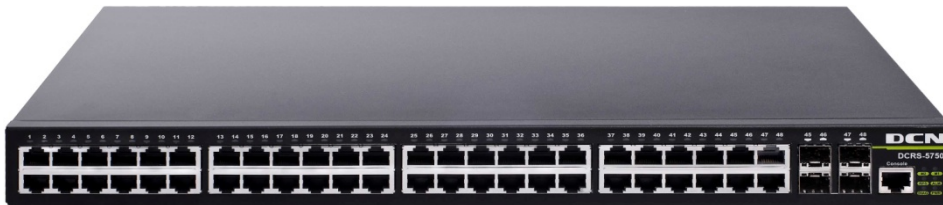


DCRS-5750 Dual Stack Ethernet Switch Datasheet



DCRS-5750-28T/28T-DC/28T-POE



DCRS-5750-52T/52T-DC/52T-POE

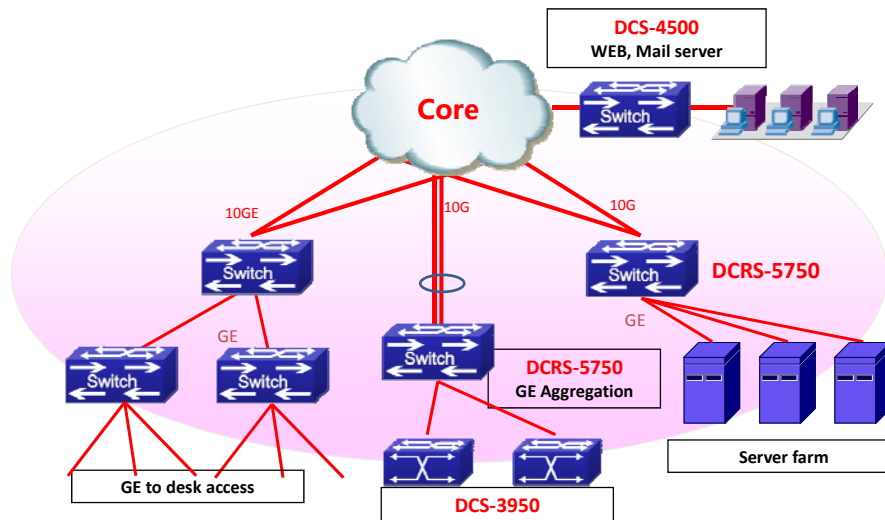
■ Product Overview

The Digital China DCRS-5750 series switches are 10G IPv6 Ethernet Layer 3 lite switch. There are 6 types switch for this family. The product family includes DCRS-5750-28T, DCRS-5750-52T, DCRS-5750-28T-DC, DCRS-5750-52T-DC, DCRS-5750-28T-POE and DCRS-5750-52T-POE. All products support IPv6 with hardware and pass the IPv6 form certification Phase II. All products comply with the RoHS standard.

The DCRS-5750 series products are ideal for aggregation layer of large networks or core layer device of small networks. The DCRS-5750 series products include over 24 GE/48GE ports and max 4 10GE ports can deployed in Data Center application, gigabit to desk application, L3 to edge application.

■ Application

DCRS-5750 Series application



■ Key Features and Benefits

➤ Performance and Scalability

DCRS-5750 series switch support wire-speed L2/L3 forwarding and high routing performance for IPv4 and IPv6 protocols.

Support up to 4 optional 10G ports, which is accomplished via a hot-pluggable 10 Gigabit XFP/SFP+ transceiver.

The DCRS-5750-28T-DC/52T-DC switch supports redundant AC and DC power supplies for different environment applications.

➤ L3 Features

The DCRS-5750 series switch delivers high-performance, hardware based IP routing.

RIPv1/v2, static and default route provide dynamic routing by exchanging routing information with other Layer 3 switches and routers.

➤ Powerful Multicast

The DCRS-5750 support abundant multicast features. The product support rich multicast features such as IGMPv1/v2/v3 and snooping etc. As the rich application experience, the product support multicast vlan register and multicast receive control and illegal multicast source detect functions.

➤ Easy high reliability network

MRPP is Multi-layer Ring Protection Protocol, which is DCN's private fast Ethernet ring protocol. Comparing to spanning tree protocol, it has advantages of fast convergence, simple

protocol calculation, little system resources cost, clear networking idea and so on, which can improve the reliability of Ethernet network operation.

VRRP is a high reliability protocol for network, which can help customer network increase network reliability and upgrade network more smoothly.

➤ **Comprehensive QoS**

8 queues per port enable differentiated management of up to 8 traffic types.

Traffic is prioritized according to IEEE802.1p, DSCP, IP precedence and TCP/UDP port number, giving optimal performance to real-time applications such as voice and video.

Bi-directional rate-limiting, per port or traffic class, preserves network bandwidth and allows full control of network resources.

