

## DATA CENTER AS7816-64X

The Edgecore DCS500 is a Top-of-Rack (TOR) or spine switch for high-performance data centers. The switch provides line-rate L2 and L3 switching across the 64 x QSFP28 ports, each supporting 1 x 100 GbE or 1x 40 GbE, or via breakout cables 4 x 25 GbE or 4 x 10 GbE to a maximum of 128 logical ports. The DCS500 can be deployed as a TOR switch supporting 10/25 GbE to servers with 40/100 GbE uplinks, or as a spine switch supporting 40/100 GbE spine interconnects. This open network switch is loaded with the Open Network Install Environment (ONIE), which supports the installation of compatible Network Operating System (NOS) software, including the open source plus commercial NOS offerings.

### Key Features and Benefits

- 64 x QSFP28 switch ports, each supporting 1 x 100 GbE or 1 x 40 GbE, or via breakout cables 4 x 25 GbE or 4 x 10 GbE to a maximum of 128 logical ports.
- Incorporates Broadcom StrataXGS Tomahawk II switch series silicon.
- High performance Intel® Xeon® D-1518 CPU.
- 2 RU form factor.
- Supports hot/cold aisles with front-to-back and back-to-front airflow SKUs.
- All ports on front; PSUs and fans accessible from rear.
- Hot-swappable, load-sharing, redundant 850 W PSUs.
- 3+1 redundant, hot-swappable fan modules.
- Hardware switch pre-loaded with Open Network Install Environment (ONIE) for automated loading of compatible open source and commercial NOS offerings.



## Ports

- Switch Ports: 64 x QSFP28 100 GbE, maximum 128 logical interfaces through breakout cables.
- Management ports on port side:
  - 1 x RJ-45 serial console
  - 1 x RJ-45 1000BASE-T management
  - 1 x USB Type A storage
- Supported Transceivers and Cables:
  - 40GBASE-SR4/LR4
  - 40G-DAC/AOC Cable
  - 100GBASE-SR4/CWDM4/LR4
  - 100G-DAC Cable
  - Note: More optics and detailed cabling information can be found at [www.edge-core.com](http://www.edge-core.com).

## Key Components

- Switch Silicon: BCM56970 Tomahawk 2
- CPU Modules:
  - Intel® Xeon® D-1518 4-Core 2.2 GHz
  - 8 GB x 2 2133MHz with ECC (DDR4 SO-DIMM)
  - 16 MB x 2 SPI Flash (Boot)
  - m.2 SSD: 32 GB MLC
  - Reserve mSATA connector

## Performance

- Switching Capability: 6.4 Tbps full duplex
- Forwarding Rate: 4.2 bpps
- Jumbo frames support up to 9 Kbytes
- Packet Buffer Size: 42 MB integrated packet buffer
- Subject to NOS:
  - MAC Addresses: 8 K min./264 K max.
  - VLAN IDs: 4 K
  - IPv4: 76 K min./128 K max. L3 hosts/extended view; IPv4/32: 32 K LPM entries with TCAM-only mode
  - Pv6: 46 K min./64 K max. L3 hosts/extended view; IPv6/64: 16 K LPM entries with TCAM-only mode

## Physical and Environmental

- Dimensions (WxDxH): 43.84 x 58.0 x 8.77 cm (17.26 x 22.83 x 3.45 in)
- Weight: 14.11 kg (31.1 lb)
- Fans: Hot-swappable 3 + 1 redundant fans
- Operating Temperature: 0°C ~ 45°C (32°F ~ 113°F)
- Storage Temperature: -40°C ~ 70°C (-40°F ~ 158°F)
- Operating Humidity: 5% ~ 95% non-condensing

## QSFP28 Port LEDs

- LED1: Blue (100 G), Orange (40 G), White (25 G), Green (10 G)
- LED2~LED4: White (25 G), Green (10 G)
- Management Port LED: Green: (10 M/100 M/1 G), Flashing: Activity
- System LEDs: PSU1, PSU2, Fan, Diag, and Loc
- Reset button

## Power

- PSUs: 2 redundant, load-sharing, hot-swappable AC or -48 VDC
- Input Voltage: 100-240 VAC, 50-60 Hz

## Software

- Switch is loaded with Open Network Install Environment (ONIE) software installer
- Compatible with the following NOS options: open source options, plus commercial NOS offerings.

## Regulatory

- EMI
  - CE Mark
  - EN 55032
  - AS/NZS CISPR 32
  - EN 55024
  - EN 61000 3-2
  - EN 61000 3-3
  - CISPR 32
- FCC Part 15 Subpart B Class A
- VCCI Class A
- Safety
  - CB
  - UL
- Environmental:
  - GR63-CORE (Pre-test)
- RoHS-6 Compliant
- Country of Origin: Taiwan (TAA Compliant)
- Electrical and Electronic Equipment (WEEE Directive 2002/96/EC)

## Warranty

Please check [www.edge-core.com](http://www.edge-core.com) for the warranty terms in your country.

## For More Information

To find out more about Edgecore Networks Corporation products and solutions, visit [www.edge-core.com](http://www.edge-core.com).

## About Edgecore Networks Corporation

Edgecore Networks Corporation is in the business of providing innovative network solutions. In the service provider network, in the data center or in the cloud, Edgecore Networks Corporation delivers the software and systems that transform the way the world connects. Edgecore Networks Corporation serves customers and partners worldwide. Additional information can be found at [www.edge-core.com](http://www.edge-core.com).

Edgecore Networks Corporation is a subsidiary of Accton Technology Corporation, the leading network ODM company. The Edgecore data center switches are developed and manufactured by Accton.

To purchase Edgecore Networks solutions, please contact your Edgecore Networks Corporation representatives at +886 3 563 8888 (HQ) or +1 (949)-336-6801 or authorized resellers.

© Copyright 2023 Edgecore Networks Corporation. The information contained herein is subject to change without notice. This document is for informational purposes only and does not set forth any warranty, expressed or implied, concerning any equipment, equipment feature, or service offered by Edgecore Networks Corporation. Edgecore Networks Corporation shall not be liable for technical or editorial errors or omissions contained herein.