

DCN

Catalog

2012-2013



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Switch To New Generation

Digital China Networks Ltd (hereinafter as DCN) is a sub specialized company of Digital China Holdings with its own networking brand and intellectual property. DCN is a globalized next generation of data communication equipment manufacturer and Smart City infrastructure provider. DCN came from Lenovo Group and entered networking market in 1997. Holding "Customer-Oriented, Technology-Driven, Service Precedence", basing on independent R&D and continuous innovation, DCN provides users with intelligent, secure, integrated networking products, solutions and qualified services.

Focusing on data communication field, DCN provides abundant product series, including switching, security, application delivery, voice, wireless, storage, server etc. DCN solutions can be deployed in various areas such as LAN, WAN, MAN, wireless and broadband access network, data center etc. DCN has successfully provided services to various areas such as education, government, operator, finance, health care, military, electric power, enterprise etc. DCN has established a wide sales and service network covering all provinces in China and Europe, North America, Southeast Asia, Middle East and the CIS region.

Since 2011, DCN and EMC Corporation of the United States started strategic cooperation to put together their respective strengths and resources, to build DCN as a global leading providers of a new generation of data communication equipment.

With the new trend of convergence of urbanization and informatization, Digital China proposed convergence services-focused "smart city" strategy. DCN are accelerating the process of China's informatization as an expert of Smart City. In this process, DCN will assume full responsibility to be the mainstream equipment supplier of Digital China Smart City infrastructure construction.

R&D Strength

DCN R&D Center is formerly the Network Lab co-originated by Institute of Computing Technology, Chinese Academy of Sciences and Lenovo Corporate Research & Development. DCN R&D Center has established a consummate R&D framework consisting of hardware/software development, system evaluation and quality control, formed integrative product chain, and delivered a series of Ethernet Switch, Multi-core Firewall, wireless products, network management system and storage product. Over 55 percent of DCN total employees are dedicated to R&D, which ensures abundant technology inventory and R&D force for self-made network products, and try the best to meet DCN customers' further demand in the market.

Service And Training

Recognizing the need for users' benefit protection and customers' satisfaction improvement, DCN founded united customer service, technical support organizations and Digital China Networks College and formed standardized service quality, uniform training system to offer extensive services from technical support, training to maintenance. DCN Technology Institute is a kind of campus training center which is co-launched by DCN College and universities, institutes and other independent high educational organizations to initiate network technologies. With superior courses arrangement, reasonable teaching pattern and operational practice of DCN College, this cooperation presents a fresh training mode, trains IT interdisciplinary talent for employment market. At the same time, this institute issues authorized networking technology certificates DCSE to students who participate the study and pass the examination.

Milestones

In 2001, according to a survey report of IDC, the port number of DC brand switches sold in natural year of 2000 ranked second in Chinese market with a sum of 1100000. And DCN was considered as a network products provider with the fastest growth in China by right of a season sales increase of 33 percent.

In 2002, DCN launched the backbone routing switch.

In 2003, constructed 3S network architecture. In 2004, under the theme of "distributed security, ordered management", DCN delivered her new products based on hierarchy application for enterprise networks. DCN took the lead in introducing D2SMP (Distributed Domain Security Management Policy), annotating a brand new technology proposition for new generation networks.

July 2005, DC brand routing switches passed the IPv6 Ready Phase-1 Silver Authentication organized by international IPv6Forum. In Sep. of the same year, DC further passed the IPv6 Ready Phase II Gold Authentication, and became the first Chinese network manufacturer getting the honor.

Oct. 2006, DCN was invited by National Development and Reform Commission of P.R.C. as an industry-leading high-tech company in new generation internet networking field, to attend the 8th China High-Tech Fair. DCRS-7600 Series IPv6 10G Routing Switches was awarded Excellent Product Award in the fair.

In 2008 whole product line passed the Certificates of CE/FCC/RoHS to t for North-America, Europe and global market. MPLS VPN technology are deployed in the product line R&D and imbedded into DCNOS platform.

In 2011, DCN released the domestic highest-performance industrial Ethernet switch DCS-3028M and DCS-5028M which achieved Class A standard in power industry. At the end of this year, DCN released the industry's high performance 802.11n Wireless access point, Access Controller/WLAN Switch for hotels, schools and enterprises that enables high-definition IPTV, video-on demand and other video applications.

In 2012, DCN released 48*10G datacenter Ethernet Switch DCRS-6500 series. Targeting higher performance and better features, DCN products have been deployed in over 68 countries.

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3. Solutions

4. Switch Matrix

- All specifications are subject to change without further notice. All features with * mark will be available by firmware upgrade.

Networking by DCN

Interconnect Switches

DCRS-9800 Series Chassis Switch



DCRS-7600 Series Chassis Switch



DCRS-6000 Series Routing Switch



DCRS-5980 Series Routing Switch



DCRS-5960 Series Routing Switch



DCRS-5750 Series Routing Switch



DCRS-5650 Series Routing Switch

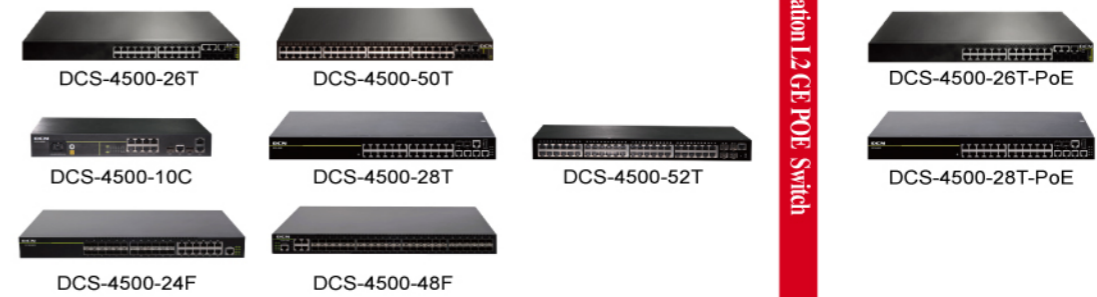


Intelligent L3 GE PoE Switch



Interconnect Switches

DCS-4500 Series Intelligent Access Switch



DCS-3950 Series Intelligent Access Switch



DCS-3650 Series Intelligent Access Switch



WLAN

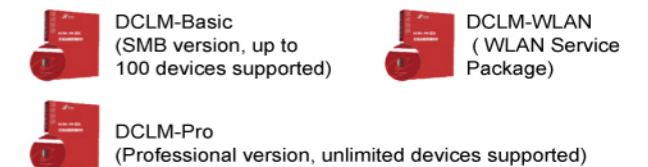
Smart Wi-Fi Access Point



Access Controller



DCLM-WLAN



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**Abundant Products
Advanced Technology**

Ethernet Switch

1



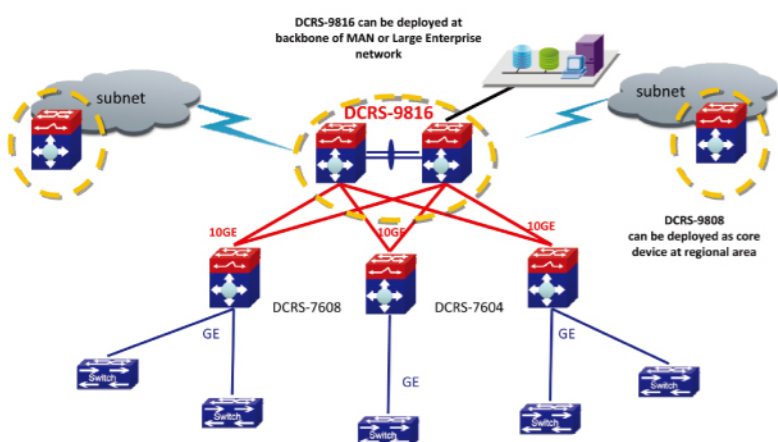
DCRS-9800

The DCRS-9800 Series is the new generation 100G platform chassis switch. With redundant and hot swappable power supply, fans and management modules, the DCRS-9800 Series ensures continuous operation and fully redundant system. The DCRS-9800 series is ideal for the backbone layer of campuses, enterprise networks and the aggregation layer of IP metro networks.



