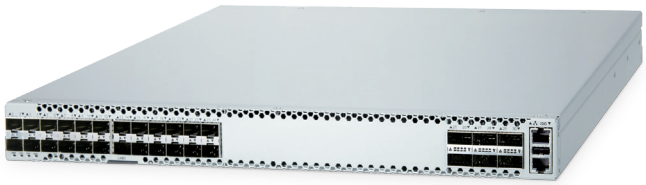
Layer 3 24-Port 10G SFP+ + 6-Port 100G QSFP28 Managed Data Center Switch



PLANET is proud to announce the launch of the **DCS-7342-24X6C**. While retaining the class-leading high-density configuration of 24-port 10GbE SFP+ and 6-port 100GbE QSFP28 interfaces, the **DCS-7342-24X6C** is built upon a radically new hardware architecture designed to overcome the physical limitations of previous platforms.

The brand-new architectural design provides significantly system capacity and the necessary flexibility for future-scale network expansions. Beyond sheer performance, the **DCS-7342-24X6C** introduces enhanced software functionality and platform readiness, ensuring that critical Layer 3 services—such as VXLAN/EVPN virtualization, BGP/IS-IS routing, and MLAG redundancy—operate with even greater efficiency and stability.

With the launch of the brand-new **DCS-7342-24X6C**, organizations can leverage these advanced hardware and software breakthroughs to build a more resilient, scalable, and ultra-high-speed Layer 3 switching infrastructure tailored for modern data centers and enterprise backbones.

Future-Ready Data Center Interconnects: Advanced L3 Routing & Virtualization

The **DCS-7342-24X6C** is a high-performance Layer 3 data center switch engineered for the most demanding high-speed, scalable environments. With a high-density configuration of **24 x 10GbE SFP+ and 6 x 100GbE QSFP28 ports**, it serves as the ultimate foundation for spine-leaf, aggregation, and core data center deployments.

- **Massive Routing Capacity**: Optimized to support up to 216K IPv4 and 108K IPv6 routing entries, facilitating expansive topologies and intensive control-plane workloads.
- **Advanced Dynamic Routing**: Full-stack support for IPv4/IPv6 protocols, including OSPFv2/v3, BGP4/BGP4+, and IS-IS, ensuring seamless inter-subnet communication.
- **Next-Gen Data Center Overlays**: Enhanced VXLAN and EVPN capabilities enable highly flexible, multi-tenant virtualized overlay networks.
- **Carrier-Grade Resilience**: Features BFD for rapid fault detection, alongside ERPS (ITU-T G.8032) for sub-15ms ring recovery and VRRP redundancy.
- **Intelligent Traffic Management**: Maximizes bandwidth efficiency via ECMP (Equal-Cost Multi-Path), PBR (Policy-Based Routing), and robust PIM-SM/SSM multicast support.

Physical Ports

- 24-Port 10G SFP+ interfaces (Port-1 to Port-24)
- 6-Port 100G/40G QSFP28 interfaces (Port-25 to Port-30)
- RJ45 to DB9 console port for switch basic management and setup
- 1-port 10/100/1000T RJ45 Management Port
- 1 x USB 2.0 Type A for USB storage device (Configuration backup and restore)

Switching

- Features Store-and-Forward mode with wire-speed filtering and forwarding rates
- IEEE 802.3x flow control for full duplex operation and back pressure for half duplex operation
- 10K jumbo frame
- 128K MAC Address Table Size
- 24MB Shared Data Buffer
- Supports ESD Protection
  - Contact Discharge 4KV DC
  - Air Gap Discharge 8KV DC
- Automatic address learning and address aging
- Support CSMA/CD protocol

Stacking Features

- Connects with stack member via 10G SFP+ and 100G QSFP28 interfaces
- Single IP address management, supporting up to 8 units stacked together
- Virtualized multiple PLANET`s DCS-7342-24X6C data center switch devices stacked into one logical device

IP Routing Features

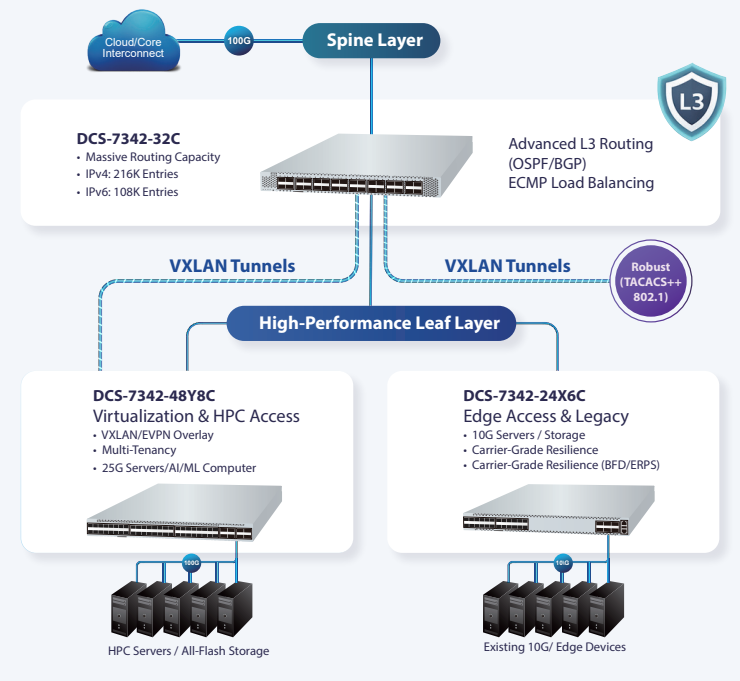
- IPv4/IPv6 hardware static routing
- IPv4 dynamic routing protocols such as RIPv1/v2, OSPFv2, IS-IS and BGP
- IPv4 Route policy/IPv4 Policy-based routing
- IPv6 dynamic routing protocols such as RIPng, OSPFv3, IS-ISv6 and BGP4+
- IPv6 Route policy
- Ethernet Virtual Private Network (EVPN)
- ECMP (Equal-Cost Multi-Path)
- VRF (Virtual Routing and Forwarding)
- Multiple tunneling techniques- GRE Tunnel
- BFD session binding static routes, VRRP, OSPF, BGP and RIP

Multicast Routing Features

- IPv4 IGMP v1/v2/v3

- **Robust Security Infrastructure**: Enterprise-grade protection with TACACS+, 802.1X, and hardware-based Anti-ARP Scan to safeguard critical data.

The **DCS-7342-24X6C** delivers high-scale routing with exceptional stability, providing a future-proof infrastructure for enterprise and cloud data center architectures.



Carrier-Grade Resilience for High-Scalability Network Environments

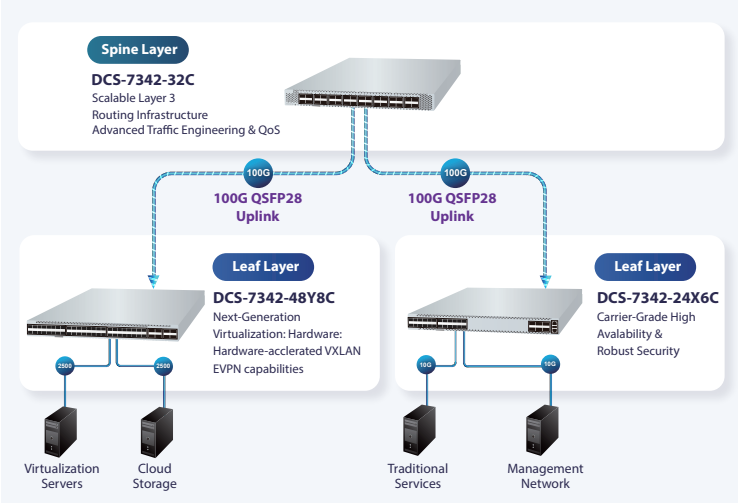
PLANET delivers a high-density, carrier-grade switching solution engineered to dominate the rigorous traffic demands of modern scalable networks. By integrating advanced Layer 3 software with next-generation hardware, this platform ensures seamless expansion and unwavering stability.

