

Dell Force10 E300

48-port High Density 10/100/1000Base-T Line Card

The 48-port High Density 10/100/1000 Base-T line card for the Dell Force10 E-Series E300 is based on the innovative Dell Force10 TeraScale™ ASICs and provides connectivity over Cat5 UTP copper for distances up to 100 meters.

This line card provides industry-leading density of up to 288 Gigabit Ethernet ports in a single chassis. Each line card slot supports 22 Gbps of throughput or a density of up to 132 line-rate, non-blocking Gigabit Ethernet ports in a single chassis. Additionally, the TeraScale ASICs and E-Series architecture enable predictable performance with QoS and Access Control Lists (ACLs) enabled, jumbo frame support, with simultaneous L2 switching, IPv4 and IPv6 routing.

Key Features

- Consistent throughput for 64 to 9,252 byte Ethernet frames on all ports with all features enabled
- Integrated Time Domain Reflectometer (TDR) to easily monitor and isolate faults on copper wiring infrastructure
- Guaranteed packet delivery through virtual output queues that minimize latency and eliminate head-of-line blocking
- Wire-speed security features including up to 2K L2, 13K IPv4 and 4K IPv6 Access Control Lists (ACLs) per line card (using default CAM profiles)
- Fully functional switching and routing with up to 32K MACs, 256K IPv4 addresses or 192K/6K IPv4/IPv6 addresses per line card (using default CAM profiles)
- Configurable CAM profiles for L2, IPv4, IPv6 FIBs and ACLs that allow flexible CAM allocation based on network requirements

Up to 288 10/100/1000Base-T ports in a single chassis

Full L2 switching and IPv4/ IPv6 routing

Specifications: 48-port High Density 10/100/1000Base-T Line Card

Ordering Information

Order Number	Description
225-2473	48-port high density 10/100/1000Base-T line card with RJ45 interfaces (series EF3)

Dell Force10 line cards meet the requirements of demanding Layer 2 and Layer 3 applications. They support Layer 2 applications that require line rate performance and high port densities, and Layer 3 applications that demand robustness at low per-port prices.

Physical

48 full-duplex 10/100/1000Base-T ports with RJ45 interfaces

Occupies a single slot in the Dell Force10 E300 chassis

Dimensions: 1.55 h x 16.06 w x 14.77" d (3.94 h x 40.79 w x 37.51 cm d)
Weight: 8 lbs (3.63 kg)
Maximum insertion force: 24 lbs (10.90 kg)
Maximum power consumption and thermal output: 220 W (751 BTU/h)
Operating temp: 32° F to 104° F (0° C to 40° C)
Relative humidity: 5 to 90% non-condensing
Maximum altitude: 10,000 ft (3048 m)

Management

Link status, link speed and link activity LEDs per port
Line card status LED
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
802.3i	Ethernet (10BASE-T)
802.3u	Fast Ethernet (100BASE-TX)
802.3x	Flow Control
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 E-Series components are EU RoHS compliant.

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