DCRS-9816 DCRS-9808

- DCRS-9800 Modules List**
 MRS-9808-M
 MRS-9800-MI
 MRS-9800-MII
 (MRS-9800-SUP+MRS-9800-FAB)
 MRS-9800-24GT-V
 MRS-9800-24GB-V
 MRS-9800-4XFP
 MRS-9800-24SFP+



Key Features and Benefits

- DCRS-9808 supports up to 192*10G ports or 192 Gigabit ports.
- DCRS-9816 supports up to 384*10G ports or 384 Gigabit ports.
- Redundant switching bus and power supply, fans and management modules.
- All parts are hot swappable.
- MRPP (Multi-layer Ring Protection Protocol), a link layer protocol applied on Ethernet loop protection which reduces network convergence time to less than 50ms.
- OSPF and BGP provide dynamic routing and graceful restart.
- Supports IPv6 routing in hardware.
- MPLS, VPLS/L3 MPLS-VPN.
- PIM-DM, PIM-SM, PIM-SSM, DVMRP multicast routing protocols, IGMP proxy and MVR (Multicast VLAN Register) make multicast application disposed easily and flexibly.

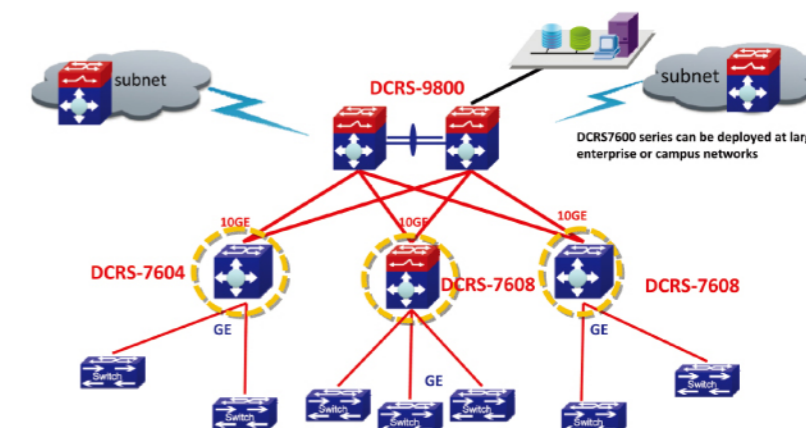
DCRS-7600

The DCRS-7600 series Chassis modular core switches is the wise choice for the integrated service networks. With redundant and hot swappable power supply, fans and management modules, the DCRS-7600 Series ensures continuous operation and fully redundant system. The DCRS-7600 series is ideal for the backbone layer of campuses, enterprise networks and the aggregation layer of IP metro networks.



DCRS-7608E DCRS-7604E/7604E-DC

- DCRS-7600 Modules List**
 MRS-7608E-MI
 MRS-7608E-MII
 MRS-7604E-M4GX24TX
 MRS-7604E-M1XFP12GX12GB
 MRS-7604E-M1XFP12GX12GT
 MRS-7600E-12GX12GB
 MRS-7600E-2XFP12GX12GB
 MRS-7600E-12GX12GT
 MRS-7600E-4XFP
 MRS-7600E-2XFP24GB12GT
 MRS-7600E-2XFP12GX12GT
 MRS-7600E-48GB
 MRS-7600E-48GT



Key Features and Benefits

- DCRS-7604 supports up to 13 *10G ports or 188 (48*3+44) Gigabit ports or 188 10/100Mbps Base-T.
- DCRS-7608 supports up to 32 *10G ports or 384 (48*8) Gigabit ports.
- Redundant Switching bus and power supply, fans and management modules.
- All parts are hot swappable.
- OSPF and BGP provide dynamic routing and graceful restart.
- Supports IPv6 routing in hardware.
- PIM-DM, PIM-SM, PIM-SSM, DVMRP multicast routing protocols, IGMP proxy and MVR (Multicast VLAN Register) make multicast application disposed easily and flexibly.
- MRPP (Multi-layer Ring Protection Protocol), a link layer protocol applied on Ethernet loop protection which reduces network convergence time to less than 50ms.

DCRS-6500-52X

DCRS-6500-52X is high performance Layer 3 10G Ethernet Switch, with 48 10G SFP+ ports and 4 QSFP+ 40G ports. With great and reliable performance, modular and redundant design, advanced and abundant features, DCRS-6500-52X is ideal for high density 10G aggregation layer of datacenter, carrier, MAN and WAN network.



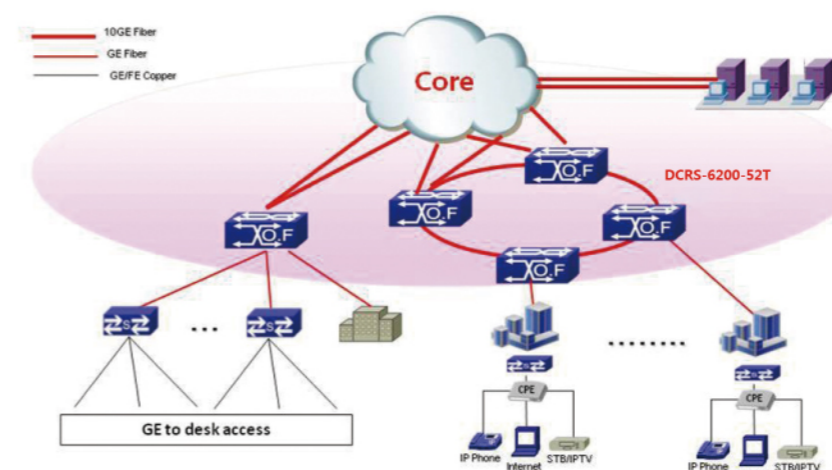
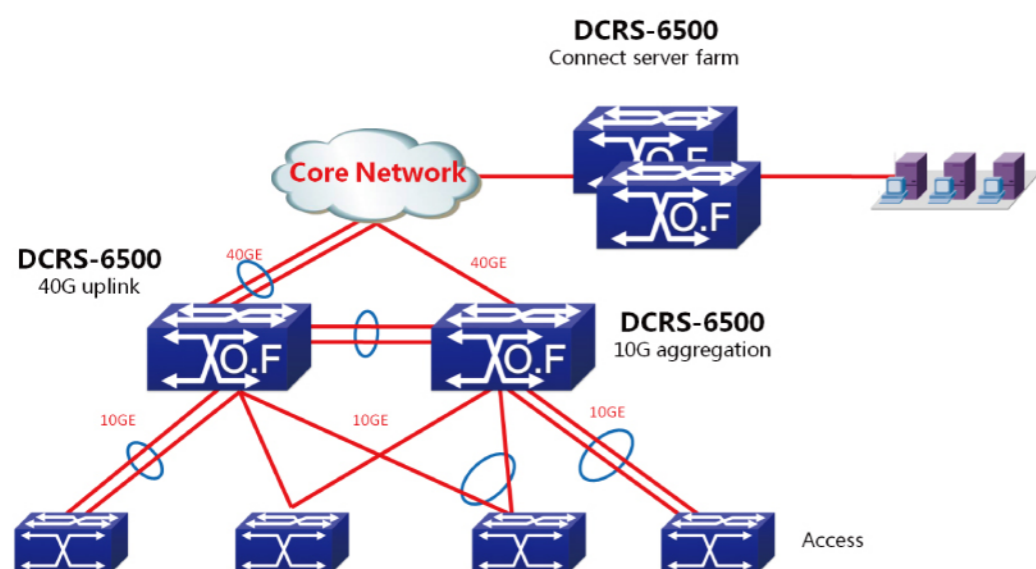
DCRS-6500-52X

DCRS-6200-52T

DCRS-6200-52T is Layer 3 Gigabit Ethernet Datacenter Switch, with 48 Gigabit Ethernet ports and 4 SFP+ 10G ports. With great and reliable performance, modular and redundant design, advanced and abundant features, DCRS-6200-52T is ideal for access or aggregation layer of datacenter, carrier and MAN network.



DCRS-6200-52T



Key Features and Benefits

- 48 * 10G SFP+ ports and 4 * QSFP+ 40G ports.
- 1.28T bps switching capacity, high density of 10G aggregation.
- Physical redundant design: modular power supply and modular fans.
- MRPP(Multi-layer Ring Protection Protocol), link layer fast ring protection, convergence time to less than 50ms.
- OSPF and BGP provide dynamic routing and graceful restart.
- Rich multicast features such as PIM-DM, PIM-SM, PIM-SSM, DVMRP and IGMP, MVR.
- Abundant MPLS features: LDP, VPLS, MPLS, MPLS VPN, MPLS-TE*.
- Support IPv6 routing in hardware and full-scale IPv6 protocols.
- Professional Datacenter Features, FCoE, TRILL, IEEE DCB, IEEE VEPA, VSF *.