- **Scalable Layer 3 Routing Infrastructure**: Supports a comprehensive suite of routing protocols, including BGP, OSPF, and IS-IS, allowing for flexible and efficient path selection across complex, large-scale architectures.
- **Next-Generation Virtualization**: Hardware-accelerated VXLAN and EVPN capabilities enable the creation of scalable virtualized overlay networks, significantly improving workload mobility for cloud and multi-tenant environments.
- **Advanced Traffic Engineering & QoS**: Granular QoS Class-Maps and Policy-Maps ensure peak performance for mission-critical applications, while ECMP (Equal-Cost Multi-Path) optimizes bandwidth utilization and load balancing.
- **Carrier-Grade High Availability**: Features BFD (Bidirectional Forwarding Detection) for sub-second fault detection, paired with ERPS (ITU-T G.8032) and MRPP to guarantee maximum uptime and rapid self-healing.
- **Robust Security & Access Control**: A multi-layered security framework—including TACACS+, RADIUS, 802.1X, and hardware-based Anti-ARP Scan—safeguards management access and data integrity.

- Support PIM-SM (Protocol Independent Multicast–Sparse Mode) and PIM-SSM ((Protocol Independent Multicast
  - Source-Specific Multicast), PIM-DM (Protocol Independent Multicast – Dense Mode)
- IPv6 MLD v1/v2 and MLD v1/v2 Snooping
- Support Multicast VLAN Registration for IPv6
- Support PIM-SM v6 (Protocol Independent Multicast-Sparse Mode IPv6)

Layer 2 Features

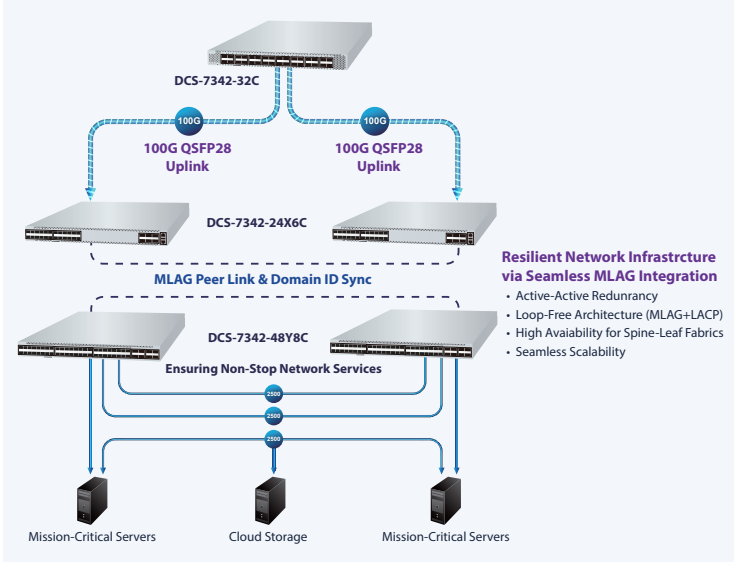
- Support **VLAN**
  - Support up to 4K VLANs
  - IEEE 802.1Q tagged VLAN
  - Provider Bridging (VLAN Q-in-Q) support (IEEE 802.1ad)
  - Protocol VLAN
  - MAC Based VLAN
  - Protocol Based VLAN
  - Private VLAN (Protected port)
  - Voice VLAN
  - Super VLAN
  - Guest VLAN
  - GVRP
- Support VXLAN Layer 2 Switching, Routing Switching, and Layer 3 GRE Tunnel
- Support BGP EVPN
- Support Priority Flow Control (PFC)
- Support Link Aggregation
  - IEEE 802.3ad Link Aggregation Control Protocol (LACP)
  - Cisco ether-channel (static trunk)
- Multi-Chassis Link Aggregation (MLAG)
  - Basic configuration
  - Blackhole flow protection
  - MLAG VRRP
  - MLAG dual active
- Support 802.1D STP, 802.1w RSTP and 802.1s MSTP
  - BPDU Protection
  - Root Protection
  - Loop Protection
  - Anti TC-BPDU Attack
- Support L2-L4 packet filtering
  - Filters based on MAC, IP, port, protocol, IP ToS, 802.1p priority, VLAN ID, SVLAN ID, VLAN range, etc.
- Support Multi-layer ring protection protocol (MRRP)
- Support Device Link Detection Protocol
- Support Bridge Protocol Filter
- Support Uplink Line Protection Protocol
- Loop detection to avoid broadcast loops
- Support port mirroring, flow mirroring, remote mirror, multi-destination, CPU mirror source/destination and
- ERSPAN
- Link Layer Discovery Protocol (LLDP)



Resilient Network Infrastructure via Seamless MLAG Integration

To ensure non-stop network services and maximize bandwidth utilization, the **DCS-7342-24X6C** supports advanced MLAG (Multi-Chassis Link Aggregation). This technology delivers carrier-grade reliability and architectural flexibility for mission-critical infrastructures.

- **Active-Active Redundancy**: MLAG allows two switches to function as a single logical entity, enabling active-active link aggregation for seamless traffic failover.
- **Simplified Domain Management**: Administrators can easily configure and identify the MLAG cluster through the Domain ID setting, ensuring synchronized and stable control-plane operations.
- **Loop-Free Architecture**: By leveraging MLAG with LACP, the network eliminates the need for Spanning Tree Protocol (STP) on access links, resulting in higher bandwidth efficiency and near-instant convergence.
- **High Availability for Spine-Leaf Fabrics**: MLAG enhances resilience at the leaf layer, providing redundant paths to ensure that a single chassis failure never interrupts data flow.
- **Seamless Scalability**: The combination of MLAG and hardware-based load balancing allows for linear bandwidth scaling as your data center infrastructure grows.



- Compatible with Cisco uni-directional link detection(UDLD) that monitors a link between two switches and blocks the ports on both ends of the link if the link fails at any point between the two devices
- Support ITU-T G.8032 ERPS (Ethernet Ring Protection Switching)

Ethernet OAM

- Support IEEE 802.3ah EFM
- Support IEEE 802.1ag CFM
- Support ITU-T Y.1731OAM functions and mechanisms for Ethernet based network

Quality of Service

- Ingress shaper and egress rate limit per port bandwidth control
- 8 priority queues on all switch ports
- Traffic classification
  - IEEE 802.1p CoS
  - ToS/DSCP/IP Precedence of IPv4/IPv6 packets
  - IP TCP/UDP port number
  - Typical network application
- Strict priority and Weighted Round Robin (WRR) CoS policies
- Traffic-policing on the switch port
- DSCP remark

Multi-Protocol Label Switching

- Virtual Private Network
  - Layer 2 Virtual Private Network
  - Layer 3 Virtual Private Network
  - VPLS
  - VPWS
- Layered Service Provider Static
- MPLS TE
- RSVP
- MPLS QoS
- LDP (Label Distribution Protocol)

Multicast

- Support IPv4 IGMP snooping v1, v2 and v3
- Support IPv6 MLD snooping v1 and v2
- MVR (Multicast VLAN Registration)

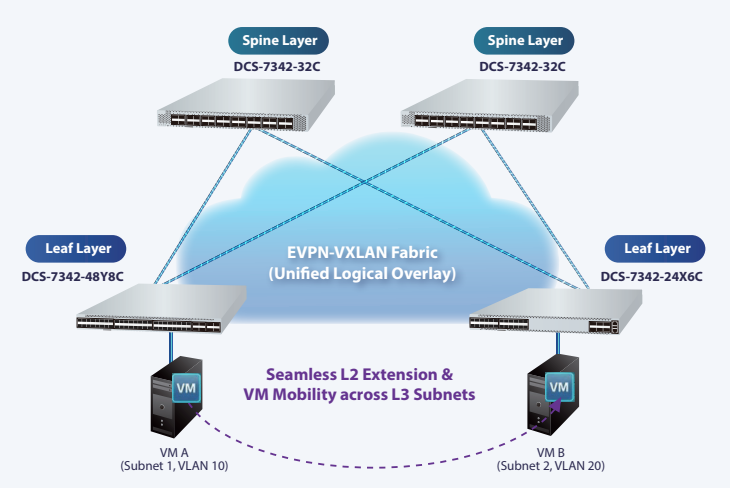
Security

- Authentication
  - IEEE 802.1X port-based network access authentication
  - Built-in RADIUS client to cooperate with the RADIUS servers
  - AAA Authentication
  - RADIUS/TACACS+ login user access authentication
- Access Control List

Advanced Data Center Overlays: VXLAN & EVPN Integration

To master the complexity of modern cloud infrastructures, the **DCS-7342-24X6C** integrates hardware-accelerated VXLAN and EVPN to build scalable, high-performance virtualized overlay networks.

