

800G SPINE CELL-SWITCH · NCF-128E

DriveNets 9300F

High-performance spine cell-switch node for Fabric-Scheduled Ethernet clusters —deterministic, cell-based switching interconnecting up to 32K GPUs.

102.4

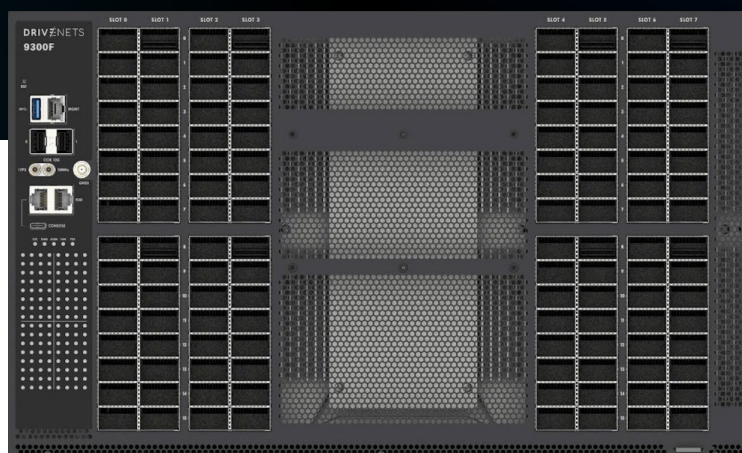
Tbps

TOTAL FABRIC CAPACITY

128 × OSFP 800G

2 × Broadcom Ramon3

Up to 32K GPUs



OVERVIEW

The DriveNets DN-9300F is a high-performance spine cell-switch platform built on a dual-ASIC Broadcom Ramon3 architecture with 128 × OSFP 800G ports. Delivering an aggregate 102.4 Tbps of cell-based switching, it eliminates Ethernet overhead and evenly distributes traffic across all fabric links for deterministic, low-latency performance. Coupled with ASA926-18XKE, ASA926-18XKA, DN-5300R or DN-5301R Ethernet leaf switches, it enables a highly efficient, scalable Fabric-Scheduled Ethernet cluster supporting AI/ML workloads at scale. Software-upgradeable 400G / 800G operation reduces total cost of ownership while providing investment protection and operational flexibility.



General

Self-routing fabric with dynamic load balancing

Single or multi-stage (three-stage) topology — scales to 2K NCPs in one system

Destination and source-based cell switching · 1588v2 PTP Class C



Security & Management

Platform Firmware Resilience (PFR)

BMC for remote monitoring and system control



Power & Cooling

2 + 1 redundant hot-pluggable PSUs

7 + 1 redundant hot-swappable fans

Typical power 1113 W (w/o optics)

Full technical detail

Ports

Fabric ports	128 × OSFP 800G
Serial console	1 × RJ-45 · 1 × USB Type-C
Management	1 × RJ-45 100/1000BASE-T
SDN management	2 × SFP+
Storage	1 × USB 3.0 Type-A
Reset	1 × reset button

Clocking & Timing

Pulse	1 × 1PPS I/O DIN
Clock I/O	1 × 10MHz I/O DIN
Time of day	1 × TOD port
GNSS	1 × GNSS antenna

Performance

Cell-based switch	2 × 51.2 Tbps throughput
Cell switching	2 × 21.6B cells/sec

LEDs

OSFP fabric ports	Link status, activity, rate
Ethernet mgmt port	Link status, activity
System	Diagnostic, locator, alarm, PSU, fan

Key Components

Switch silicon	2 × Broadcom Ramon3 BCM88920
CPU	Intel COMe Ice Lake-D D-1713NT 4C (D-1734NT 8C optional)
Memory	32GB DDR4 (2 × 16GB) with ECC
Storage	NVMe M.2 SSD 240G (480G optional)
BMC / PFR	AST2600 / AST1060

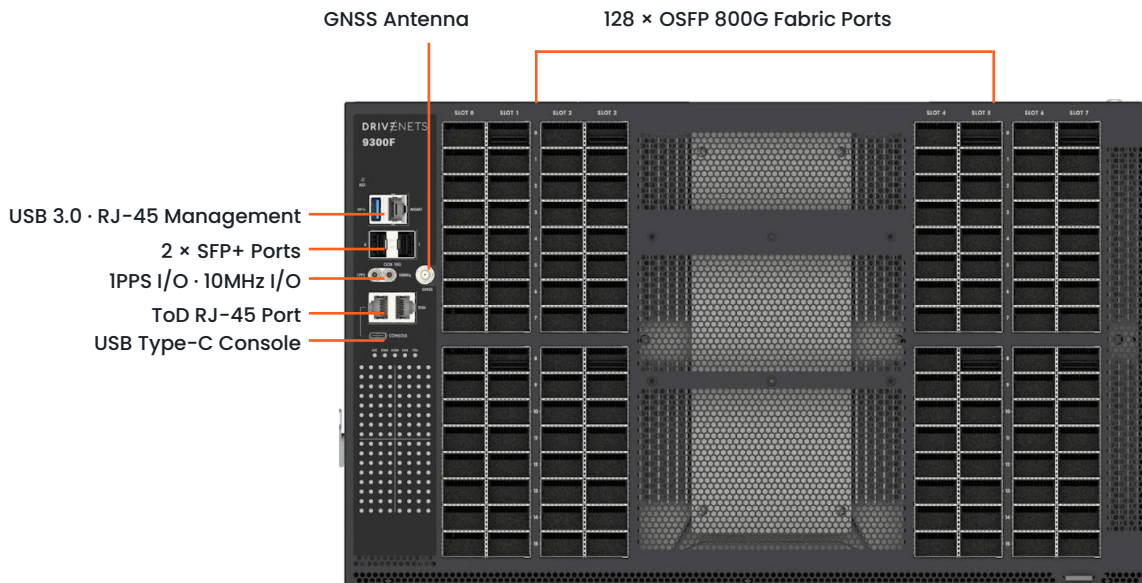
Physical & Environmental

Dimensions (H×W×D)	263 × 440 × 668.2 mm
Weight	63 kg
Fans	7 + 1 redundant, hot-swap
Operating temp	0°C – 40°C (32°F – 104°F)
Storage temp	-40°C – 70°C (-40°F – 158°F)
Operating humidity	5% – 85% non-condensing

Power

PSUs	2 + 1 redundant, load-sharing, hot-swap VAC/VDC
Input voltage	200–240 VAC · -48 to -60 VDC
Typical power	1113 W (w/o optics)
Maximum power	4352 W (with 800G 14 W optics)

Front panel



REGULATORY COMPLIANCE

Certifications

EMI

CE Mark · EN55032 Class A ·
EN55024/35
EN 301 489-1 / -19 · EN 303413
FCC Part 15 Subpart B Class A · EN
300 386

Safety

UL 62368-1 Ed.3 / UL 60960
IEC/EN 60950-1
IEC/EN 62368-1 Ed.3

Environmental

ETSI 300 019-2-1 T1.2 (storage) ·
-2-2 T2.3 (transport)
EN 300 019-2-3 Class 3.2 (vibration,
bump)
Acoustic ETS 300753 · RoHS-6

102.4 Tbps

FABRIC CAPACITY

128 × 800G

OSFP FABRIC PORTS

32K GPUs

IN ONE CLUSTER

2K NCPs

PER SYSTEM

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