Key Features and Benefits

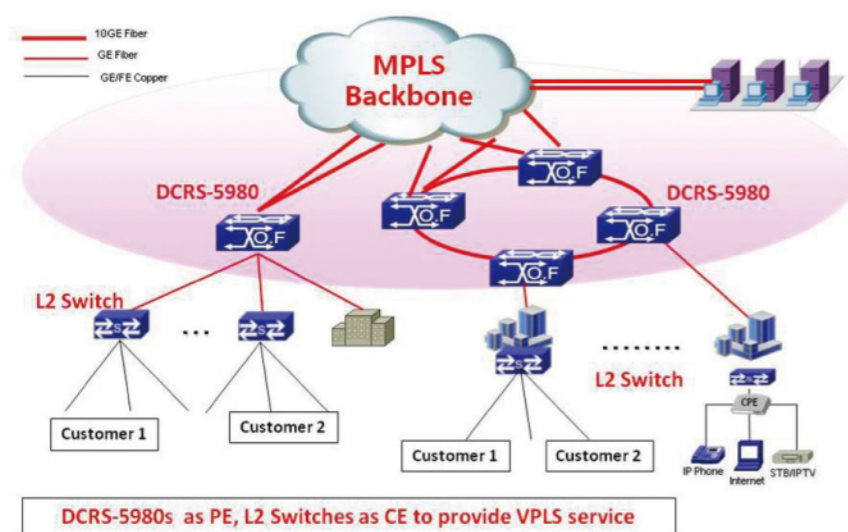
- 48 * 10/100/1000Base-TX ports and 4 * 10G SFP+ ports.
- Physical redundancy design: modular power supply and modular fans.
- Abundant MPLS features: LDP, VPLS, MPLS, MPLS VPN.
- OSPF and BGP provide dynamic routing and graceful restart.
- MRPP(Multi-layer Ring Protection Protocol), link layer fast ring protection, convergence time to less than 50ms.
- IPv6 Ready Phrase II and DHCPv6 certificated.
- Support IPv6 routing in hardware and full-scale IPv6 protocols.
- MPLS, L3 MPLS-VPN.
- PIM-DM, PIM-SM, PIM-SSM, DVMRP multicast routing protocols, IGMP proxy and MVR (Multicast VLAN Register) make multicast application disposed easily and flexibly.

DCRS-5980

The DCRS-5980 series is Gigabit Ethernet Layer 3 switches with 20/44 Gigabit Ethernet ports, 4 combo Gigabit Ethernet RJ-45/SFP ports and dual slots for optional 10G modules with max 4 10G Ethernet ports. The DCRS-5980 series is ideal for aggregating servers or for aggregating access switches in the distribution layer of three-tier networks. It is also an excellent choice as a core switch for enterprise customers.



DCRS-5980-28T-DC/28T-POE
DCRS-5980-52T-DC/52T-POE



Key Features and Benefits

- 20/44 GE, 4 combo GE RJ-45/SFP ports and dual slots for optional 10G modules with max 4 10GE.
- The DCRS-5980 series supports both AC and DC power supplies.
- MRPP (Multi-layer Ring Protection Protocol), a link layer protocol applied on Ethernet loop protection which reduces network convergence time to less than 50ms.
- OSPF and BGP provide dynamic routing and graceful restart.
- Hierarchical VPLS (H-VPLS), Virtual Private LAN Service (VPLS).
- The DCRS-5980 series supports IPv6 routing in hardware and full-scale IPv6 protocols.
- MPLS, L3 MPLS-VPN .
- PIM-DM, PIM-SM, PIM-SSM, DVMRP multicast routing protocols, IGMP proxy and MVR (Multicast VLAN Register) make multicast application disposed easily and flexibly.
- MAC-in-MAC as IEEE 802.1ah-2008 offers complete separation of customer and provider domains.

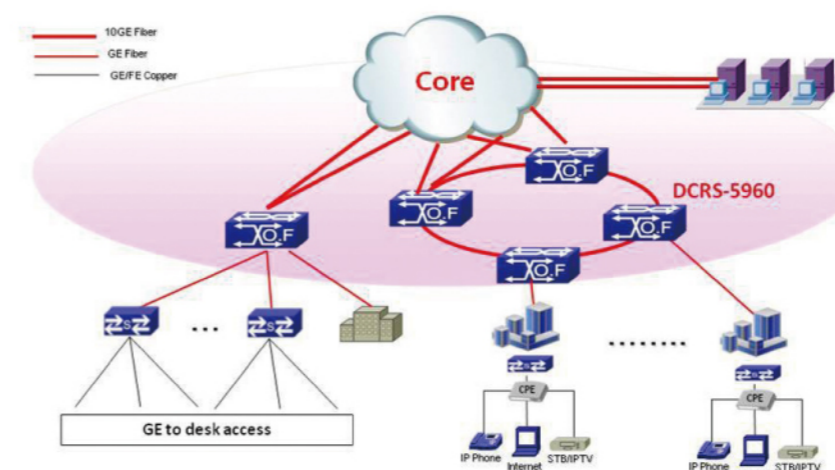
DCRS-5960



DCRS-5960-28F-DC
DCRS-5960-52F-DC
DCRS-5960-28T/28T-R/28T-POE
DCRS-5960-52T/52T-R/52T-POE

DCRS-5960 series is L3 managed Ethernet switch with POE and AC/DC power supply. With the abundant feature and flexible type configuration, DCRS-5960 can be recommend to deploy in Enterprise Core networks or MAN aggregation Layer.

DCRS-5960 F series is an unique Full-Fiber Ethernet switch. Specially for popular FTTX+LAN solution, with AC/DC power supply. With the highest density for SFP slots and L3 features, DCRS-5960 F series had been deployed in plenty of FTTX project all over the world.



Key Features and Benefits

- The DCRS-5960 series supports both AC and DC power supplies.
- RIPv1/v2, OSPF, BGP4 Routing supported.
- MRPP (Multi-layer Ring Protection Protocol), a link layer protocol applied on Ethernet loop protection which reduces network convergence time to less than 50ms.
- IPv6 Ready Phrase II and DHCPv6 certificated.
- OSPF and BGP provide dynamic routing and graceful restart.
- MPLS, L3 MPLS-VPN.
- PIM-DM, PIM-SM, PIM-SSM, DVMRP multicast routing protocols, IGMP proxy and MVR (Multicast VLAN Register) make multicast application disposed easily and flexibly.

DCRS-5750

The DCRS-5750 series switches are 10G IPv6 Ethernet Layer 3 lite switch. All products support IPv6 with hardware and pass the IPv6 forum certification Phase II. The DCRS-5750 series products can be deployed in Data Center application, gigabit to desk application, L3 to edge application.



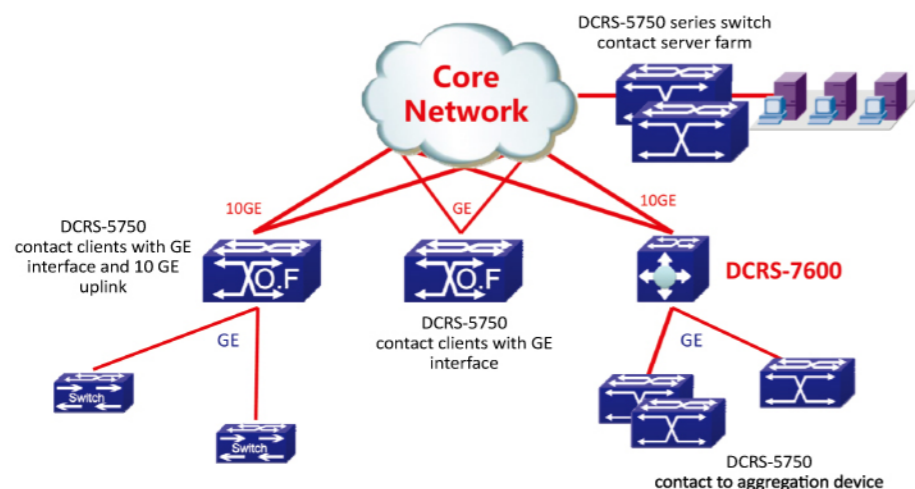
DCRS-5750-28F/28F-DC
DCRS-5750-52F-DC
DCRS-5750-28T/28T-R/28T-POE
DCRS-5750-52T/52T-R/52T-POE

DCRS-5650

DCRS-5650 series switch is L3 Fast Ethernet switch which meets the requirements of security and intelligent networks for education institutes, governments, carriers, enterprises, and industries. It can be the access device for large networks, as well as the collective layer device for buildings or core switch for small and medium networks.