- **Efficient Virtualization**: VXLAN encapsulates L2 frames into L3 UDP packets, supporting up to 16 million isolated logical networks across a physical IP fabric.
- **BGP-Driven Control Plane**: Leveraging EVPN with BGP, the system intelligently distributes reachability info to minimize broadcast flooding and optimize traffic.
- **Seamless Workload Mobility**: Maintains L2 connectivity during VM or container migration across physical hosts, ensuring uninterrupted service delivery.
- **Optimized Routing**: Supports Integrated Routing and Bridging (IRB) and advanced multicast (PIM-SM/SSM) for efficient inter-segment traffic flow.
- **Secure Multi-Tenancy**: Features VFI (Virtual Forwarding Instance) to provide isolated, secure environments for multiple tenants over a shared infrastructure.
- **Wire-Speed Hardware**: The architecture handles all encapsulation at wire-speed, delivering ultra-low latency for high-throughput applications.



Unified Fabric Management: High-Bandwidth Stacking for Seamless Scalability

To simplify the complexity of expanding infrastructures, the DCS-7342-24X6C supports advanced stacking, integrating multiple physical eight switches into a single high-performance logical chassis.

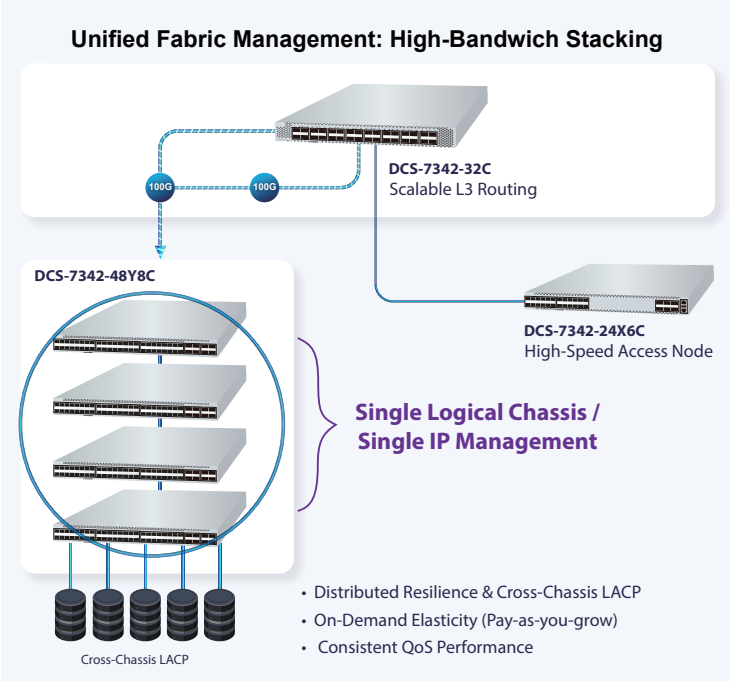
- **Centralized Efficiency**: Manage the entire stack through a single IP address, reducing administrative overhead and synchronizing configurations across the fabric.
- **100G Stacking Backplane**: Leverage high-speed 100G QSFP28 ports as stacking links to create a non-blocking internal fabric, ensuring massive throughput for inter-switch traffic.
- **Distributed Resilience**: Combined with Cross-Chassis LACP, the system provides seamless redundancy; traffic is instantaneously rerouted if a unit fails to maintain uninterrupted service.
- **On-Demand Elasticity**: A "pay-as-you-grow" architecture allows for seamless scaling of port density without reconfiguring the entire network topology.

  - IP-based ACL/MAC-based ACL
  - ACL based on:
  - MAC Address
  - IP Address
  - Ethertype
  - Protocol Type
  - VLAN ID
  - DSCP
  - 802.1p Priority
  - Up to 512 entries
- ARP
  - ARP Detection
  - ARP Anti Attack
  - Anti ARP Scan
  - ARP Guard
  - ARP Binding
  - ARP Limit
  - ARP Inspection
- MAC Security
  - Static MAC
  - MAC Filtering
  - Blackhole MAC List
- Loging Filter
  - Telnet/SSH ACL filtering
  - Telnet/SSH IPv6 ACL filtering
- Port security for source MAC address entries filtering
- VLAN security for MAC address learning on VLAN
- DHCP snooping to filter distrusted DHCP messages
- IP source guard prevents IP spoofing attacks
- DoS attack prevention
- RBAC (Role Based Access Control)
- Link-Flapping detection

Management

- Support Console, Telnet and SSH v1.5/v2 terminal services
- SNMP Management
  - Support SNMPv1/v2/v3 network management protocols and standard MIB for general features
  - SNMP trap for system notification
  - Support RMON (Remote Monitoring)
- Support NETCONF network management protocol
- System maintenance
  - Firmware upload via TFTP
  - Configuration upload/download through FTP/TFTP
  - Hardware reset button for system reboot or reset to factory default
- Support fan temperature control for automatic adjustment
- Support temperature and fan monitoring with alerts
- SNTP Network Time Protocol (Simple Network Time Protocol) and Network Time Protocol (NTP)
- Support sFlow v4/v5
- DNS Client Status
- Support IPv4 ARP/ARP Proxy

- **Secure Control Plane**: Unified management access is hardened by TACACS+, RADIUS, and SSH, protecting the centralized stack against unauthorized access.
- **Consistent QoS Performance**: Hardware-based QoS profiles are applied across the entire stack, guaranteeing consistent priority for mission-critical applications.



Intelligent Management & Advanced Security Framework

The **DCS-7342-24X6C** combines sophisticated automation protocols with robust security architecture to simplify operations and protect critical data paths.

- **Next-Gen Automation with NETCONF**: Supports the NETCONF protocol to enable programmable network management and seamless integration with modern orchestration tools.
- **Real-Time Traffic Analysis**: Features sFlow technology for high-performance, hardware-based monitoring of network traffic, providing deep visibility into bandwidth usage and potential anomalies.
- **Carrier-Grade AAA Security**: Implements TACACS+, RADIUS, and SSH v2.0 to ensure encrypted management access and centralized authentication.
- **Proactive Control-Plane Protection**: Equipped with Anti-ARP Scan and hardware-based DDoS attack prevention to safeguard the switch CPU from malicious traffic.
- **Precision Timing & Monitoring**: Supports NTP for synchronized timekeeping and comprehensive RMON for proactive remote monitoring and diagnostics.
- **Eco-Friendly Hardware Efficiency**: Features intelligent fan temperature control that automatically adjusts speeds to reduce power consumption and noise.

