

800GBE FABRIC SWITCH

DriveNets 2500S

High-performance, high-density 800GbE AI fabric switch for leaf, spine and super-spine architectures.

51.2

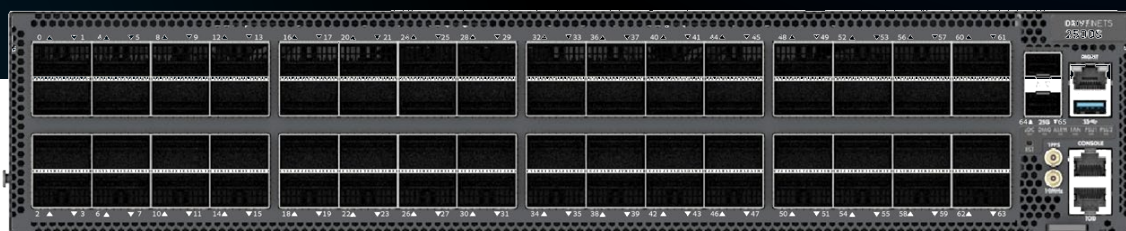
Tbps

TOTAL SWITCHING CAPACITY

64 × 800G OSFP800

2RU platform

Broadcom Tomahawk 5



OVERVIEW

The DriveNets 2500S is an 800G switch platform designed for high-capacity data center and AI cluster deployments. It delivers line-rate L2 and L3 switching across sixty-four OSFP800 interfaces with 400G, 200G and 100G breakout options — enabling dense aggregation and high-bandwidth connectivity at 51.2 Tbps for leaf, spine and super-spine architectures. Built on Broadcom Tomahawk 5 silicon with a modular thermal and power design, and an open ONIE-based software environment for straightforward onboarding and lifecycle automation.



Interfaces

64 × 800G OSFP800 data ports

Breakout: 2 × 400G, 4 × 200G, or 8 × 100G per interface

2 × 25G SFP28 additional ports



General

Suitable for large-scale data center fabrics

Broadcom Tomahawk 5 silicon, 51.2 Tbps

Intel Ice Lake-D control subsystem with security features



Power & Cooling

2RU platform with front-facing data ports

1 + 1 redundant hot-swappable PSUs

3 + 1 redundant hot-swappable fan modules

Full technical detail

Ports

Switch ports	64 × 800G OSFP800
Console	1 × RJ-45 UART RS232
Out-of-band mgmt	1 × RJ-45
In-band mgmt	2 × SFP28
USB	1 × USB 3.0

Timing & Synchronization

Standards	IEEE 1588 PTP, SyncE
Clock I/O	1 × 10MHz SMB
Pulse	1 × 1pps SMB
Time of day	1 × TOD RJ-45

Cooling

Airflow	Front-to-back (0°C – 40°C)
Fans	3 + 1 redundant, hot-swap

Power

PSUs	2 × 3000W AC/DC, load-sharing, hot-swap
AC input	200–240 VAC, 50–60Hz (16 A / 3000 W max)
DC input	–48V ~ –60V (80 A / 3000 W max)
Typical / max power	1066 W / 1684 W (w/o optics)

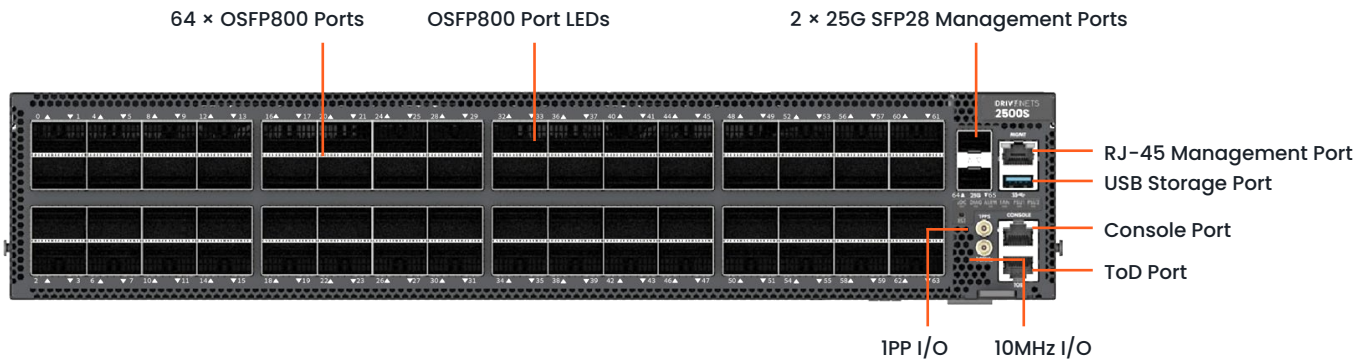
Key Components

Switch silicon	Broadcom Tomahawk 5 (BCM78900), 51.2 Tbps
CPU	Intel Ice Lake-D D1713NTE 4C
Memory	2 × 16GB ECC DDR4 SO-DIMM
Storage	M.2 240G NVMe SSD
NOR flash	64MB boot + 64MB backup
BMC / ROT	AST2600 / AST1060

Physical & Environmental

Dimensions (W×D×H)	438.4 × 648.2 × 88 mm
Form factor	2RU, front-facing ports
Operating temp	0°C – 40°C (32°F – 104°F)
Operating humidity	5% – 95% non-condensing

Front panel



REGULATORY COMPLIANCE

Certifications

EMI

CE Mark
FCC Title 47, Part 15, Subpart B,
Class A

Safety

CB EN60950 · UL60950
EN62368 · UL62368

Environmental

0–40°C @ 6000 ft · 5–95% RH
WEEE 2002/96/EC · RoHS-2

51.2 Tbps

SWITCHING CAPACITY

64 × 800G

OSFP800 DATA PORTS

2 RU

FORM FACTOR

3000 W

REDUNDANT AC/DC
PSUS

DRIVENETS

DriveNets builds high-performance networking solutions for large-scale AI infrastructure and service-provider networks. DriveNets' Network Cloud powers production networks at global operators such as AT&T and Comcast, while its AI Fabric solutions optimize the performance and time to first token (TTFT) in multi-vendor AI environments at foundation model labs, NeoClouds, and enterprises. DriveNets combines high-performance networking, end-to-end automation, and full-stack AI cluster optimization to remove network bottlenecks, maximize GPU utilization, accelerate AI cluster deployments, and improve token economics. Learn more at www.drivenets.com