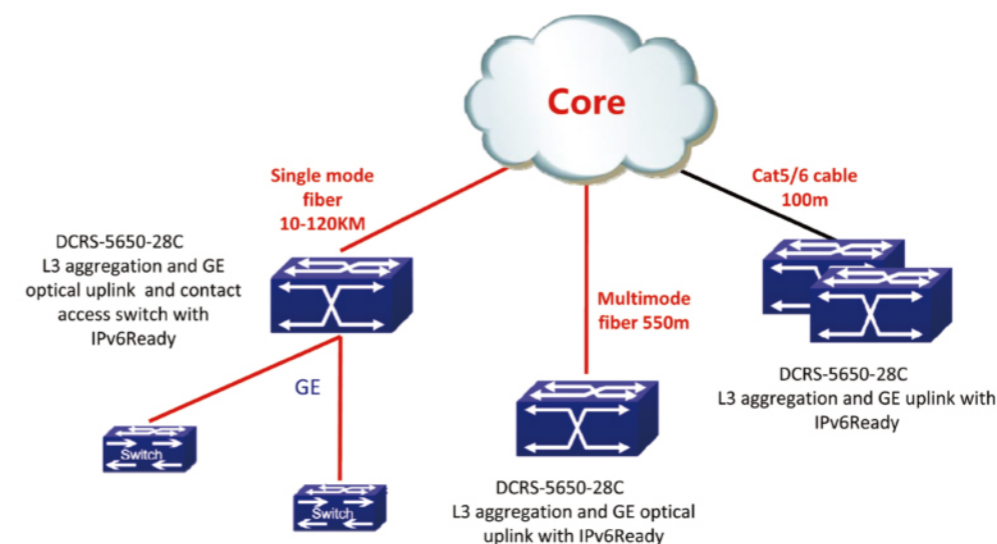


DCRS-5650-28C



Key Features and Benefits

- MRPP (Multi-layer Ring Protection Protocol), a link layer protocol applied on Ethernet loop protection which reduces network convergence time to less than 50ms.
- RIPv1/v2, static routing.
- Supports IPv6 routing in hardware.
- Rich multicast features such as IGMPv1/v2/v3 snooping. Multicast VLAN Registration (MVR) with VLAN and Trunk association, and multicast receiver/sender control and illegal multicast source detect functions.
- DDM, VCT are more requested by carrier users. OAM to improve the effectively management mechanism.
- Support QinQ, Selective QinQ, Flexible QinQ.



Key Features and Benefits

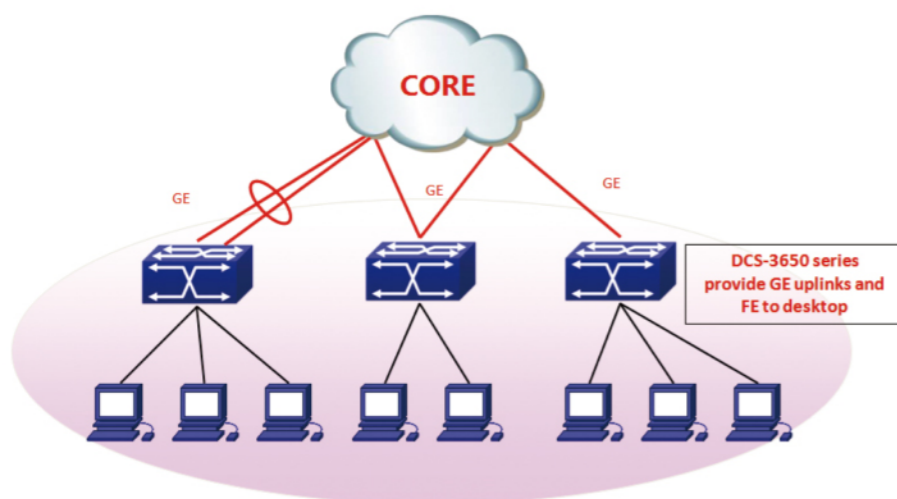
- The DCRS-5650 series support up to 4 *GE Combo ports and 24 10/100Base-T ports.
- IPv4 and IPv6 dual stack certification Phase II.
- Dynamic routing protocol support such as RIP, OSPF, BGP, PBR etc.
- Support high availability features protect network and device safety.
- Multiservice feature for different customers include VLAN, QOS etc.
- More security ability help customer construct more security network like 802.1X based AAA, radius and Tacacs+ support.
- SNMP, TELNET, CLI, HTTPS etc.

DCS-3650

DCS-3650 series is L2 fast Ethernet switch with the good cost-efficiency but provide redundant features to meet the customer requirements from Enterprise and MAN access. The product is designed for IPv4 and IPv6 dual stack network. With the abundant IPv6 features, the product is ideal for next generation network.



DCS-3650-8C/8C-POE
DCS-3650-26C



Key Features and Benefits

- 4K 802.1Q VLANs, Port Based VLAN, 255 GVRP VLANs.
- STP, RSTP, MSTP based on 802.1D, 802.1W, 802.1S.
- Authentication, Authorization, Accounting by Radius and TACACS+.
- Multi-level CLI, CL Classification.
- Rich multicast features such as IGMPv1/v2/v3 snooping. Multicast VLAN Registration (MVR) with VLAN and Trunk association, and multicast receiver/sender control and illegal multicast source detect functions.
- Traffic classification based on IEEE 802.1p CoS, IP Precedence, DSCP, TCP/UDP port number, Access Control List. 4 Queues, SP+WRR.
- DHCP server/client, DHCP Snooping, DHCP relay option 82.
- IP Source Guard.

**Abundant Products
Advanced Technology**

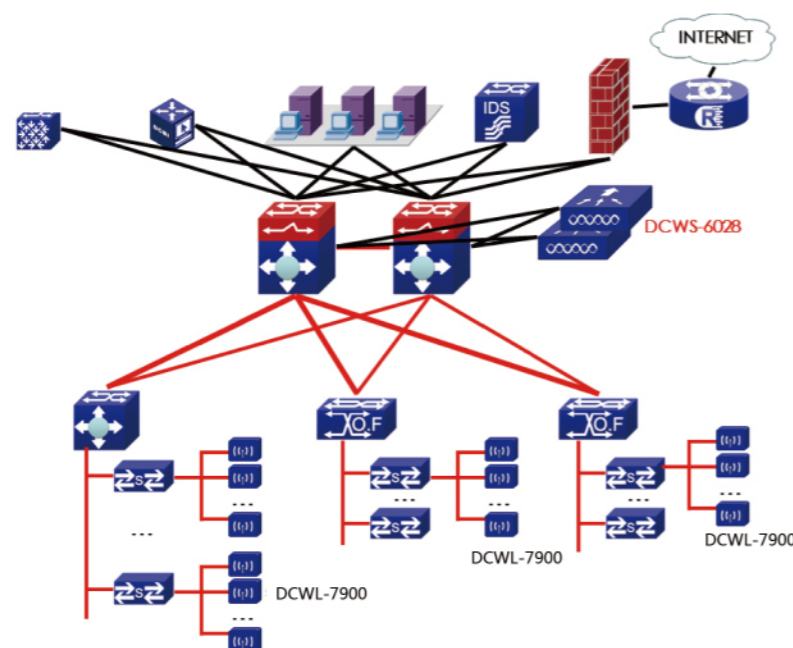
WLAN Products

DCWL-7900

DCWL- 7900 Series, the industry' s high performance 802.11n access point, delivers ultra-high speed, reliable and longest-range connectivity. It' s also the only 802.11n product purpose-built for hotels, schools and enterprises that enables high-definition IPTV, video-on demand and other video applications while supporting VoIP and data applications for guests and employees.



DCWL-7942AP DCWL-7952AP
DCWL-7962AP



Key Features and Benefits

- Advanced smart antenna array and Quality of Service (QoS) technology combine to deliver the industry' s most reliable and highest performing 802.11n system available.
- Concurrent support for high-definition IP video, voice and data.
- High-gain antenna finds the best path for any given transmission allowing unprecedented support for picture perfect high-definition video, crystal clear voice and high speed data.
- Standalone or controller-based, traffic is not forced through the controller eliminating any single point of failure or performance bottleneck.
- The DCWL-7900 Series gives enterprises protection over their wireless investments by enhancing performance and range for legacy 802.11a/b/g clients.
- Support for standard 802.3af/802.3at power over Ethernet allows enterprises to use existing PoE switches without costly upgrades.