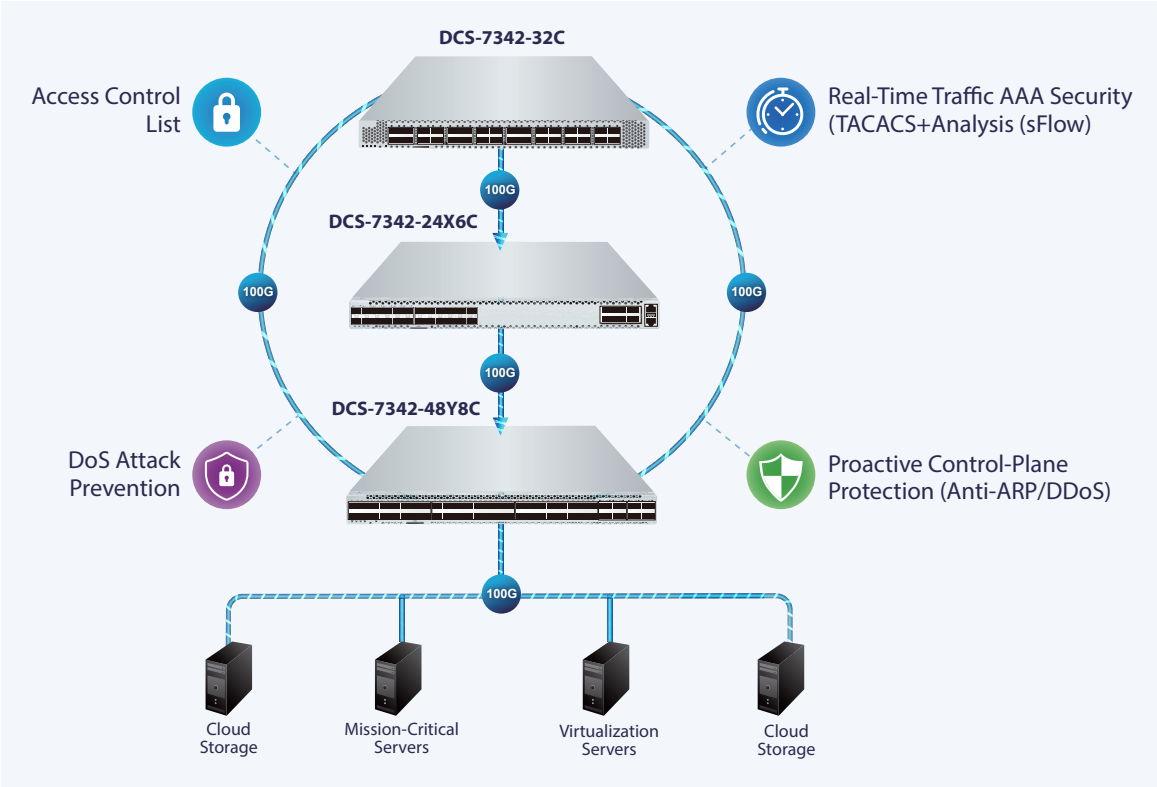
- Support IPv6 ICMPv6/ Path MTU Discovery(PMTUD)/ PPPoE+/ Neighbor Discovery Protocol (NDP)
- Log and alarm
  - CPU usage display and alarm
  - Memory usage display and alarm
  - Temperature, PSU, FAN, status display and alarm
  - Operation logs
  - Management of logs, alarms, and debugging information
- Network Diagnostic
  - ICMPv6/ICMPv4 remote ping
  - Trance Route
  - DDM (Digital Diagnostic Monitor)
- DHCP Functions
  - DHCP Client/Relay/Server
  - DHCP Snooping
  - DHCP Option 82/252
  - DHCPv6 Client/Relay/Server
  - DHCPv6 Snooping

Redundant Power System

- Support dual power redundancy and redundant backup for two sets of fans (Include 2 power DCS-PWR350- ACHDC)
- Hot-swappable power modules and fans

Hardware

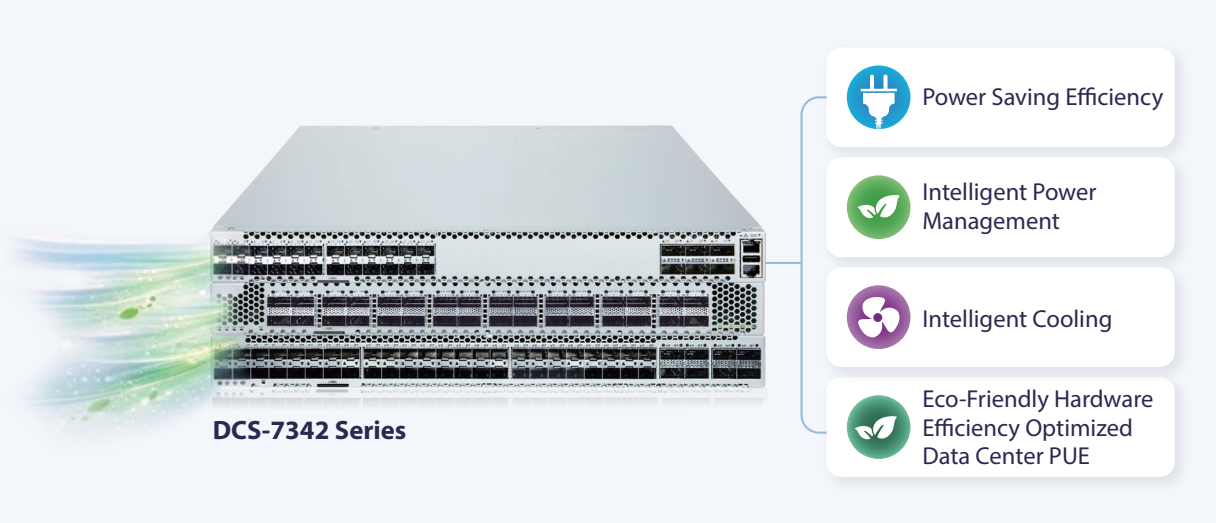
- 19-inch rack mountable; 1U height
- Reset button for resetting to default setting and system reboot
- LED indicators for power alert, fan alert and Ethernet interfaces
- FCC Part 15 Class A, CE



Sustainable Infrastructure: Intelligent Power Management & Green Efficiency

As environmental responsibility becomes a core requirement for modern IT, the DCS-7342-24X6C integrates advanced power-saving technologies without compromising high-performance data center demands.

- **Intelligent Fan Speed Control**: Features a smart cooling architecture with redundant, hot-swappable fans. These fans dynamically adjust rotational speeds based on real-time temperature sensors, significantly reducing power consumption and acoustic noise during lower traffic periods.
- **High-Efficiency Redundant Power Supplies**: Equipped with 80 Plus Platinum (or high-efficiency) hot-swappable AC power modules. The redundant design not only ensures maximum uptime but also optimizes load sharing to achieve peak energy efficiency.
- **Hardware-Level Power Scaling**: The advanced chipset architecture is designed to scale power consumption based on port link status. Unused ports are automatically placed in a low-power state, lowering the overall energy footprint of the rack.
- **Optimized Thermal Design**: The chassis airflow is engineered for professional front-to-back cooling, contributing to better overall Data Center PUE by aligning with hot/cold aisle containment strategies.
- **Sustainable OPEX Reduction**: By combining intelligent energy management with high-density performance, the DCS-7342-24X6C helps organizations reduce Total Cost of Ownership (TCO) and meet corporate carbon reduction goals.

