Modular Force10 Operating System (FTOS) software delivers inherent stability

Inline diagnostics and traffic visibility tools increase control of network

Line-rate, non-blocking performance regardless of traffic conditions

C-Series C300 Resilient Switch

The Force10 Networks C300 is a resilient chassis-based switch that delivers reliability, network control and scalability. The C300 is designed to support mission critical applications with very low-latency across converged networks. Comprehensive management capabilities, make the C300 a cost-effective and flexible deployment option.

Key Applications

- Low cost 100/1000 Mbps server aggregation for small- to medium-sized data centers (100s to 1,000s of servers)
- Cost-effective LAN core switch for small- and medium-campuses (100s to 1,000s of PCs)
- High density GbE aggregation for distribution into a multiple Gbps or 10 GbE backbone
- Cost-effective PoE-enabled 10/100/1000Base-T wiring closet aggregation

Key Features

The Force10 C300 is designed to provide inherent reliability, network control, and scalability for high performance Ethernet environments.

- Up to 384 line-rate 10/100/1000Base-T ports with full 15.4W Class 3 PoE support in a 14-RU chassis
- Up to 32 line-rate 10 GbE ports with XFP pluggable optics
- Intelligent power management with full 15.4W PoE (IEEE 802.3af) support across all ports
- 5 microsecond switching latency under full load for 64 byte frames
- Switch fabric capacity of 1.536 Tbps and 571 Mpps L2 or L3 packet forwarding capacity
- High availability architecture
 - 1+1 Route Processor Module (RPM) design
 - Continuous runtime data plane monitoring and advanced in-service CLI diagnostic functions
 - Power supply redundancy with load sharing power bus enabling uninterrupted VoIP calls during a power supply failure





Specifications: C-Series C300 Resilient Switch

Ordering Information Order Number Description

CH-C300 8-slot C300 Chassis with

Backplane

CC-C300-FAN C300 Fan Subsystem
CC-C-1200W-AC C300 1200W Power Supply

Module

LC-CB-RPM C300 Switch Fabric and Route

Processor Module (Series CB)

LC-CB-10GE-4P C300 4-port 10 Gigabit Ethernet line-card, XFP optics required

(series CB)

LC-CB-GE-48T C300 48-port 10/100/1000 Base-T

line-card with RJ45 interface (series CB)

LC-CB-GE-48V C300 48-port

C300 48-port 10/100/1000 Base-T line-card with RJ45 interface and

inline-power (series CB)

Physical

8 Line card slots

2 Switch fabric and route processor module slots

8 Power supply module slots

1 Fan tray slot

Size: 14 RU, 22.5" h x 17.5" w x 14" d (57.15 cm x 44.45 cm x 34.56 cm)

Weight with factory-installed components: 55 lbs (24.95 kg)

Weight fully loaded: 152.27 lbs (69.07 kg)

AC Power

Nominal input voltage: 100 - 240 VAC 50/60 HZ

Maximum thermal output:

9,600W (32,755 BTU/Hour) 100/120 VAC

9,600W (32,755 BTU/Hour) 200/220 VAC

Maximum input current:

14A 100 VAC per module

12A 120 VAC per module

7A 200 VAC per module

6A 240 VAC per module

Maximum system power input:

9.6KVA 100/120 VAC

9.6KVA 200/240 VAC

19" front rack mountable

Maximum Operating Specifications:

Temperature: 32° to 104°F (0° to 40°C)

Altitude: no performance degradation to 10,000 feet

(3,048 meters)

Relative humidity: 5 to 85 percent, noncondensing

Shock: Bellcore GR-63

Vibration: Bellcore GR-63

Maximum Non-operating Specifications:

Temperature: -40° to 158°F (-40° to 70°C)

Maximum altitude: 15,000 feet (4,572 meters)

Relative humidity: 5 to 95 percent, noncondensing

Vibration: Bellcore GR-63

Redundancy

1+1 redundant Switch Fabric and Route Processor Modules (RPM)

2+1 redundant system power supply modules

Online insertion and removal of all components

Environmental self-monitoring

IEEE Compliance

802.3 10Base-T

802.3u Fast Ethernet (100Base-TX)

802.3ab 1000Base-T 802.3z Gigabit Ethernet 802.3ae 10 Gigabit Ethernet 802.3ak 10 Gigabit Ethernet CX4

802.3af Power over Ethernet 802.1p L2 Prioritization

802.1Q VLAN Tagging, Double VLAN Tagging 802.1ac Frame Extensions for VLAN Tagging 802.1s Multiple Spanning Tree Protocol 802.1w Rapid Spanning Tree Protocol 802.1X Port Based Network Access Control

802.1AB Link Layer Discovery Protocol 802.3ad Link Aggregation with LACP

802.1D Bridging 802.3x Flow Control

RFC Compliance

OSPF

1587 NSSA option 2154 OSPF MD5

2328 OSPF v2 2370 Opaque LSA option

General Routing and Switching Protocols

768 UDP 783 TFTP

791 IP 792 ICMP

793 TCP 826 ARP

854 Telnet

959 FTP1027 Proxy ARP

1305 NTP v3 1519 CIDR

1542 BootP (relay)

1591 DNS client 1812 IP v4 routers

2131 BootP/DHCP helper

2338 VRRP

IP Multicast

ietf-draft IGMP Snooping

Security

1492 TACACS+ 2865 RADIUS

3128 Protection Against a Variant of the Tiny

Fragment Attack Secure Copy (SCP) SSH v1/v2

SNMP/MIBs

1157 SNMP v1

1213 SNMP v2 (MIB-II)

1215 Traps for use with SNMP

1493 Bridges

1573 Interfaces group MIB

1757 RMON

1907 MIB for SNMPv2 2011 SNMPv2 IP MIB

2012 SNMPv2 TCP MIB

2013 SNMPv2 UDP MIB

2233 Interfaces MIB2574 SNMPv3 USM

SNMPv3 VACM

2576 Coexistence between SNMPv1/v2/v3

2665 Ethernet-like interfaces

2787 VRRP MIB

Fault management (alarms & status reporting)

Force10 Link aggregation MIB

Force10 chassis MIB

Force10 SNMP copy MIB

Force10 monitoring MIB

Compliances

Safety

2575

CUS 60950, 3rd edition (US NRTL through CSA)

CSA 60950, 3rd edition

CE Mark (EN 60950)

CB Report, all country deviations

EN 60825-1 Safety of Laser Products-Part 1: Equipment

Classification Requirements and User's Guide

EN 60825-2 Safety of Laser Products-Part 2:

Safety of Optical Fibre Communications Systems 21 CFR 1040.10 and 1040.11 FDA laser device requirements

EMC

USA: FCC Part 15, Class A

Canada: ICES-003, Class A

Europe: EN55022 1998, Class A

Japan: VCCI Class A

EN 55024 1998

RoHS Compliance

All components of C300 are EU RoHS compliant with the exception of lead, which is exempt from the Directive for network equipment



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