Specification

Physical Characteristics

Model	DCWL- 7942AP	DCWL-7952AP	DCWL-7962AP
10/100 /1000Base-T	1		
PoE	802.3af/802.3at		
Power	External Power adapter Input: 110~240V AC Output: 12V DC, 1.5A		
Power Consumption	9.9W	9.9W	12.3W
Antenna	3 detachable 5dBi Omni-Antenna RP-SMA connector		
Operating Temperature	32°F(0°C)~131°F (55°C)		
Operating Humidity	5% ~95% non-condensing		

Software Characteristics

Model	DCWL-7942AP	DCWL-7952AP	DCWL-7962AP
Standards	802.11bgn	Dual-Band 802.11bgn or 802.11an	Dual-Band 802.11bgn and 802.11an
Frequency Band	IEEE 802.11b, 802.11g, 802.11n: 2.4 – 2.484 GHz N/A IEEE 802.11a/n : 5.15 – 5.85 GHz		
Output Power	100mW(20dBm)	100mW(20dBm)	100mW(20dBm)
Simultaneous VoWLAN Clients	Up to 10	Up to 10	Up to 20
BSSID	Up to 16	Up to 16	Up to 32
Wireless Security	WEP(WEP64, WEP128,WEP152), WPA, 802.11i		

Product Ordering Information

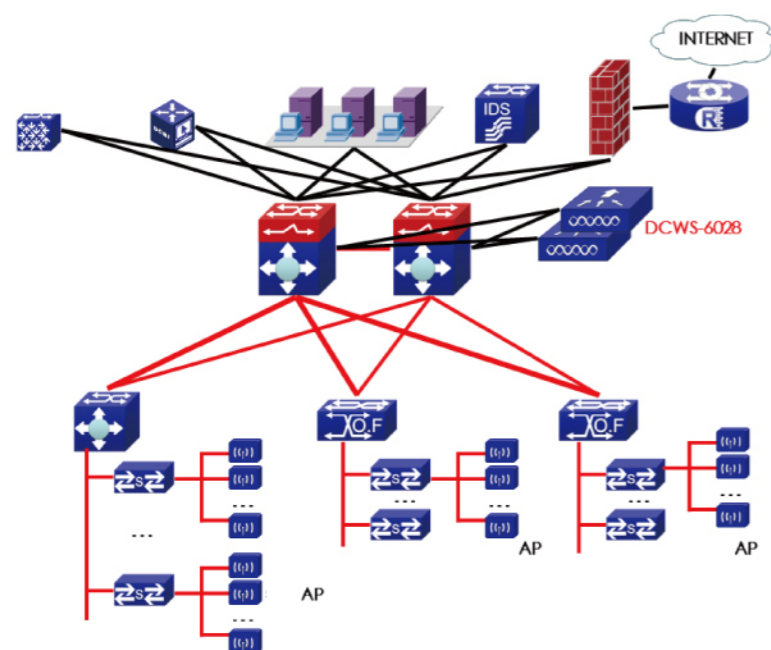
Model	Description
DCWL- 7942AP	DCN 802.11n Indoor AP
DCWL- 7952AP	DCN 802.11bgn/802.11a Dual Band Single Radio Indoor AP
DCWL- 7962AP	DCN 802.11bgn & 802.11a Dual Band Dual Radio Indoor AP
DCWL-MK10	AP mounting kit for DCN AP
DCWL-PoEINJ-G	1-port Gigabit 803.3af PoE injector

DCWS-6028

DCN Wireless Access Controller DCWS-6028 is the enterprise-class Smart Wireless LAN system. DCWS-6028 easily integrates with network, security and authentication infrastructure already in place and is easily configured through web GUI. DCN Smart Wi-Fi access points automatically are discovered and are configured by DCWS-6028.



DCWS-6028



Key Features and Benefits

- Supporting up to 256 APs and 32 WLANs per device, DCWS-6028 can easily serve the largest campus deployments.
- Flexible deployment options.
- DCWS-6028 interacts with existing network and security infrastructure and provides dynamic RF management across APs to eliminate AP placement issues.
- Combines network management, dynamic RF management and AP control within a low-cost solution Advanced WLAN features and functions.
- Role-based user policies, WLAN groupings, internal authentication database, rogue AP detection and client thresholds per AP.

Specification

Physical Characteristics

Model	DCWS-6028
Dimension	440mm X 324mm X 44mm
Ethernet Ports	24 ports, auto MDX, auto-sensing 10/100/1000 Mbps, RJ-45
	4 10/100/1000 Mbps, Fiber, SFP connector
Management Port	2 slots, support up to 4 10Gbps
Power	1 console port(RJ-45)
	110 – 240V AC Universal, IEC 320 connector DC RPS(-48V)
Power Consumption	130W
Operating Temperature	32°F (0°C) – 131°F (55°C)
Operating humidity	5% – 90% non-condensing

Software Characteristics

Model	DCWS-6028
Default Managed APs	32
Max. Managed APs	256
Concurrent Stations	10K
VLAN	4K
ACL	4K
MAC address table	32K
AP discovery & control	Layer-2 or Layer-3
	AP discover AC automatically
	AP download firmware from AC automatically
	AP download configuration from AC automatically
Roaming	Roaming within AC
	Roaming between ACs
	Key Cache roaming
IPv6	IPv4/V6, ISATAP, 6to4 Tunnel, IPv4 over IPv6 Tunnel, DHCPv6, DNSv6, ICMPv6, ACLv6, TCP/UDP for IPv6, SOCKET for IPv6, SNMP v6, Ping /Traceroute v6, RADIUS, Telnet/SSH v6, FTP/TFTP v6, NTP v6, IPv6 MIB support for SNMP, VRRP for IPv6, IPv6 QoS, Static Routing, OSPFv3
Authentication	MAC Filtering
	802.1x Authentication (EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-MD5)
	Captive Portal
	Local Authentication(5000 user entries)