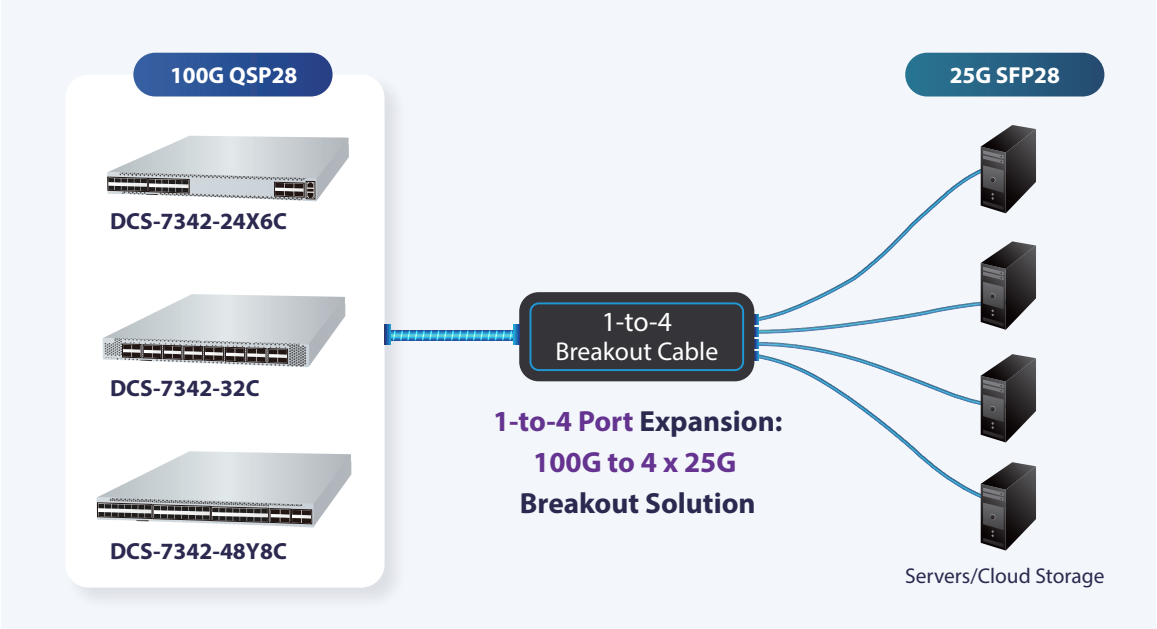


1-to-4 Port Expansion: 100G to 4 x 25G Breakout Solution

Maximize your hardware investment by transforming a single 100G QSFP28 port into four independent 25G SFP28 connections. This professional-grade breakout cable provides the most efficient way to link high-capacity core switches to multiple high-performance servers or storage nodes.

Core Advantages

- **1-to-4 Port Multiplying**: Unlock 4 x 25Gbps lanes from a single 100G interface, significantly increasing available port count for downstream devices.
- **Direct 100G Utilization**: Fully utilize the massive 100Gbps bandwidth of your DCS-7342-24X6C without wasting unused capacity.
- **Seamless Hardware Integration**: Specifically engineered for 1-Port 100G/QSFP28 modules, ensuring perfect synchronization across all four 25G lanes.
- **Carrier-Grade Efficiency**: Eliminates the need for multiple expensive 25G transceivers and complex patch panels, reducing both failure points and costs.
- **Low-Latency Fabric**: Direct-attach architecture ensures near-zero signal delay, ideal for high-frequency trading and cloud computing.
- **Spine-Leaf Optimization**: Connect one 100G Spine port directly to four 25G Leaf switches or servers, creating a highly scalable and cost-effective network fabric.

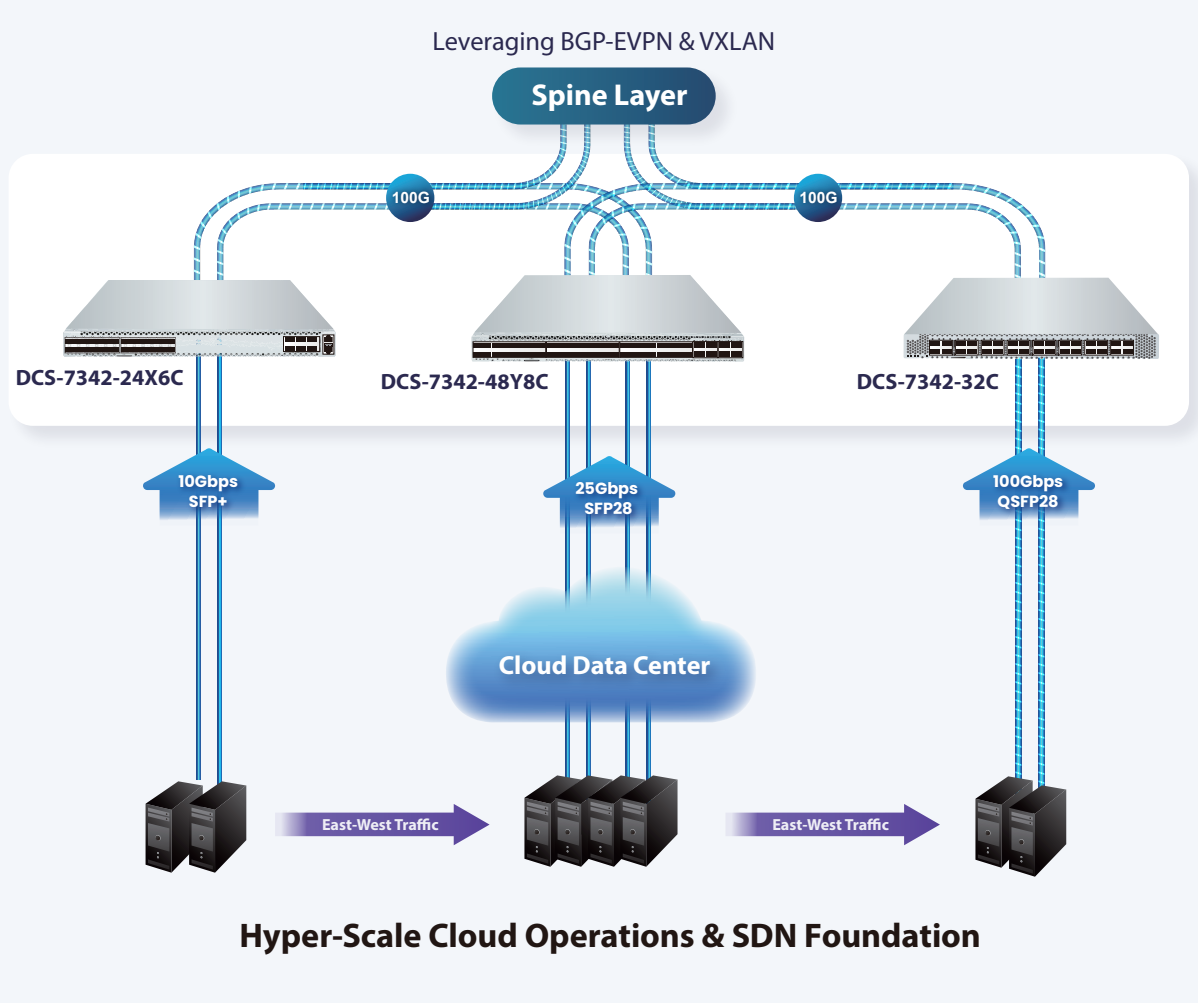


Applications

Orchestrating Seamless VM Mobility and Multi-Tenant Isolation

In modern cloud data centers, the **DCS-7342-24X6C** serves as a high-velocity engine for virtualized workloads. By leveraging BGP-EVPN and VXLAN, the switch enables seamless Virtual Machine (VM) mobility across Layer 3 boundaries without the need for complex network reconfiguration.