➤ **Expedient Management**

DCRS 5750 series support DDM (Digital Diagnostic Monitor), which makes the detailed digital diagnostic function standard in SFF-8472 MSA. DDM is more requested by carrier users.

DCRS 5750 series support OAM to improve the effectively management mechanism, which greatly extends Ethernet application to Metropolitan Area Network and Wide Area Network by implementing OAM on Ethernet

➤ **Enhanced Security**

IEEE 802.1X port-based access control and MAC-based access control ensure all users are authorized before being granted access to the network.

Access Control Lists (ACLs) can be used to restrict access to sensitive network resources by denying packets based on L2/L3/L4 headers information. And for some service is based on time, the product can support time based ACL to match the requirement.

Secure Shell (SSH) encrypts network management information via Telnet providing secure network management.

RADIUS Authentication enables centralized control of the switch and restricts unauthorized users from altering the configuration of the switch.

➤ **POE support**

With the RPS(Remote Power Supply) connect, the DCRS-5750-28T-POE/52T-POE can support POE (Power Over Ethernet) technical and connect to wireless AP, IP phone and Network Camera.

The DCRS-5750-28T-POE/52T-POE can support 24/48 port POE at same time and the MAX 15.4W power of each port with RPS support. The product can define the power of each port to save the power and set port priority for each port.

➤ **Abundant IPv6 Support**

The DCRS-5750 series switch supports IPv6 routing in hardware for maximum performance. As more network devices growing and the need for larger addressing and higher security become critical, the DCRS-5750 series switch will be a right product to meet the requirement. The DCRS-5750 passed IPv6 form Phase II certificate is the best proof of the application.

■ **Specification**

Attributes	DCRS-5750-28T/-DC/-POE	DCRS-5750-52T/-DC/-POE	
Ports	24 10/100 /1000 Ethernet Ports with POE , Include 4 COMBO (SFP/GT) 2 slots and max 4 10GE,	48 10/100/1000 Ethernet Ports Include 4 COMBO (SFP/GT) 2 slots and max 4 10GE	
Performance			
Switching Capability	128Gbps	176Gbps	
Throughput	96Mpps	131Mbps	
MAC Address	Max 16K	Max 16K	
VLAN Table	Max 4K	Max 4K	
ACL TABLE	Max 1k(Ingress & Egress)	Max 1k(Ingress & Egress)	
Routing Table	Max IPv4 128 & IPv6 128	Max IPv4 128 & IPv6 128	
L3 Interface	Max 256	Max 256	
Port Queues	8	8	
Physical			
Dimension (WHD)	415mm×44mm×325mm	415mm×44mm×325mm	
Relative Humidity	5% ~ 90%, non-condensing	5% ~ 90%, non-condensing	
Operating Temperature	0°C ~ 50°C	0°C ~ 50°C	
Storage Temperature	-40°C ~ 70°C	-40°C ~ 70°C	
Power	AC: 100-240V DC: -48V R: 12VDC + 100-240VAC *DCRS-5750-28T only has AC power	AC: 100-240V DC: -48V R: 12VDC + 100-240VAC *DCRS-5750-52T only has AC power	
Power Consumption	35W for device 15.4W per port(POE)	65W for device 15.4W per port(POE)	
MTBF	>80,000 hours	>80,000 hours	
MEF Comply	Comply MEF 9,14	Comply MEF 9,14	
EMC safety	FCC, CE, RoHS,	FCC, CE, RoHS	
Main Features			
Forwarding		<ul style="list-style-type: none"> ■ Storage and forwarding 	
L1,L2 Features	VLAN Type	<ul style="list-style-type: none"> ■ 802.1Q based Vlan and support upto 4K vlan id ■ Support QinQ, selective QinQ, Flexibe QinQ ■ Support Voice vlan ■ Port based Vlan ■ MAC based Vlan upto 500 ■ IP subnet Vlan upto 256 ■ Protocol based Vlan upto 16 ■ Private VLAN ■ Support GVRP 	
		Spanning Tree	<ul style="list-style-type: none"> ■ 802.1D STP, 802.1W RSTP, 802.1S MSTP ■ Support Root guard, BPDU guard, BPDU forwarding, BPDU

