are authorized before being granted access to the network. User authentication is carried out using any standard-based RADIUS server.
- I One thousand large number of Access Control Lists (ACLs) can be used to restrict access to sensitive network resources by denying packets and forward by different policies.
- I The DCS-3950-28CT-POE support DHCP snooping, which prevents DHCP attacks and illegal DHCP SERVER by setting trust ports and untrust ports. With DHCP Snooping binding and option82 enabled, it can combine modules like dot1x and ARP, or implement user-access-control independently
- I The DCS-3950-28CT-POE product support much more L2 security features such as ARP guard, Anti-ARP scanning, and other ARP and MAC security technology to protect network security and reliability.

∅ Comprehensive QoS

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- I DCS-3950-28CT-POE switch can classify stream by port, 802.1p, TOS, DSCP and assign different level of service, supports SWRR/WRR/SP to provide QOS for voice/data/video.

Ø Abundant Multicast Features

- I DCS-3950-28CT-POE also support MVR(Multicast VLAN Register), selectively allows traffic to cross between different VLANs for bandwidth and security reasons. With MVR Trunk function, which could associate multicast Vlan to trunk port, DCS-3950-28CT-POE combine the Vlan data into the same link, saving lots of resources for users.
- I The DCS-3950-28CT-POE could prevent multicast traffic from flooding through IGMP Snooping, while multicast traffic is forwarded to ports associated to multicast devices only

Ø Simple management

- I DCS-3950-28CT-POE supports Simple Network Management Protocol (SNMP), in-band and out-of-band. Supports Command Line Interface (CLI) and WEB, supports Security IP function to prevent illegal users log in or change the configuration.
- I As an important feature of carrier network, OAM can help the user to monitor and manage the network across different protocols and equipments.
- I DCS-3950-28CT-POE supports Secure Shell (SSH), which will ensure the security of switch management and configuration.
- I DCS-3950-28CT-POE can be managed by general network management platform with 3rd management software.

Ø Abundant IPv6 Support

- I The DCS-3950-28CT-POE switch supports IPv6 in hardware for maximum performance. As more network devices growing and the need for larger addressing and higher security become critical, the DCS-3950-28CT-POE switch will be a right product to meet the requirement. DCN passed IPv6 form Phase II certificate is the best proof of the application.
- I The DCS-3950-28CT-POE switch also supports DHCPv6, based on IPv6, including DHCPv6 server, client, relay and snooping, etc.

Ø POE support

- I The DCS-3950-28CT-POE can support POE (Power Over Ethernet) technical and connect to wireless AP, IP phone and Network Camera. The network can help admin easy deployed of cable.

- I With both 802.3af and 802.3at support, the DCS-3950-28CT-POE can support 24 port 15.4 W PoE OR 12 ports 30W PoE. The product can define the power of each port to save the power and set port priority for each port.

Ø Integrated authentication and billing solution

- I DCS-3950-28CT-POE support DCN enhanced 802.1x authentication and billing solution, and authentication by port and MAC address. Working with DCN DCBI3000 and 802.1x client, it can bill by time/flow, and strict bundle for account, password, IP, MAC, VLAN, port, and switches. It support anti spam, internet time control. With user based dynamic VLAN and bandwidth authorization, it can allocate IP address based on group policy without DHCP server.

■ Specifications

Item	DCS-3950-28CT-POE
Ports	24*10/100Base-TX POE + 2*1000M/Gigabits Combo(SFP/GT) + 2*10/100/1000Base-T
Performance	
Switching Capacity	12.8Gbps
Forwarding Rate	9.6Mpps
MAC ADDRESS	8K
ACL TABLE	1K
Queues per port	8 for Gigabits ports, 4 for 10/100M ports
VLAN TABLE	4K
POE	All ports POE Max 24 ports full load of 15.4W OR max 12 ports 30W
Physical	
Dimension (W×H×D)	440mm x 44mm x 350mm
Power Supply	Input AC: 100 V~240 V

