

# DCS-4500 Series Gigabits Dual Stack Intelligent Access Switch Datasheet



DCS-4500-26T



DCS-4500-50T



DCS-4500-26T-POE

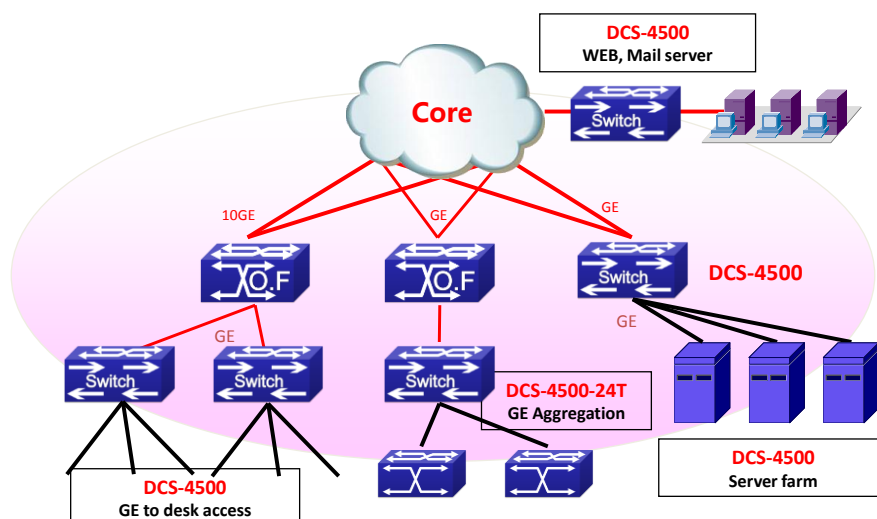
## ■ Product Overview

DCS-4500 Series switch is Gigabits intelligent security access switch for enterprise and MAN networks. It supports comprehensive QoS, enhanced VLAN functions (Vlan VPN, Voice Vlan, QinQ, etc), classified bandwidth control, multi link aggregation, intelligent security control, which fulfill the network requirements for Gigabits to desktop, server farm connection, MAN security access, and so on.

The 4500 series GE intelligent switch has 3 types include DCS-4500-26T, DCS-4500-50T, DCS-4500-26T-POE. The product designed for ipv4 and ipv6 dual stack network. With the abundant ipv6 features and full Gigabits rate, the product can still work for next generation enterprise network.

## ■ Application

### DCS-4500 Series application



## ■ Main Features

### ➤ High adaptability VLAN Features

- DCS-4500 series 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.
- DCS4500 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.
- DCS-4500 series Vlan VPN (QinQ) technique provide low cost, easy operation, manageable L2 VPN function.
- Voice Vlan function enables to add IP Phone to voice VLAN to ensure QoS.

### ➤ Enhanced Security

- IEEE 802.1X port-based access control ensures all users are authorized before being granted access to the

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network. User authentication is carried out using any standard-based RADIUS server.

- Access Control Lists (ACLs) can be used to restrict access to sensitive network resources by denying packets and forward by different policies.
- The DCS-4500-26T/50T/26T-POE product support much more L2 security features such as ARP guard, Anti-ARP scanning, Local ARP proxy and other ARP and MAC security technology to protect network security and reliability.

### ➤ **Abundant protocols**

- DCS-4500 series switch supports 802.1D/W/S spanning tree, GVRP, 802.1Q, 802.1p, LACP/802.3ad, DHCP standards, SNTP and etc.

### ➤ **POE+ support**

- The DCS-4500-26T-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.
- The DCS-4500-26T-POE can support 22 port POE, the MAX power of each port up to 15.4W, or 4 ports POE+. The all ports share total 195W power within the switch. The product can define the power of each port to save the power and set port priority for each port.

### ➤ **Comprehensive QoS**

- DCS-4500 series switch can classify stream by port, 802.1p, TOS, DSCP, TCP/UDP ports and assign different level of service, supports SWRR/WRR/SP to provide QOS for voice/data/video.

### ➤ **Simple management**

- DCS-4500 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.
- DCS-4500 supports Secure Shell (SSH), which will ensure the security of switch management and configuration.
- They can be managed by general network management platform with 3rd management software.