		Tunnel
	Link Aggregation	<ul style="list-style-type: none"> Support LACP 802.3ad, max 14 groups trunk with max 8 ports for each trunk,
		<ul style="list-style-type: none"> Support source / destination MAC/IP based load balance
	MAC Operation	<ul style="list-style-type: none"> Support MAC binding
		<ul style="list-style-type: none"> Support MAC filter
		<ul style="list-style-type: none"> Support MAC limit per port
	Broadcast storm control	<ul style="list-style-type: none"> Support Broadcast / Multicast / Unicast Storm Control
		<ul style="list-style-type: none"> Supports control and can set rate for broadcast
	Port	<ul style="list-style-type: none"> Support VCT & DDM
		<ul style="list-style-type: none"> Support UDLD, LLDP, LLDP-MED
		<ul style="list-style-type: none"> Support 1:1 and N:1 port mirror
		<ul style="list-style-type: none"> RSPAN
		<ul style="list-style-type: none"> Jumbo Frame
<ul style="list-style-type: none"> Loopback interface 		
<ul style="list-style-type: none"> Port loop detection 		
<ul style="list-style-type: none"> Bandwidth control: At least 64Kbps step 		
<ul style="list-style-type: none"> GE combo ports could be compatible with FE SFP module 		
POE * The feature need RPS/PSU support	Support 24/48 GE ports POE	
	Support IEEE 802.3af POE	
	Support global / port POE function control	
L3 Features	<ul style="list-style-type: none"> IP Protocol (IP support both of IPv4 and IPv6) 	
	<ul style="list-style-type: none"> Default Routing, Static Routing, Black hole route, VLSM and CIDR, 	
	<ul style="list-style-type: none"> RIPv1/V2, 	
	<ul style="list-style-type: none"> VRRP, VRRP v3 	
	<ul style="list-style-type: none"> Support BFD 	
	<ul style="list-style-type: none"> ARP guard, Local ARP proxy, Proxy ARP, ARP binding, Gratuitous ARP, ARP limit 	
QOS Features	<ul style="list-style-type: none"> 8 queues per port 	
	<ul style="list-style-type: none"> Support QinQ, Selective QinQ, Flexible QinQ 	
	<ul style="list-style-type: none"> Traffic classification based on IEEE 802.1p CoS, IP Precedence, DSCP, TCP/UDP port number, Access Control List 	
	<ul style="list-style-type: none"> Supports SP, WRR, SWRR, SDWRR for scheduling 	
	<ul style="list-style-type: none"> Support flow shaping 	
Security	IEEE 802.1x	<ul style="list-style-type: none"> Port, MAC based authentication
		<ul style="list-style-type: none"> Support account based on time length and traffic
		<ul style="list-style-type: none"> Support guest vlan and auto vlan
		<ul style="list-style-type: none"> Work with private client can manage P2P traffic
	AAA	<ul style="list-style-type: none"> RADIUS for IPv4 and IPv6
		<ul style="list-style-type: none"> TACACS+ for IPv4
	ACL	<ul style="list-style-type: none"> Support 1K Access Control Lists(ACL) based on

		source/destination IP address, source/destination MAC address, IP type, TCP/UDP port number, IP precedence, time range, ToS.
		■ ACL on VLAN interface
		■ Flow redirect based on ACL
	ARP	■ Support ARP binding
		■ Support ARP limit
		■ Support ARP guard
		■ Support Anti ARP scanning
	Enhanced	■ Monitor pingSweep, and anti illegal multicast, controlled traffic
		■ Ip Source Guard support under controlled L3 forwarding block
		■ Prevent illegal multicast source and limited multicast.
■ Support DHCP Snooping, and DHCP Snooping option 82		
Multicast	■ Support IGMP v1/v2/v3 snooping	
	■ 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 & SSL 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	Multiple firmware images/ configuration files
		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, DHCP relay option 82, DHCP Snooping, and DHCP Snooping option 82		

■ **Warranty** 3 years

■ **Order Information**

Product	Description
DCRS-5750-52T	10G IPv6 Routing Switch, 44* 10/100/1000Base-T + 4 Gigabit Combo (SFP/GT) ports+2 slot, AC power supply
DCRS-5750-28T	10G IPv6 Routing Switch, 20* 10/100/1000Base-T + 4 Gigabit Combo (SFP/GT) ports+2 slot, AC power supply
DCRS-5750-52T-DC	10G IPv6 Routing Switch, 44* 10/100/1000Base-T + 4 Gigabit Combo (SFP/GT) ports+2 slot, AC+VDC redundant power supply
DCRS-5750-28T-DC	10G IPv6 Routing Switch, 20* 10/100/1000Base-T + 4 Gigabit Combo (SFP/GT) ports+2 slot, AC+DC redundant power supply
DCRS-5750-52T-POE	10G IPv6 Routing Switch, 44* 10/100/1000Base-T [POE] + 4 Gigabit Combo (SFP/GT) ports+2 slot, AC+DC+POE redundant power supply
DCRS-5750-28T-POE	10G IPv6 Routing Switch, 20* 10/100/1000Base-T [PoE] + 4 Gigabit Combo (SFP/GT) ports+2 slot, AC+DC+POE redundant power supply
DC-PSU-650	PSU power 650W, Supply DC(-48V) and PoE RPS
MRS-2XFP	2* 10G module(XFP interface) for DCRS-5750, DCRS-5960, DCRS-5980 series
MRS-2GB	2* 1G module(SFP interface) for DCRS-5750, DCRS-5960, DCRS-5980 series
MRS-2SFP+	2* 10G module(SFP+ interface) for DCRS-5750, DCRS-5960, DCRS-5980 series

■ **Connect us**

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