



Dell Force10 C150/C300

48-port Gigabit Ethernet Line Card with Pluggable SFP Modules

The 48-port Gigabit Ethernet line card for the Dell Force10 C-Series C150 and C300 with pluggable SFP modules support distances up to 80 km over fiber, and pluggable 1000Base-T modules support distances up to 100 m over Cat5 UTP. 100Base-FX SFP modules support distances up to 2 km, providing a flexible solution for applications spanning the LAN, MAN, and WAN in mixed fiber/copper and mixed speed installations.

This line card provides industry-leading density of up to 384 line-rate, non-blocking Gigabit Ethernet ports in a single chassis. Additionally, the C-Series ASICs and architecture enables line-rate performance with QoS and Access Control Lists (ACLs) enabled, jumbo frame support, and simultaneous L2 switching and IPv4 routing. The intelligence embedded in the line cards allows localized switching, providing very low latency.

Key Features

- Full line-rate throughput for Ethernet frames from 64 byte to 9,252 byte frames on all ports regardless of features enabled
- Pluggable SFP modules providing support for 100Base-FX, 1000Base-SX, 1000Base-LX, 1000Base-ZX and 1000Base-T interfaces
- 5 microsecond switching latency under full load for 64 byte frames
- Per-port status and activity LEDs

Up to 384 10 GbE ports
ports in a single chassis

Line-rate, non-blocking
performance

Flexible solution for
100Base-FX, 1000Base-X,
and 1000Base-T applications

Specifications: C150/C300 48-port Gigabit Ethernet Line Card with Pluggable SFP Modules

Ordering Information

Order Number	Description
331-5182	48-port 100Base-FX/GbE line card – SFP modules required (series CB)
331-5409	Qualified 100Base-FX Ethernet SFP optics module, LC connector
331-5271	Qualified SX GbE SFP optics module, LC connector
430-4540	Qualified SX GbE SFP optics module, LC connector
331-5272	Qualified LX GbE SFP optics module, LC connector
430-4536	Qualified ZX GbE SFP optics module, LC connector
430-4542	Qualified 1000Base-T GbE SFP module, RJ45 connector

Physical

48 full-duplex Gigabit Ethernet ports with pluggable SFP modules

Occupies a single slot in the Dell Force10 C150/C300 chassis

Dimensions: 1.75 h x 15.25 w x 13.75" d
(4.45 h x 38.74 w x 34.93 cm d)

Weight: 5.31 lbs (2.41 kg)

Maximum power consumption and thermal output: 130 W (444 BTU/h)

Maximum Operating Specifications

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

Altitude: No performance degradation to 10,000 ft (3,048 m)

Relative humidity: 5 to 85 percent, non-condensing

Maximum Non-Operating Specifications

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

Maximum altitude: 15,000 ft (4,572 m)

Relative humidity: 5 to 95 percent, non-condensing

Management

Link status and link activity LED per port

Status LED per line card

Onboard diagnostic capability

IEEE Compliance

802.1p	L2 Prioritization
802.1Q	VLAN Tagging, Double VLAN Tagging
802.3ab	Gigabit Ethernet (1000BASE-T)
802.3ac	Frame Extensions for VLAN Tagging
802.3u	Fast Ethernet (100BASE-FX)
802.3x	Flow Control
802.3z	Gigabit Ethernet (1000BASE-X)
MTU	9,252 bytes

Regulatory Compliance

Safety

UL/CSA 60950-1, 1st Edition

EN 60950-1, 1st Edition

IEC 60950-1, 1st Edition Including all National Deviations and Group Differences

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 Communication Systems
FDA Regulation 21 CFR 1040.10 and 1040.11

Emissions

Australia/New Zealand: AS/NZS CISPR 22: 2006, Class A

Canada: ICES-003, Issue-4, Class A

Europe: EN 55022: 2006 (CISPR 22: 2006), Class A

Japan: VCCI V3/2007.04 Class A

USA: FCC CFR 47 Part 15, Subpart B, Class A

Immunity

EN 300 386 V1.3.3: 2005 EMC for Network Equipment

EN 55024: 1998 + A1: 2001 + A2: 2003

EN 61000-3-2: Harmonic Current Emissions

EN 61000-3-3: Voltage Fluctuations and Flicker

EN 61000-4-2: ESD

EN 61000-4-3: Radiated Immunity

EN 61000-4-4: EFT

EN 61000-4-5: Surge

EN 61000-4-6: Low Frequency Conducted Immunity

RoHS

All C-Series components are EU RoHS compliant.

SFP Support

Any combination of Dell Force10 approved 100Base-FX, 1000Base-SX, 1000Base-LX, 1000Base-ZX or 1000Base-T SFPs may be populated. SFP modules are sold separately.

