

1.6T AI FABRIC SWITCH

DriveNets 2601S

High-performance, high-density 1.6T AI fabric switch for leaf, spine and super-spine architectures.

102.4Tbps

TOTAL SWITCHING CAPACITY

64 × 1.6T OSFP224

3RU platform

Broadcom Tomahawk 6



OVERVIEW

The DriveNets 2601S is a high-performance, air-cooled Ethernet switch platform designed for next-generation AI fabrics and large-scale data center deployments. Built on Broadcom Tomahawk 6 silicon, it delivers line-rate L2 and L3 switching across sixty-four 1.6T OSFP224 interfaces with 800G, 400G, 200G and 100G breakout options — enabling ultra-high-density connectivity at 102.4 Tbps for leaf, spine and super-spine architectures. The 3RU platform combines eight hot-swappable fan trays with redundant AC power delivery and advanced timing, and is powered by the DriveNets Network Operating System (DNOS) for a scalable, highly reliable foundation.



Interfaces

64 × 1.6T OSFP224 data ports

Breakout: 800G, 400G, 200G or 100G configurations

2 × 25G SFP28 in-band management ports



General

Designed for large-scale data center fabrics

Broadcom Tomahawk 6 silicon, 102.4 Tbps

Intel Ice Lake-D (D-1713NT 4C) control subsystem



Power & Cooling

3RU rack-mountable, front-to-back forced airflow

12V/2700W AC PSUs with 2+2 redundancy

8 hot-swappable fan tray modules

Full technical detail

Ports

Switch ports	64 × 1.6T OSFP224
Breakout	800G / 400G / 200G / 100G
Console	1 × RJ-45 UART RS232
Out-of-band mgmt	1 × RJ-45
In-band mgmt	2 × 25G 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 forced air
Fan trays	8 hot-swappable modules
Fans	8 × 60 × 60 × 67 mm
Operating temp	0°C – 40°C

Power

PSUs	12V / 2700W AC
Redundancy	2+2 redundant, hot-swap
Input	AC, front-to-back airflow
Distribution	Load-sharing across PSUs

Key Components

Switch silicon	Broadcom Tomahawk 6 (BCM78914), 102.4 Tbps
CPU	Intel Ice Lake-D D-1713NT 4C
Memory	2 × 16GB ECC DDR4 SO-DIMM
Storage	M.2 240GB NVMe SSD
NOR flash	64MB boot + 64MB backup
BMC / RoT	AST2620 / AST1060
CPLD	Lattice LCMXO3LF

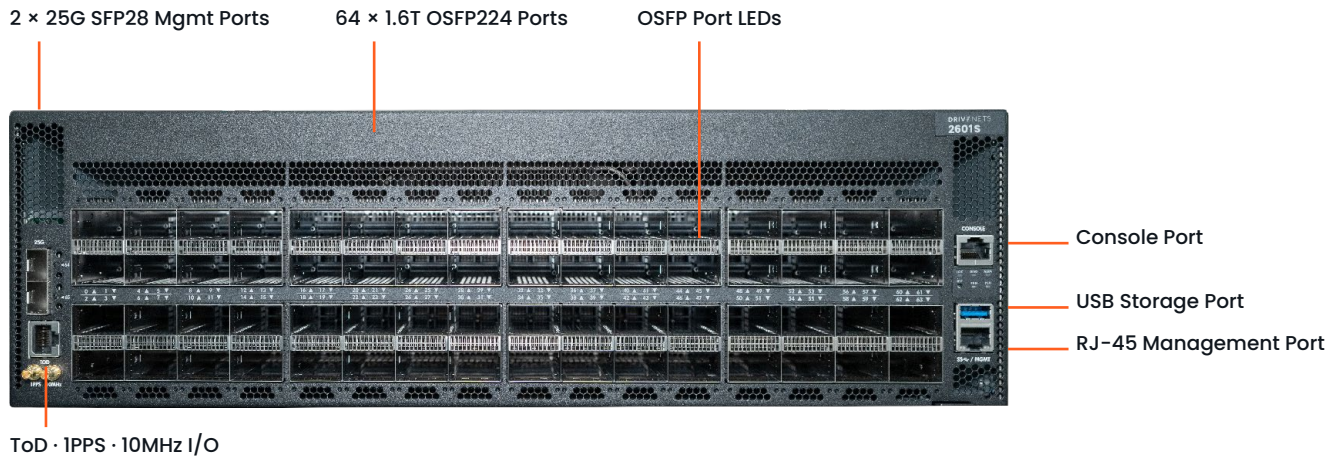
Physical & Environmental

Dimensions (W×D×H)	440 × 648.2 × 131.6 mm
Form factor	3RU, rack-mountable
Operating temp	0°C – 40°C (32°F – 104°F)
Storage temp	–40°C – 70°C
Operating altitude	0 – 1,800 m

Software

Network OS	DriveNets DNOS
Forwarding	Line-rate Layer 2 and Layer 3
Target roles	Leaf, spine, super-spine

Front panel



REGULATORY COMPLIANCE

Certifications

EMC

FCC CFR 47 Part 15 Subpart B:2024
Class A
ICES-003 Issue 7:2020 Class A

CE & UKCA · EN 55032 · EN 55024 · EN 55035
EN IEC 61000-3-2 · EN 61000-3-3
ETSI EN 300 386 V2.2.1

VCCI-CISPR 32:2016 · AS/NZS CISPR 32
Class A

Safety

UL/CUL 62368-1 Ed.4
IEC 62368-1 Ed.2 + Ed.3 + Ed.4

Environmental

0–40°C operating · –40–70°C storage
Operating altitude 0–1,800 m
Front-to-back forced airflow

102.4 Tbps

SWITCHING CAPACITY

64 × 1.6T

OSFP224 DATA PORTS

3 RU

FORM FACTOR

2700 W

AC PSU, 2+2
REDUNDANT

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