Specification

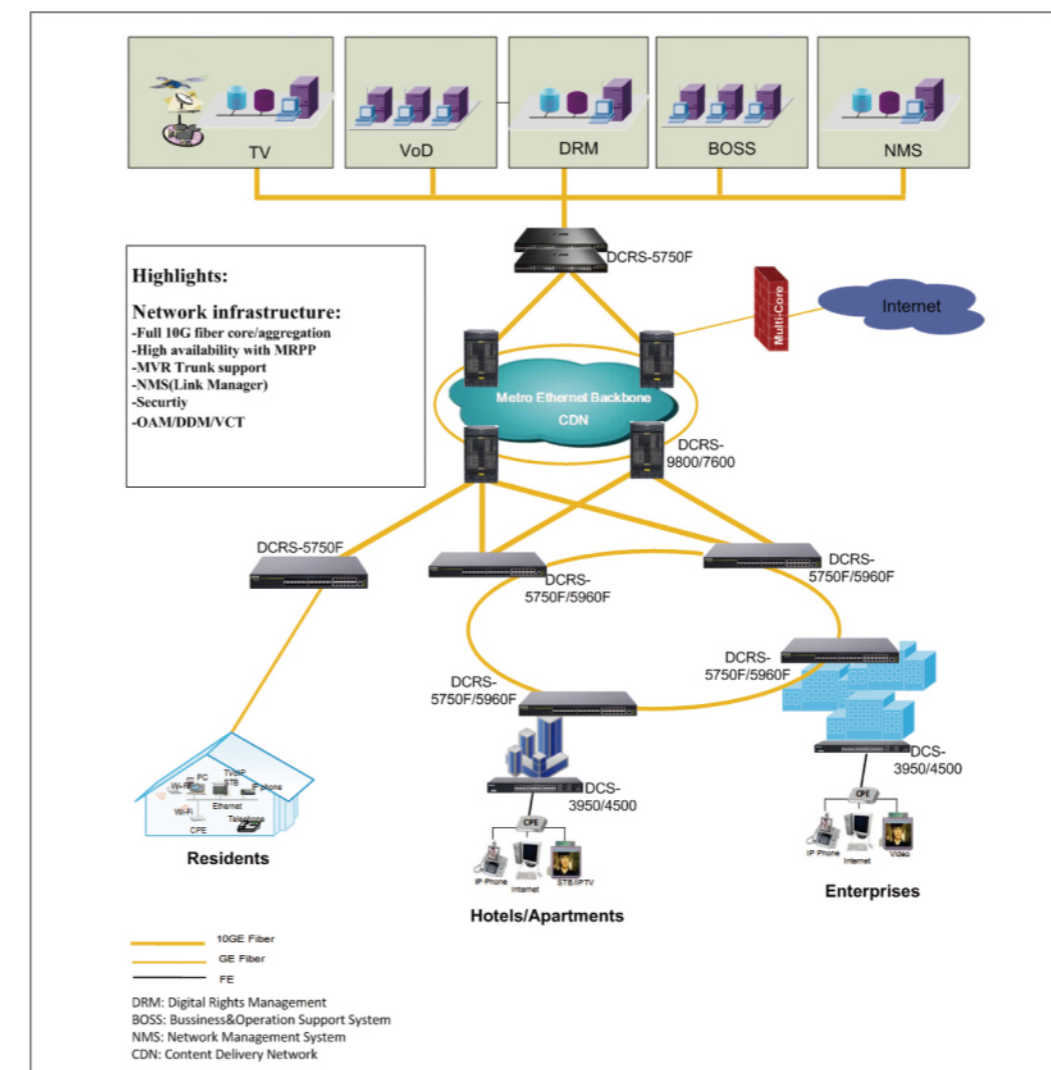
Software Characteristics

Model	DCWS-6028
AAA	Radius Client
	LDAP
	Radius Server
	Local Authentication(5000 user entries)
	accounting server
802.11 Security	BSSIDs(Up to 64)
	SSID Hidden
	802.11i (802.1x Authentication and PSK Authentication)
	WEP (WEP64/WEP128/WEP152), WPA, WPA2
	TKIP
WIDS/WIPS	Rogue AP detection
	DDos
	DoS attack prevention
	Rogue DHCP Server detection
	Password guessing protection
	Rate limiting
	Layer-3 (IP address based ACL)
	L2 client isolation
	Load balance based on throughput
	Support RF power adjust automatically/manually

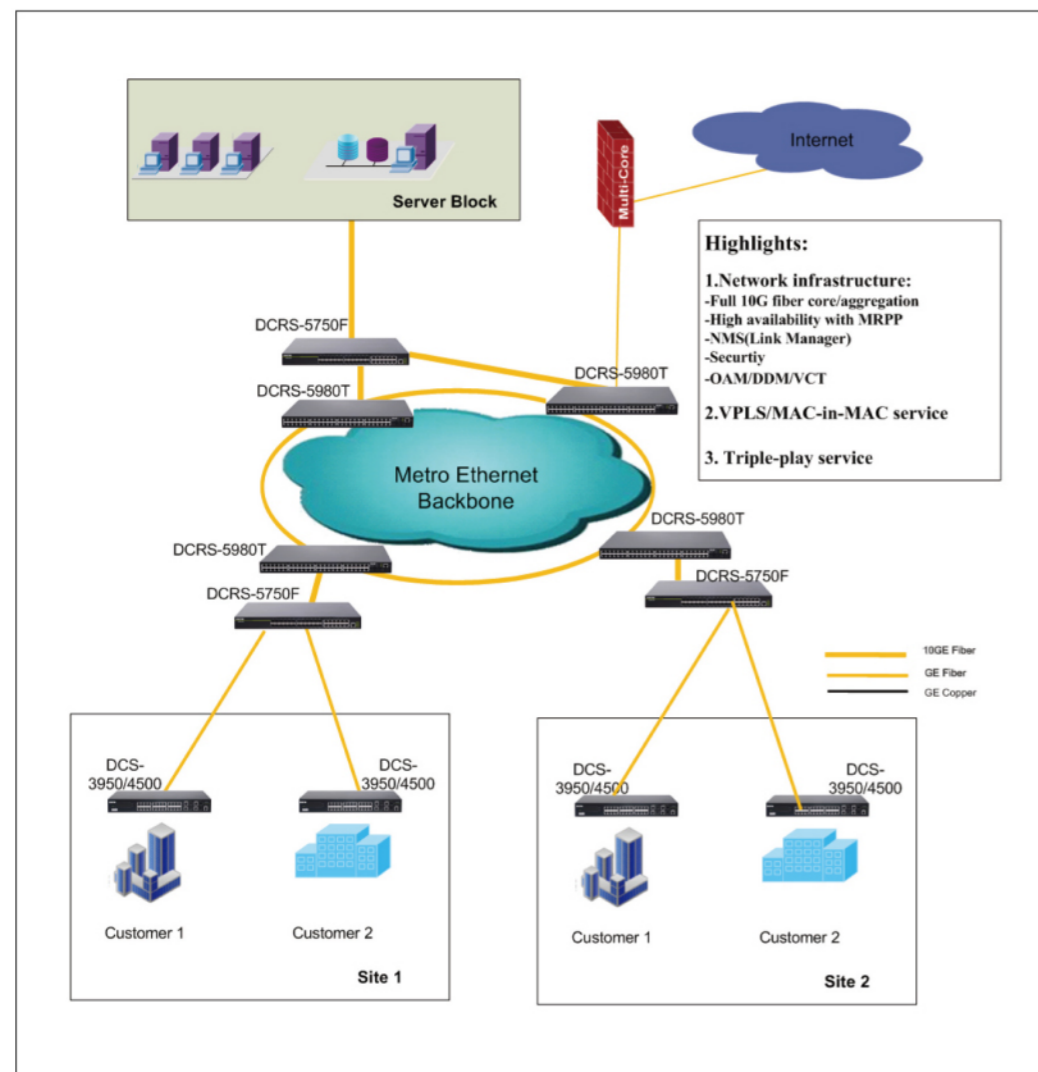
Product Ordering Information

Model	Description
DCWS-6028	DCN Smart Wireless Access Controller(24GT/4GB, 4SFP+)
DCWS-L32	DCN Upgrade License (Work with DCN AC, 32Apsupgrade license)
DCWS-L64	DCN Upgrade License (Work with DCN AC, 64Apsupgrade license)