### ➤ **Abundant IPv6 Support**

- The DCS-4500 series 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-4500 series switch will be a right product to meet the requirement. The DCS-4500 passed IPv6 form Phase II certificate is the best proof of the application.

## ➤ Integrated authentication and billing solution

- DCS-4500 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-4500-26T	DCS-4500-26T-POE	DCS-4500-50T
Ports	22x10/100/1000 Base-T with 4 Gigabits Combo	22x10/100/1000 Base-T With 4 Gigabits Combo	46x10/100/1000 Base-T with 4 Gigabits SFP (Combo)
<b>Performance</b>			
<b>Switching Capacity</b>	52Gbps	52Gbps	100Gbps
<b>Forwarding Rate</b>	39Mpps	39Mpps	75Mpps
<b>MAC ADDRESS</b>	8k	8k	8k
<b>ACL TABLE</b>	512	512	512
<b>Queues per port</b>	4	4	4
<b>VLAN TABLE</b>	4k	4k	4k
<b>Main Features</b>			
<b>Forwarding</b>	<ul style="list-style-type: none"> <li>■ Storage and forwarding</li> </ul>		
<b>Port Support</b>	<ul style="list-style-type: none"> <li>■ IEEE802.3(10Base-T)</li> <li>■ IEEE802.3u(100Base-TX)</li> <li>■ IEEE802.3z ( 1000BASE-X )</li> <li>■ IEEE802.3ab ( 1000Base-T )</li> <li>■ Loopback interface</li> <li>■ 9k Jumbo Frame</li> <li>■ Port loop detect</li> <li>■ Protect Port</li> </ul>		
<b>LLDP</b>	<ul style="list-style-type: none"> <li>■ Support LLDP</li> </ul>		
<b>Spanning Tree</b>	<ul style="list-style-type: none"> <li>■ 802.1D STP, 802.1W RSTP, 802.1S MSTP with 48 instance</li> <li>■ Root Guard, Bpdu Guard, Bpdu forwarding</li> </ul>		

<b>Multicast</b>	<ul style="list-style-type: none"> <li>■ IGMP V1/V2/V3 Snooping</li> <li>■ MLD v1/v2 snooping</li> <li>■ MVR(multicast vlan register)</li> <li>■ multicast receive control</li> <li>■ Illegal multicast source detect</li> </ul>
<b>QoS</b>	<ul style="list-style-type: none"> <li>■ 4 hardware queues per port</li> <li>■ support 802.1p, ToS, application ports number,</li> <li>■ support IPv4 and Ipv6 DSCP</li> <li>■ support WRR/SP,</li> <li>■ support flow shaping</li> </ul>
<b>VLAN Type</b>	<ul style="list-style-type: none"> <li>■ Port based Vlan</li> <li>■ 802.1Q based Vlan and support upto 4K vlan id</li> <li>■ Private VLAN</li> <li>■ IP subnet Vlan upto 256</li> <li>■ Protocol based Vlan upto 16</li> <li>■ MAC based Vlan upto 500</li> <li>■ Support Voice vlan</li> <li>■ Support QinQ</li> <li>■ Support GVRP</li> </ul>
<b>ACL</b>	<ul style="list-style-type: none"> <li>■ Support standard and extension ACL , MAC based ACL, MAC-IP based ACL, Time based ACL</li> <li>■ ACL on VLAN interface</li> <li>■ Flow redirect based on ACL</li> </ul>
<b>enhanced security features</b>	<ul style="list-style-type: none"> <li>■ Monitor pingSweep, and anti illegal multicast, controlled traffic</li> <li>■ Ip source guard support under controlled L3 forwarding block</li> </ul>
<b>Bandwidth Management</b>	<ul style="list-style-type: none"> <li>■ 64Kbps</li> </ul>
<b>MAC Operation</b>	<ul style="list-style-type: none"> <li>■ Support MAC binding</li> <li>■ Support MAC filter</li> <li>■ Support black hole MAC</li> <li>■ Support MAC limit</li> </ul>
<b>ARP Operation</b>	<ul style="list-style-type: none"> <li>■ Support ARP binding</li> <li>■ Support ARP limit</li> <li>■ Support ARP guard</li> <li>■ Support Anti ARP scanning</li> </ul>
<b>Flow control</b>	<ul style="list-style-type: none"> <li>■ Support HOL preventing first packet jam, semi-duplex backpressure, duplex IEEE802.3x</li> </ul>
<b>DHCP</b>	<ul style="list-style-type: none"> <li>■ DHCP server, client, snooping, option82, relay</li> </ul>
<b>Port Trunking</b>	<ul style="list-style-type: none"> <li>■ Support LACP 802.3ad, max 32 group trunk with max 8 ports for each trunk,</li> <li>■ Support load balance</li> </ul>