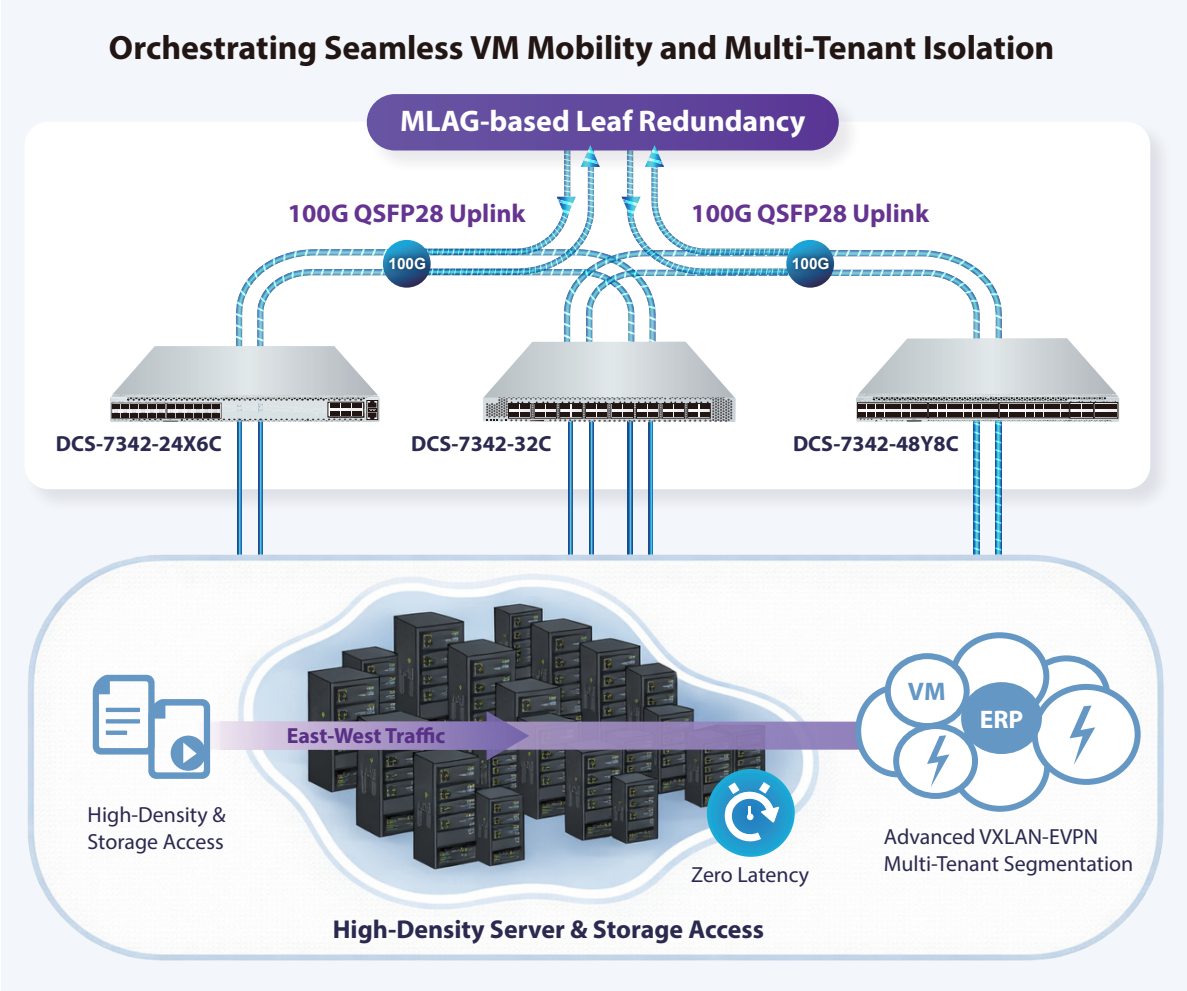
Equipped with 24 x 10G SFP+ ports for high-density server access and 6 x 100G QSFP28 uplinks, the platform provides the massive non-blocking bandwidth essential for East-West traffic (server-to-server). This architecture ensures strict multi-tenant isolation and service integrity, providing a robust, future-proof foundation for hyper-scale cloud operations and networking.



Resilient Enterprise Backbone for Mission-Critical Services

In large-scale enterprise data centers, the **DCS-7342-24X6C** provides a high-performance fabric to interconnect hundreds of servers and high-speed storage arrays. It is engineered to power mission-critical applications such as ERP, CRM, and high-frequency database services that demand zero latency and maximum stability.

By leveraging advanced VXLAN-EVPN routing, the switch enables granular network segmentation and multi-tenant isolation with hardware-level efficiency. With **6** x 100G QSFP28 uplinks and MLAG redundancy, the platform ensures a non-blocking, high-availability architecture. This guarantees seamless operations and maximum up time for essential business workflows, eliminating single points of failure across the enterprise backbone.

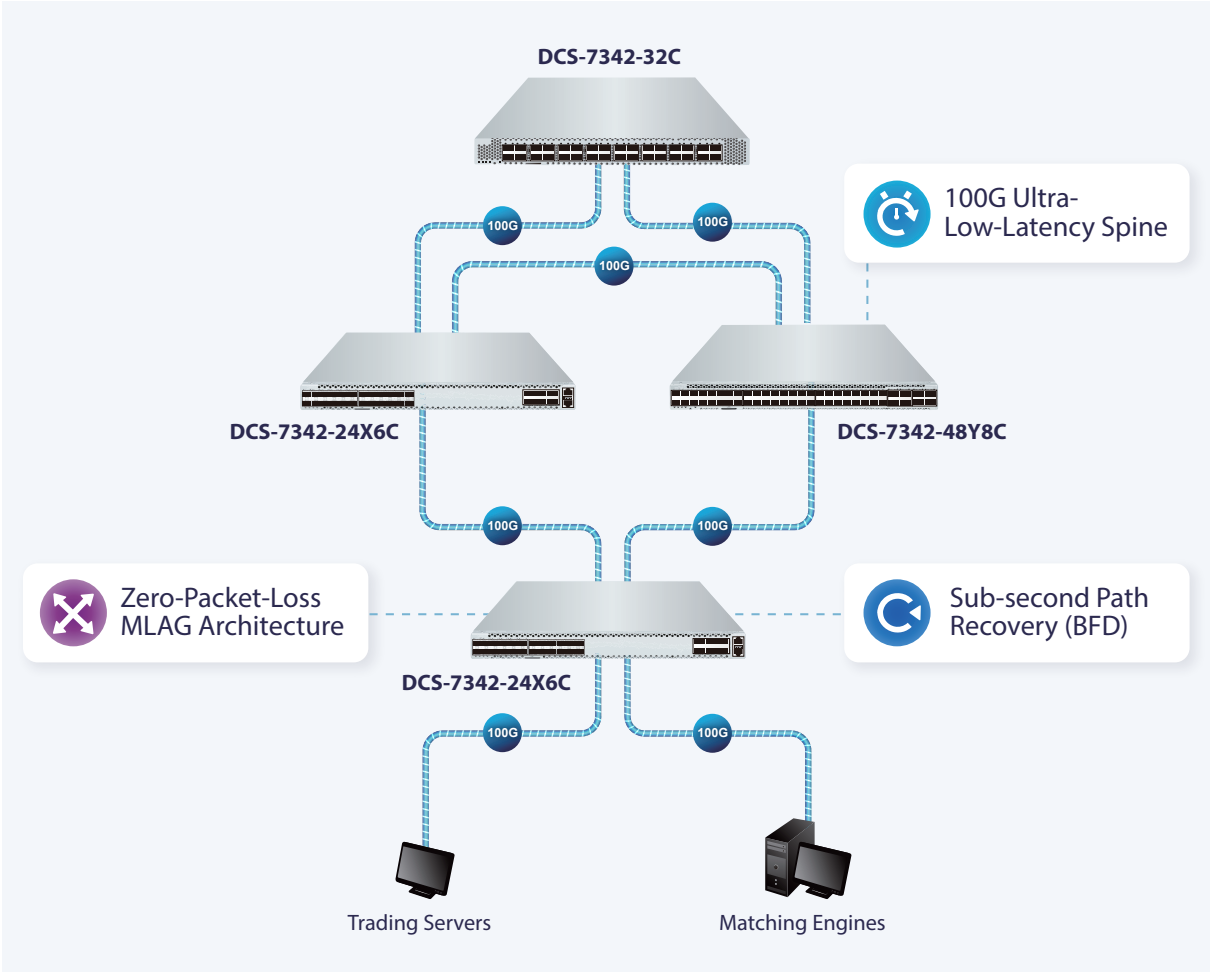


Ultra-Low Latency Fabric for High-Frequency Trading (HFT)

In the competitive landscape of high-frequency trading, the **DCS-7342-24X6C** is engineered to deliver the **microsecond-level latency** and unwavering reliability required for split-second execution.

By supporting **MLAG (Multi-Chassis Link Aggregation)**, the switch provides an active-active, unified fabric that ensures **zero-packet-loss failover** and maximum bandwidth utilization. The integration of **BFD (Bidirectional Forwarding Detection)** allows for sub-second, near-instantaneous path recovery, while advanced hardware-based **QoS** and security features protect the trading environment from network congestion and external threats.

This high-performance architecture, coupled with a sustainable, energy-efficient design, ensures secure, continuous, and lightning-fast trading operations for modern financial institutions.