DCN Triple Play Solution



DCN MAN Solution



L2 Box	DCS-3650 Series		DCS-3950 Series					DCS-4500 Series						
	DCS-3650-8C/8C-POE	DCS-3650-26C	DCS-3950-10C/10C-R/10C-DC	DCS-3950-26C	DCS-3950-28C/28C-R/28C-DC	DCS-3950-28C-POE	DCS-3950-52C	DCS-4500-10C	DCS-4500-26T	DCS-4500-28T	DCS-4500-26T-POE	DCS-4500-28T-POE	DCS-4500-50T	DCS-4500-52T
Switch Classification														
Layer 2	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Connectivity														
10/100Base-TX, fixed	8	24	8	24	24		48							
10/100Base-TX PoE, fixed	(8)					24								
10/100/1000Base-T, fixed						2		8	22	24			46	48
10/100/1000Base-T PoE, fixed											22	24		
Dual personality ports(Fixed RJ45 1000Base-T or SFP Open slots)	1	2	2	2	4	2	4	2	4	2	4	2	4	
Open SFP slot (GbE)									2			2		4
Performance														
Switch fabric speed,Gbps	3.6	8.8	5.6	8.8	12.8	12.8	17.6	20	52	56	52	56	100	104
Forwarding Rate (Mpps)	2.7	6.6	4.2	6.6	9.6	9.6	13.2	15	39	42	39	42	75	78
Packet buffer,Bytes	384K	384K	384K	384K	384K	1M	1M	1.5M	0.5M	1.5M	0.5M	1.5M	0.5M	1.5M
Jumbo Frame	2048	2048	2048	2048	2048	1632	1632	12K	9K	12K	9K	12K	9K	12K
MAC address Table	8K	8K	8K	8K	8K	8K	16K	8K	8K	16K	8K	16K	8K	16K
Multicast MAC address Table	4K	4K	4K	4K	4K	255	255	1K	256	1K	256	1K	256	1K
ACL Table	512	512	1K	1K	1K	1K	1K	1K	512	1K	512	1K	512	1K
Resilience and availability														
IEEE 802.1D STP/802.1w RSTP/802.1s MSTP	*	*	*	*	*	*	*	*	*	*	*	*	*	*
IEEE 802.3ad LACP(max # trunks/links per trunk)	14/8	14/8	14/8	14/8	14/8	8	8	128/8	32/8	128/8	32/8	128/8	32/8	128/8
Virtual Cable Testing	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DDM	*	*	*	*	*	*	*	*	*	*	*	*	*	*
LLDP	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Loop guard	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Traffic control														
802.1Q VLANs	4k	4k	4k	4k	4k	4k	4k	4k	4k	4k	4k	4k	4k	4k
Port-based VLAN	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Protocol-based VLAN	*	*	*	*	*	*	*	*	*	*	*	*	*	*
IP subnet based VLAN	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Voice VLAN	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Mac VLAN	*	*	*	*	*	*	*	*	*	*	*	*	*	*
LACP algorithm of source/destination IP	*	*	*	*	*	*	*	*	*	*	*	*	*	*
QVRP	*	*	*	*	*	*	*	*	*	*	*	*	*	*
802.1ad Vlan Stacking (QinQ)	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Selective QinQ	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Security														
Layer 2 MAC filtering	*	*	*	*	*	*	*	*	*	*	*	*	*	*
BPDU Tunnel	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Login authentication and authorization by RADIUS and TACACS+	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TACACS+ accounting/ auditing	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SSH v1/v2	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHCP/DHCPv6 snooping	*	*	*	*	*	*	*	*	*	*	*	*	*	*
IP/IPv6 Source Guard	*	*	*	*	*	*	*	*	*	*	*	*	*	*
port security	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quality of Service														
802.1p Priority Queues per Port	4	4	4	4	4	4	4	8	4	8	4	8	4	8
802.1p Queuing method	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Trusted COS/TOS/IP Precedence/DSCP/Port	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Broadcast Storm Control	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Rate Limiting, port based	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Queuing method(SP/WRR/ SF -WRR)	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Layer 2 & Layer 3 Multicast														
Multicast VLAN	*	*	*	*	*	*	*	*	*	*	*	*	*	*
IGMP Query	*	*	*	*	*	*	*	*	*	*	*	*	*	*
IGMP Snooping (v1,v2,v3)	*	*	*	*	*	*	*	*	*	*	*	*	*	*
IGMP Snooping Fast Leave(v2,v3)	*	*	*	*	*	*	*	*	*	*	*	*	*	*
IPv6 MLD v1/v2 Snooping	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Layer 3 IPv6														
IPv4/IPv6 Dual Protocol Stack	*	*	*	*	*	*	*	*	*	*	*	*	*	*
IPv6 address	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Manageability														
Console Port	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Web Interface	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Management through console, telnet, SNMP	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TFTP/FTP	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Configuration backup and restore	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Multi-level CLI	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DNS Client	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHCP Client/Relay/Server	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHCP relay per VLAN	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHCP option 43/60/82	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHCPv6 option37/38	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHCPv6 Relay/Server	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NTP	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Port Mirroring	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Port Mirroring per IP/TCP/UDP	*	*	*	*	*	*	*	*	*	*	*	*	*	*
RSPAN	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ERSPAN	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MIB														
RFC 1056 TCP/IP - based MIB	*	*	*	*	*	*	*	*	*	*	*	*	*	*
RFC1213, 1157 SNMPv2c/v3 MIB	*	*	*	*	*	*	*	*	*	*	*	*	*	*
RFC1493 bridge MIB	*	*	*	*	*	*	*	*	*	*	*	*	*	*
RFC 2674 bridge MIB extension	*	*	*	*	*	*	*	*	*	*	*	*	*	*
RFC1643 ethernet MIB	*	*	*	*	*	*	*	*	*	*	*	*	*	*
RFC1757 RMON group 1,2,3,9	*	*	*	*	*	*	*	*	*	*	*	*	*	*
RFC 2925 Remote Management MIB	*	*	*	*	*	*	*	*	*	*	*	*	*	*
RFC 2233 (rfc2233) - SMIPv2 MIB	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Physical														
Dimensions (Width x Height x Depth)	282mmx44mmx178mm	443mmx44mmx230mm	282mm x 44mm x 178mm	440mmx44mmx170mm	440mmx44mmx230mm	440mmx44mmx350mm	440mmx44mmx230mm	330mmx44mmx204mm	440mmx44mmx230mm	440mm x 44mm x 230mm	440mmx44mmx230mm	440mm x 44mm x 410mm	440mmx44mmx230mm	442mm x 44mm x 220mm
Operating Temperature	0℃ ~50℃	0℃ ~50℃	0℃ ~50℃	0℃ ~50℃	0℃ ~50℃	0℃ ~50℃	0℃ ~50℃	0℃ ~50℃	0℃ ~50℃	0℃ ~50℃	0℃ ~50℃	0℃ ~50℃	0℃ ~50℃	0℃ ~50℃
Power Supply	AC	AC	AC/AC+12VDC/48VDC	AC	AC/AC+12VDC/48VDC	AC	AC	AC	AC	AC	AC	AC	AC	AC
Internal POE Power	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Electrical														
Maximum Power Consumption, Watts	≤15W/140W	≤20W	≤15W	≤30W	≤30W	≤424W	≤30W	≤24W	≤50W	≤30W	≤25W	≤400W	≤58W	≤40W

Switch To New Generation

Digital China Networks Ltd (hereinafter as DCN) is a sub specialized company of Digital China Holdings with its own networking brand and intellectual property. DCN is a globalized next generation of data communication equipment manufacturer and Smart City infrastructure provider. DCN came from Lenovo Group and entered networking market in 1997. Holding "Customer-Oriented, Technology-Driven, Service Precedence", basing on independent R&D and continuous innovation, DCN provides users with intelligent, secure, integrated networking products, solutions and qualified services.

Focusing on data communication field, DCN provides abundant product series, including switching, security, application delivery, voice, wireless, storage, server etc. DCN solutions can be deployed in various areas such as LAN, WAN, MAN, wireless and broadband access network, data center etc. DCN has successfully provided services to various areas such as education, government, operator, finance, health care, military, electric power, enterprise etc. DCN has established a wide sales and service network covering all provinces in China and Europe, North America, Southeast Asia, Middle East and the CIS region.

Since 2011, DCN and EMC Corporation of the United States started strategic cooperation to put together their respective strengths and resources, to build DCN as a global leading providers of a new generation of data communication equipment.

With the new trend of convergence of urbanization and informatization, Digital China proposed convergence services-focused "smart city" strategy. DCN are accelerating the process of China's informatization as an expert of Smart City. In this process, DCN will assume full responsibility to be the mainstream equipment supplier of Digital China Smart City infrastructure construction.