IEEE802.1x	<ul style="list-style-type: none"> <li>■ base Port, MAC, authentication</li> <li>■ Support account based on time length and traffic</li> <li>■ Support guest vlan and auto vlan</li> <li>■ Work with private client can manage P2P traffic</li> </ul>
MAB	<ul style="list-style-type: none"> <li>■ MAC Based AAA</li> </ul>
AAA	<ul style="list-style-type: none"> <li>■ RADIUS for Ipv4 and Ipv6</li> <li>■ TACACS+ for Ipv4</li> </ul>
Broadcast storm control	<ul style="list-style-type: none"> <li>■ Supports control and can set rate for broadcast</li> </ul>
IPv6	
IPv6	<ul style="list-style-type: none"> <li>■ ICMPv6, NDP, SNMP over IPv6, HTTP over Ipv6, Ipv6 Ping/tracer, Ipv6 Telnet, Ipv6 RADIUS+, Ipv6 Syslog, IPv6 SNTP, IPv6 FTP/TFTP</li> <li>■ IPv6 ACL</li> <li>■ DHCP v6</li> </ul>
Management	
Management	<ul style="list-style-type: none"> <li>■ CLI, WEB, Telnet, SNMPv1/v2c/v3 through IPv4 and IPv6</li> <li>■ RMON 1,2,3,9</li> </ul>
Console	<ul style="list-style-type: none"> <li>■ RJ-45</li> </ul>
Dual Image	<ul style="list-style-type: none"> <li>■ Dual image</li> <li>■ Dual configuration</li> </ul>
Syslog	<ul style="list-style-type: none"> <li>■ Supports</li> </ul>
classify config management	<ul style="list-style-type: none"> <li>■ Supports</li> </ul>
SSH/SSL	<ul style="list-style-type: none"> <li>■ Supports</li> </ul>
MIB interface	<ul style="list-style-type: none"> <li>■ Supports</li> </ul>
Unified management	<ul style="list-style-type: none"> <li>■ Support NMS software management</li> </ul>
Security IP security management	<ul style="list-style-type: none"> <li>■ Supports IPv4 and IPv6</li> </ul>
Cluster	<ul style="list-style-type: none"> <li>■ Support MAX 24 unites cluster</li> </ul>
SNTP/NTP	<ul style="list-style-type: none"> <li>■ Supports</li> </ul>
BOOTP	<ul style="list-style-type: none"> <li>■ Supports</li> </ul>
FTP/TFTP	<ul style="list-style-type: none"> <li>■ supports</li> </ul>

Physical	DCS-4500-26T	DCS-4500-26T-POE	DCS-4500-50T
Dimension (W×H×D)	440mm×44mm×229mm	440 x 415 x 44 mm	440 x 415 x 44 mm
Power Supply	AC: 100 V~240 V	Input AC: 100 V~240 V;	AC: 100 V~240 V
Power Consumption	≤60W	≤225W	≤90W
MTBF	>80,000 hours		
Temperature	Working 0°C~50°C, storage -40°C~70°C		
Relative Humidity	5%~95%, non-condensing		
EMC safety	FCC, CE, RoHS,		

## ■ Warranty

Limited lifetime warranty

## ■ Ordering information

Product	Description
DCS-4500-50T	L2 1000M copper switch, 46*10/100/1000M ports +4 gigabits combo(SFP/GT) ports
DCS-4500-26T	L2 1000M copper switch, 22*10/100/1000M ports +4 gigabits combo(SFP/GT) ports
DCS-4500-26T-POE	L2 1000M copper switch, 22*10/100/1000M ports +4 gigabits combo(SFP/GT) ports

## ■ Connect us

For more detail information about DCN product, contact:

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