Specifications

Product	DCS-7342-24X6C
Hardware Specifications	
10G SFP+ Interfaces	24 10GBASE-X SFP+ interfaces (Port-1 to Port-24) Compatible with 1GBASE-X SFP transceiver
100G QSFP28 Interfaces	6-port 100G QSFP28 (Port-25 to Port-30) Backward compatible with 40GBASE-X QSFP+
Console	1 x RJ45 to DB9 console port (115200, 8, N, 1)
Management Port	1 x 10/100/1000BASE-T RJ45 port
USB	1 x USB 2.0 Type A for USB storage device (Configuration backup and restore)
Fan	4 hot-pluggable fan modules
Reset Button	< 6 sec: System reboot > 6 sec: Factory default
Enclosure	Metal
Installation	19-inch Rack-mount kit
ESD Protection	±4KV contact discharge ±8KV air gap discharge
Dimensions (W x D x H)	440 x 410 x 44 mm, 1U height
Weight	7.1kg
ESD Protection	±8KV air gap discharge ±6KV contact discharge
Power Requirements	100~240V AC, 50/60Hz, 2.5A (max.)
Power Consumption	Max. 76 watts/259 BTU (Power on without any connection) Max. 427 watts/835 BTU (Full loading)
Redundant Power System	Dual power redundancy and redundant backup for two sets of fans (Include 2 power DCS-PWR350- ACHDC) Hot-swappable power modules and fans
LED Indicators	**System:** Power (Green) Alarm (Amber) SYS (Green). System Boot Process (Amber/Green twinkle alternately) AC Power (PSU) (Green) FAN(Green). Fan Failure (Amber) Diag (Green). **Per 10/100/1000T RJ45 Port(Management Port):** Speed (Right side): 10Mbps (Off) 100Mbps (Amber) 1000Mbps (Green) LNK/ACT(Left side): (Green) **Per 10GBASE-X SFP+ interfaces (Port-1 to Port-24)** 10G LNK/ACT (Green) 1G LNK/ACT (Amber) **Per 100G QSFP28 interfaces (Port-25 to Port-30)** 40G LNK/ACT (Amberr) 100G LNK/ACT (Green)
Switching Specifications	
Switch Architecture	Store-and-Forward
Switch Fabric	1.7Tbps/non-blocking
Throughput@64Bytes	600Mpps@64Bytes
ARP Table	32K
Address Table	128K entries, automatic source address learning and aging
IP Interfaces	Max. 4K (4094) VLAN interfaces
Routing Table	IPv4 216K entries IPv6 108K entries
Multicast Table	16K
ACL Table	512
Shared Data Buffer	24MB
Jumbo Frame	10K bytes
Flow Control	IEEE 802.3x pause frame for full duplex Back pressure for half duplex
Flash	1G

RAM	4GB
IP Clustering	
Software Stack	Connects with stack member via 10G SFP+ and 100G QSFP28 interfaces. Single IP address management, supporting up to 8 units stacked together
Software Stacking Compatibility List	Virtualized multiple PLANET`s DCS-7342-24X6C data center switch devices stacked into one logical device
IPv4 Layer 3 Functions	
IP Routing Protocols	IPv4 hardware static routing IPv4 dynamic routing protocols RIPv1/v2, OSPFv2, IS-IS and BGP
Multicast Routing Protocol	IPv4 IGMP v1/v2/v3 PIM-DM/PIM-SM/PIM-SSM
VRRP Group	255
Routing Features	IPv4 Route policy/IPv4 Policy-based routing BFD session binding static routes, VRRP, OSPF, BGP and RIP ECMP VRF (Virtual Routing and Forwarding) Multiple tunneling techniques- GRE Tunnel
IPv6 Layer 3 Functions	
IP Routing Protocol	IPv6 dynamic routing protocols RIPng, OSPFv3, IS-ISv6 and BGP4+ IPv6 hardware static routing
Multicast Routing Protocol	IPv6: PIM-SM v6
Routing Features	IPv6 hardware static routing IPv6 Route policy
Layer 2 Management Functions	
VXLAN	VXLAN Layer 2 Switching, Routing Switching, Layer 3 GRE Tunnel BGP EVPN (Ethernet Virtual Private Network) Priority Flow Control (PFC)
MLAG	Blackhole Flow Protection MLAG VRRP MLAG dual active
MPLS	Virtual Private Network - Layer 2 Virtual Private Network - Layer 3 Virtual Private Network - VPLS - VPWS Layered Service Provider Static MPLS TE RSVP MPLS QoS LDP (Label Distribution Protocol)
Port Configuration	Port disable/enable Auto-negotiation 10/100/1000Mbps full and half duplex mode selection Flow control disable/enable Port link capability control
Port Status	Display each port's speed duplex mode, link status, flow control status, auto-negotiation status, trunk status
Mirror	Port Mirror Flow Mirror Remote Mirror Multi-destination Mirror CPU as mirror source or destination Encapsulated Remote SPAN (ERSPAN)
VLAN	802.1Q tagged VLAN Q-in-Q tunneling Protocol VLAN MAC-based VLAN Protocol-based VLAN Private VLAN (Protected port) Voice VLAN Super VLAN Guest VLAN GVRP Up to 4K VLAN groups

Link Aggregation	IEEE 802.3ad LACP/static trunk
Spanning Tree Protocol	IEEE 802.1D Spanning Tree Protocol IEEE 802.1w Rapid Spanning Tree Protocol IEEE 802.1s Multiple Spanning Tree Protocol
Multicast	IPv4 IGMP snooping v1, v2 and v3 IPv6 MLD snooping v1 and v2 MVR (Multicast VLAN Registration)
Bandwidth Control	Port-based bandwidth limitation Supports flow/VLAN-based bandwidth limiting (single-rate two-color, single-rate three-color, dual-rate three-color) Implements priority-based scheduling and priority mapping for flows
Storm Control	Implements DLF (Destination Lookup Failure) storm suppression Supports multicast storm suppression Supports broadcast storm suppression
QoS	Ingress shaper and egress rate limit per port bandwidth control 8 priority queues on all switch ports Traffic classification - IEEE 802.1p CoS - ToS/DSCP/IP Precedence of IPv4/IPv6 packets - IP TCP/UDP port number - Typical network application Strict priority and Weighted Round Robin (WRR) CoS policies Traffic-policing on the switch port DSCP remark
UDLD	Compatible with Cisco uni-directional link detection(UDLD)
Ring	Supports ERPS, and complies with ITU-T G.8032
Ethernet OAM	IEEE 802.3ah EFM EEE 802.1ag CFM ITU-T Y.1731OAM functions and mechanisms for Ethernet based network
Security Functions	
Authentication	IEEE 802.1X port-based network access authentication Built-in RADIUS client to cooperate with the RADIUS servers AAA Authentication RADIUS/TACACS+ login user access authentication
Access Control List	IP-based ACL/MAC-based ACL ACL based on: - MAC Address - IP Address - Ethertype - Protocol Type - VLAN ID - DSCP - 802.1p Priority Up to 512 entries
ARP	ARP Detection ARP Anti Attack Anti ARP Scan ARP Guard ARP Binding ARP Limit ARP Inspection
MAC Security	Static MAC MAC Filtering Blackhole MAC Lis
Loging Filter	Telnet/SSH ACL Filtering Telnet/SSH IPv6 ACL Filtering