Power Consumption	370W	
MTBF	>80000 hours	
Temperature	Working 0°C~50°C, storage -40°C~70°C	
Relative Humidity	5%~95%, non-condensing	
EMC safety	FCC, CE, RoHS,	
Main Features		
Forwarding	n Storage and forwarding	
L1,L2 Features	VLAN Type	n 802.1Q based Vlan and support upto 4K vlan id
		n Support QinQ
		n Support Voice vlan
		n Port based Vlan
		n MAC based Vlan
		n IP subnet Vlan
		n Protocol based Vlan
		n Private VLAN
		n Support GVRP
	Spanning Tree	n 802.1D STP, 802.1W RSTP, 802.1S MSTP
		n Support Root guard, BPDU guard, BPDU Tunnel
	Link Aggregation	n Support LACP 802.3ad, max 8 groups trunk with max 8 ports for each trunk,
		n Support source / destination MAC based load balance
	MAC Operation	n Support MAC binding
		n Support MAC filter
		n Support black hole MAC
		n Support MAC limit per port
	Broadcast storm control	n Support Broadcast / Multicast / Unicast Storm Control
		n Supports control and can set rate for broadcast
	Port	n Support VCT
		n Support UDLD, LLDP, LLDP-MED
		n Support 1:1 and N:1 port mirror
		n Jumbo Frame
		n Loopback interface
		n Port loop detection
		n Bandwidth control: At least 64Kbps step
n Support HOL preventing first packet jam, semi-duplex backpressure, duplex IEEE802.3x		
n GE combo ports could be compatible with FE SFP module		
n Port Protection		
POE+	Support IEEE 802.3af POE	

		Support IEEE 802.3at POE+, Max 30W power per port
		Support global / port POE function control
QOS Features		n 4 hardware queues per FE port and 8 queues per GE port
		n Support QinQ
		n Traffic classification based on IEEE 802.1p CoS, IP Precedence, DSCP, Access Control List
		n Supports SP, WRR, SWRR for scheduling
		n Support flow shaping
Security	IEEE 802.1x	n Port, MAC based authentication
		n Support account based on time length and traffic
		n Support guest vlan and auto vlan
		n Work with private client can manage P2P traffic
	AAA	n RADIUS for Ipv4 and Ipv6
		n TACACS+ for Ipv4
	ACL	n Support 1K Access Control Lists(ACL) based on source/destination IP address, source/destination MAC address, IP type, IP precedence, time range, ToS.
		n ACL on VLAN interface
		n Flow redirect based on ACL
	ARP	n Support ARP binding
		n Support ARP limit
		n Support ARP guard
		n Support Anti ARP scanning
	Enhanced	n Monitor pingSweep, and anti illegal multicast, controlled traffic
		n Ip source guard support under controlled L3 forwarding block
		n Prevent illegal multicast source and limited multicast.
n Support DHCP Snooping, and DHCP Snooping option 82		
Multicast		n Support IGMP v1/v2/v3 snooping
		n Support Multicast Vlan Register (MVR) based on port
		Support Multicast receive control
		Support illegal multicast source detect
		Support multicast policy configuration
IPv6		ICMPv6, NDP, SNMP over IPv6, HTTP over Ipv6, Ipv6 Ping/tracer, Ipv6 Telnet, Ipv6 RADIUS+, Ipv6 Syslog, IPv6 SNTP, IPv6 FTP/TFTP
		Support DHCPv6 Server, Relay, Snooping
		Support MLD Snooping
		Support IPv6 MVR
Management	Switch Management	CLI, WEB, Telnet, SNMPv1/v2c/v3 through IPv4 and IPv6

		RMON 1,2,3,9
		SSHv1,v2 support
		RJ45 Console
		Support Public & Private MIB interface
		Supports SNTP/NTP, Summer Saving Time
		Support Multiple sys-log servers
		Support OAM 802.3ah
		Support NMS software management
		Support MAX 24 unites cluster
		Supports IPv4 and IPv6 Security IP management
	Firmware & Configuration	Firmware upgrade via TFTP/FTP server
		Configuration file upload/download via TFTP/FTP server
	DHCP	Supports BOOTP, DHCP server/client for IP address assignment
	Support DHCP relay option 82, DHCP Snooping, and DHCP Snooping option 82	

■ Warranty

Limited lifetime warranty

■ Ordering information

Model	Description
DCS-3950-28CT-POE	24*10/100Base-TX POE+ 2* 1000M/Gigabits Combo(SFP/GT) + 2*10/100/1000Base-T

■ Connect us

For more detail information about DCN product, contact:

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