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DCN Ethernet Switch Matrix

L3 Box	DCRS-5700 Series						DCRS-5960Series						DCRS-5980 Series			
	DCRS-5750-28T/28T-DC	DCRS-5750-52T/52T-DC	DCRS-5750-28T-POE	DCRS-5750-52T-POE	DCRS-5750-28T/28F-DC	DCRS-5750-52F-DC	DCRS-5960-28T/28T-DC	DCRS-5960-52T/52T-DC	DCRS-5960-28T-POE	DCRS-5960-52T-POE	DCRS-5960-28F-DC	DCRS-5960-52F-DC	DCRS-5980-28T-DC	DCRS-5980-28T-POE	DCRS-5980-52T-DC	DCRS-5980-52T-POE
Feature / Model																
Switch Classification	Layer 3															
Connectivity	10/100/1000Base-T, fixed															
10/100/1000Base-T PoE, fixed	20	44					20	44					20	44		
Dual personality ports(Fixed RJ45 1000Base-T or SFP Open slots)	4	4	4	4	12	4	4	4	4	4	12	4	4	4	4	4
Open SFP slot (GbE)					12	44					12	44				
10G extend slot(Max 2x10GbE/ 2x1GbE interface per slot)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Performance	Switch fabric speed,Gbps															
Switch fabric speed,Gbps	128	176	128	176	128	176	128	176	128	176	128	176	128	128	176	176
Forwarding Rate (Mpps)	96	131	96	131	96	131	96	131	96	131	96	131	96	96	131	131
Packet buffer,Bytes	1M	1M	1M	1M	1M	1M	1.5M	1.5M	1.5M	1.5M	1.5M	1.5M	3M	3M	3M	3M
Jumbo Frame	9K	9K	9K	9K	10K	9K	10K	10K	10K	10K	10K	10K	12K	12K	12K	12K
MAC address Table	16K	16K	16K	16K	16K	16K	16K	16K	16K	16K	16K	16K	32k	32k	32k	32k
Multicast MAC address Table	1k	1k	1k	1k	1k	1k	4k	4k	4k	4k	4k	4k	1k	1k	1k	1k
ACL Table	1K	1K	1K	1K	1K	2K	3K	3K	3K	3K	3K	3K	8k	8k	8k	8k
Routing entries	512	512	512	512	512	512	Max 13K	Max 13K	Max 13K	Max 13K	Max 13K	Max 13K	Max 16K	Max 16K	Max 16K	Max 16K
Routing domains (IP interface)	256	256	256	256	256	256	1024	1024	1024	1024	1024	1024	1024	1024	1024	1024
VRF Number							252	252	252	252	252	252	252	252	252	252
Resilience and availability	IEEE 802.1D STP/802.1w RSTP/802.1s MSTP															
IEEE 802.1D STP/802.1w RSTP/802.1s MSTP	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
IEEE 802.3ad LACP(max # trunks/links per trunk)	128/8	128/8	128/8	128/8	128/8	128/8	128/8	128/8	128/8	128/8	128/8	128/8	128/8	128/8	128/8	128/8
Virtual Cable Testing	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DDM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
LLDP	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
VRRP	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Loop guard	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Traffic control	802.1Q VLANs															
802.1Q VLANs	4k	4k	4k	4k	4k	4k	4k	4k	4k	4k	4k	4k	4k	4k	4k	4k
Super VLAN	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
LACP algorithm of source/destination IP	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
GVRP	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
802.1ad Vlan Stacking (QinQ)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Selective QinQ	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Security	Layer 2 MAC filtering															
Layer 2 MAC filtering	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
BPDU Tunnel	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Login authentication and authorization by RADIUS and TACACS+	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TACACS+ accounting/ auditing	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SSH v1/v2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHCP/DHCPv6 snooping	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
IP/IPv6 Source Guard	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
port security	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quality of Service	802.1p Priority Queues per Port															
802.1p Priority Queues per Port	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
802.1p Queuing method	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Trusted COS/TOS/IP Precedence/DSCP/Port	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Broadcast Storm Control	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Rate Limiting, port based	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Queuing method(SP/WRR/ SP+WRR)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Layer 2 & Layer 3 Multicast	Multicast VLAN															
Multicast VLAN	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
IGMP v1,v2, v3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
IGMP Query	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
IGMP Snooping (v1,v2,v3)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
IGMP Snooping Fast Leave(v2,v3)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PIM-DM/SM/SSM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
anycast RP	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
IPv6 MLD v1/v2 Snooping	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Routing	RIP v1,v2															
RIP v1,v2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OSPF v2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
IPv6 Static Route	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
RIPng	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OSPFv3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
BGP4+	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Layer 3 IPv6	IPv4/IPv6 Dual Protocol Stack															
IPv4/IPv6 Dual Protocol Stack	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
IPv6 address	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
IPv6 Tunneling	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Manageability	Console Port															
Console Port	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Web Interface	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Management through console, telnet, SNMP	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TFTP/FTP	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Configuration backup and restore	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Multilevel CLI	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DNS Client	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHCP Client/Server/Relay	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHCP option 43/60/82	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHCPv6 option37/38	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHCPv6 Relay/Server	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NTP	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
RSPAN	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ERSPAN	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cluster	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MIB	RFC 1066 TCP/IP - based MIB															
RFC 1066 TCP/IP - based MIB	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
RFC1213, 1157 SNMPv2c/v3 MIB	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
RFC1493 bridge MIB	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
RFC 2674 bridge MIB extension	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
RFC1643 ethernet MIB	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
RFC1757 RMON group 1,2,3,9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
RFC 2925 Remote Management MIB	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
RFC 2233 (rfc2233) - SMlv2 MIB	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Physical	Dimensions (Width x Height x Depth)															
Dimensions (Width x Height x Depth)	440mm×44mm×325mm	440mm×44mm×325mm	440mm×44mm×325mm	440mm×44mm×325mm	440mm×44mm×325mm	440mm×44mm×325mm	440mm×44mm×325mm	440mm×44mm×325mm	440mm×44mm×325mm	440mm×44mm×325mm	440mm×44mm×325mm	440mm×44mm×325mm	440mm×44mm×325mm	440mm×44mm×325mm	440mm×44mm×325mm	440mm×44mm×325mm
Operating Temperature	0°C~50°C	0°C~50°C	0°C~50°C	0°C~50°C	0°C~50°C	0°C~50°C	0°C~50°C	0°C~50°C	0°C~50°C	0°C~50°C	0°C~50°C	0°C~50°C	0°C~50°C	0°C~50°C	0°C~50°C	0°C~50°C
Power Supply	AC/AC+8VDC	AC/AC+8VDC	AC+8VDC	AC+8VDC	AC/AC+8VDC	AC+8VDC	AC/AC+8VDC	AC/AC+8VDC	AC+8VDC	AC+8VDC	AC+8VDC	AC+8VDC	AC+8VDC	AC+8VDC	AC+8VDC	AC+8VDC
Internal POE Power																
Electrical	Maximum Power Consumption, Watts(not include POE Power)															
Maximum Power Consumption, Watts(not include POE Power)	≤35W	≤65W	≤35W	≤65W	≤65W	≤130W	≤35W	≤65W	≤35W	≤65W	≤65W	≤130W	≤130W	≤130W	≤180W	≤180W

L3 Chassis	DCRS-7600 Series		DCRS-9800 Series	
	DCRS-7604/DCRS-7604-DC	DCRS-7608	DCRS-9808	DCRS-9816
Feature / Model				
Switch Classification	Layer 3			
Connectivity	Management Slot			
Management Slot	Max 2	2	2	2
Business Slot	Max 3	8	8	16
10/100/1000Base-T, fixed	Max 188	Max 384	Max 192	Max 384
Open SFP slot (GbE)	Max 188	Max 384	Max 192	Max 384
10GE fixed	Max 13	Max 32	Max 192	Max 384
Performance	Switch fabric speed,Tbps			
Switch fabric speed,Tbps	1.2	2.4	>1.54	>3.1
Forwarding Rate	282Mpps	571.4Mpps	420Mpps	950Mpps
MAC Table	MAX 16K	MAX 128K	MAX 128K	MAX 128K
Routing Table	MAX 128K	MAX 128K	MAX 16K	MAX 16K
VLAN Table	4K	4K	4K	4K
Routing domains (IP interface)	1024	1024	1024	1024
Resilience and availability	IEEE 802.1D STP/802.1w RSTP/802.1s MSTP			
IEEE 802.1D STP/802.1w RSTP/802.1s MSTP	*	*	*	*
Shift between main/backup,	*	*	*	*
All hot-swappable	*	*	*	*
Redundant power supply	*	*	*	*
Power load balancing	*	*	*	*
Firmware & Configure dual fault tolerance backup	*	*	*	*
IEEE 802.3ad LACP(max # trunks/links per trunk)	128/8	128/8	128/8	128/8
DDM	*	*	*	*
VRRP	*	*	*	*
Loop guard	*	*	*	*
Traffic control	802.1Q VLANs			
802.1Q VLANs	4k	4k	4k	4k
Super VLAN	*	*	*	*
LACP algorithm of source/destination IP	*	*	*	*
GVRP	*	*	*	*
802.1ad Vlan Stacking (QinQ)	*	*	*	*
Selective QinQ	*	*	*	*
Security	BPDU Tunnel			
BPDU Tunnel	*	*	*	*
Login authentication and authorization by RADIUS and TACACS+	*	*	*	*
TACACS+ accounting/ auditing	*	*	*	*
SSH v1/v2	*	*	*	*
DHCP/DHCPv6 snooping	*	*	*	*
port security	*	*	*	*
Quality of Service (QoS) & Class of Service (CoS)	802.1p Priority Queues per Port			
802.1p Priority Queues per Port	8	8	8	8
Trusted COS/TOS/IP Precedence/DSCP/Port	*	*	*	*
Broadcast Storm Control	*	*	*	*
Queuing method(SP/WRR/ SP+WRR)	*	*	*	*
DiffServ (DSCP)	*	*	*	*
Layer 2 & Layer 3 Multicast	Multicast VLAN			
Multicast VLAN	*	*	*	*
IGMP v1,v2, v3	*	*	*	*
IGMP Query	*	*	*	*
IGMP Snooping (v1,v2,v3)	*	*	*	*
IGMP Snooping Fast Leave(v2,v3)	*	*	*	*
PIM-DM/SM/SSM	*	*	*	*
anycast RP	*	*	*	*
IPv6 MLD v1/v2 Snooping	*	*	*	*
Routing	RIP			