Security	Port security for source MAC address entries filtering VLAN security for MAC address learning on VLAN DHCP snooping to filter distrusted DHCP messages IP source guard prevents IP spoofing attacks DoS attack prevention RBAC (Role Based Access Control) Link-Flapping detection
DHCP Functions	DHCP Client/Relay/Server DHCP Snooping DHCP Option 82/252 DHCPv6 Client/Relay/Server DHCPv6 Snooping
Management Functions	
Basic Management Interfaces	Console; Telnet; SNMP v1, v2c
Secure Management Interfaces	SSHv1.5/v2, SNMPv3
System Management	SNMP trap for system notification RMON (Remote Monitoring) NETCONF network management protocol System maintenance - Firmware upload via TFTP - Configuration upload/download through FTP/TFTP - Hardware reset button for system reboot or reset to factory default Fan temperature control for automatic adjustment Temperature and fan monitoring with alerts SNTP Network Time Protocol (Simple Network Time Protocol) Network Time Protocol (NTP) sFlow v4/v5 DNS Client Status IPv4 ARP/ARP Proxy IPv6 ICMPv6/ Path MTU Discovery(PMTUD)/PPPoE+/ Neighbor Discovery Protocol (NDP)
Log and Alarm	CPU usage display and alarm Memory usage display and alarm Temperature, PSU, FAN, status display and alarm Operation logs Management of logs, alarms, and debugging information
Network Diagnostic	ICMPv6/ICMPv4 remote ping Trance Route DDM (Digital Diagnostic Monitor) Device Link Detection Protocol Bridge Protocol Filter Uplink Line Protection Protocol Loop detection to avoid broadcast loops
SNMP MIBs	RFC 1213 MIB-II RFC 1271 RMON RFC 2819 RMON (1, 2, 3,9) RFC 2863 IF-MIB RFC 3411 SNMP-Frameworks-MIB RFC 3418 SNMPv2-MIB RFC 4188 BRIDGE-MIB RFC 4293 IP-MIB RFC 4668 RADIUS Authentication Client MIB LLDP MIB
Standards Conformance	
Regulatory Compliance	FCC Part 15 Class A

	IEEE 802.3 10BASE-T Ethernet	IEEE 802.1ag Connectivity Fault Management (CFM)
	IEEE 802.3u 100BASE-TX Fast Ethernet	RFC 768 UDP
	IEEE 802.3ab 1000BASE-T Gigabit Ethernet	RFC 793 TCP
	IEEE 802.3an Gigabit 10GBASE-T Ethernet	RFC 791 IP
	IEEE 802.3z Gigabit 1000BASE-SX/LX	RFC 792 ICMP
	IEEE 802.3ae 10Gbps Ethernet	RFC 2068 HTTP
	IEEE 802.3 40G, 100G Ethernet standards	RFC 1112 IGMP v1
	IEEE 802.3x flow control and back pressure	RFC 2236 IGMP v2
	IEEE 802.3ad port trunk with LACP	RFC 3376 IGMP v3
	IEEE 802.1D Spanning Tree Protocol	RFC 2710 MLD v1
	IEEE 802.1w Rapid Spanning Tree Protocol	FRC 3810 MLD v2
	IEEE 802.1s Multiple Spanning Tree Protocol	RFC 1058 RIP v1
	IEEE 802.1p Class of Service	RFC 2453 RIP v2
	IEEE 802.1Q VLAN tagging	RFC 2328 OSPF v2
	IEEE 802.1X Port Authentication Network Control	RFC 5340 OSPF v3
	IEEE 802.1ab LLDP	ITU-T G.8032 ERPS Ring
	IEEE 802.3ah OAM	ITU-T Y.1731 Performance Monitoring
Environment		
Operating	Temperature: 0 ~ 50 degrees C Relative Humidity: 5 ~ 90% (non-condensing)	
Storage	Temperature: -10 ~ 70 degrees C Relative Humidity: 5 ~ 90% (non-condensing)	

Ordering Information

DCS-7342-24X6C	Layer 3 24-Port 10G SFP+ + 6-Port 100G QSFP28 Managed Data Center Switch
DCS-PWR350-ACHDC	350-watt AC power supply for DCS-7342-24X6C

Available Modules for DCS-7342-24X6C

100Gbps QSFP28

Model	Speed (Mbps)	Connector Interface	Fiber Mode	Distance	Wavelength (nm)	Operating Temp.
QSFP-100G-SR4	100G	MPO/MTP	Multi Mode	100m	850nm	0 ~ 70 degrees C
QSFP-100G-LR4	100G	LC	Single Mode	10km	1310nm	0 ~ 70 degrees C

100G QSFP28 to 4 25G SFP28 Breakout Cable - 3M

Model	Speed (Mbps)	Connector Interface	Distance	Operating Temp.
CB-QSFP4X25G-3M	100Gbps to 4 x 25Gbps	QSFP28 and SFP28	3 meters	0 ~ 70 degrees C

40Gbps QSFP+

Model	Speed (Mbps)	Connector Interface	Fiber Mode	Distance	Wavelength (nm)	Operating Temp.
QSFP-40G-SR4	40G	MPO/MTP	Multi Mode	100m	850nm	0 ~ 60 degrees C
QSFP-40G-LR4	40G	LC	Single Mode	10km	1310nm	0 ~ 60 degrees C
CB-DAQSFP-0.5	40G	LC	Multi Mode	0.5M	-	-40 ~ 75 degrees C
CB-DAQSFP-2M	40G	LC	Multi Mode	2M	-	-40 ~ 75 degrees C

10Gigabit Ethernet Transceiver

MTB-LA10	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 10km (TX:1270nm RX:1330nm)
MTB-LB10	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 10km (TX:1330nm RX:1270nm)
MTB-LA20	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 20km (TX:1270nm RX:1330nm)
MTB-LB20	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 20km (TX:1330nm RX:1270nm)
MTB-LA40	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 40km (TX:1270nm RX:1330nm)
MTB-LB40	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 40km (TX:1330nm RX:1270nm)
MTB-LA60	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 60km (TX:1270nm RX:1330nm)
MTB-LB60	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 60km (TX:1330nm RX:1270nm)
MTB-RJ	1-Port 10GBASE-T SFP+ Copper Fiber Optic Module - 30m
MTB-SR	1-Port 10GBASE-SR SFP+ Fiber Optic Module - 300m
MTB-SR2	1-Port 10GBASE-LR SFP+ Fiber Optic Module – 2km
MTB-LR	1-Port 10GBASE-LR SFP+ Fiber Optic Module - 10km
MTB-LR20	1-Port 10GBASE-LR SFP+ Fiber Optic Module - 20km
MTB-LR40	1-Port 10GBASE-LR SFP+ Fiber Optic Module - 40km
MTB-LR60	1-Port 10GBASE-LR SFP+ Fiber Optic Module - 60km
MTB-LR80	1-Port 10GBASE-LR SFP+ Fiber Optic Module - 80km

Gigabit Ethernet Transceiver (1000BASE-X SFP)

MGB-GT	SFP-Port 1000BASE-T Module
MGB-LX	SFP-Port 1000BASE-LX mini-GBIC module - 20km
MGB-SX	SFP-Port 1000BASE-SX mini-GBIC module - 550m
MGB-SX2	SFP-Port 1000BASE-SX mini-GBIC module - 2km
MGB-L40	SFP-Port 1000BASE-LX mini-GBIC module - 40km
MGB-L80	SFP-Port 1000BASE-LX mini-GBIC module - 80km
MGB-L120	SFP-Port 1000BASE-LX mini-GBIC module - 120km
MGB-LA10	SFP-Port 1000BASE-BX (WDM, TX:1310nm) mini-GBIC module - 10km
MGB-LB10	SFP-Port 1000BASE-BX (WDM, TX:1550nm) mini-GBIC module - 10km
MGB-LA20	SFP-Port 1000BASE-BX (WDM, TX:1310nm) mini-GBIC module - 20km
MGB-LB20	SFP-Port 1000BASE-BX (WDM, TX:1550nm) mini-GBIC module - 20km
MGB-LA40	SFP-Port 1000BASE-BX (WDM, TX:1310nm) mini-GBIC module - 40km
MGB-LB40	SFP-Port 1000BASE-BX (WDM, TX:1550nm) mini-GBIC module - 40km
MGB-LA80	SFP-Port 1000BASE-BX (WDM, TX:1490nm) mini-GBIC module - 80km
MGB-LB80	SFP-Port 1000BASE-BX (WDM, TX:1550nm) mini-GBIC module - 80km

Related Products

DCS-7342-32C	Layer 3 32-Port 100G QSFP28 Managed Data Center Switch
DCS-PWR800-ACHDC	800-watt AC power supply for DCS-7342-32C
DCS-7342-48Y8C	Layer 3 48-Port 25G SFP28 + 8-Port 100G/40G QSFP28 Managed Data Center Switch
DCS-PWR550-ACHDC	550-watt AC power supply for DCS-7342-48Y8C(v2)

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