

ARCTICA 4808XS

A CUSTOMIZABLE, TOP-OF-RACK SWITCH WITH 10GB
HOSTS FOR 100GB INFRASTRUCTURES



OVERVIEW

As modern data centers and high-performance computing systems improve performance and efficiency, the number of interactions between devices increases exponentially. To prevent bottlenecks, high-performance networking switches are mission critical. Designed for performance and scalability, Penguin Computing's Arctica 4808xs is equipped with virtual extensible LAN (VxLAN) routing and an enlarged L2/L3 forwarding table. Capable of 100Gb, 50Gb, 40Gb, 25Gb and 10Gb uplink speeds, the Arctica 4808xs works great as a top-of-rack aggregation switch.

FEATURES & BENEFITS

- 1.18 Tbps total bandwidth with low latency (300ns port-to-port) to deliver high performance packet switching
- 165W typical power consumption (with passive cables) for easy facility environment planning
- Provides a upgrade path of 10/40 GbE network to 100GbE Fabrics
- x86-based control plane provides easier integration of server administration tools

FEATURE	TECHNICAL SPECIFICATIONS
Form Factor	1U Top-of-Rack Form Factor
Chassis	<div>Ports:<ul style="list-style-type: none">• 48x 10Gb SFP+ ports• 8x 100Gb QSFP28 ports</div> <div>Power Supplies<ul style="list-style-type: none">• 2x 460W Redundant Power Supplies</div> <div>Airflow:<ul style="list-style-type: none">• Choice of front-to-back and back-to-front</div> <div>RJ-45 Serial Console:<ul style="list-style-type: none">• 1</div> <div>RJ-45 1/10/100 Base-T Management:<ul style="list-style-type: none">• 2</div> <div>USB Type A Storage:<ul style="list-style-type: none">• 1</div>
Hardware	<div>Data Plane:<ul style="list-style-type: none">• Mellanox Spectrum• Cut-through operation• Forwarding Capacity<ul style="list-style-type: none">- 1.18 Tbps (full bidirectional line rate on all ports)• Packet Buffer<ul style="list-style-type: none">- 16MB</div> <div>Control Plane:<ul style="list-style-type: none">• Management Processor<ul style="list-style-type: none">- Intel 1.4 GHz, Dual-core, 64 bit processor- 8GB RAM- 32GB SSD Storage</div>

FEATURE	TECHNICAL SPECIFICATIONS
Network OS	<p>Loaded with Open Network Install Environment (ONIE)</p> <ul style="list-style-type: none"> • Compatible with Cumulus Linux • Layer-2 and Layer-3 Architectures <p>Layer 2</p> <ul style="list-style-type: none"> • 802.1d Bridging • 802.1w RSTP • 802.1s MSTP • 802.1q VLAN 4096 • 802.1ad (Q-inQ) VLAN Double Tagging • 802.3ad Link Aggregation/LACP • Multi-Chassis LAG • Storm Control <p>Layer 3</p> <ul style="list-style-type: none"> • IGMP/MLD Snooping • IPv4/v6 Routing Protocols • OSPF • BGP • VRF • ECMP/WCMP • VRRP • IP Multicast • PIM-SM • PIM-DM
Data Center/Virtualization	<p>VXLAN Bridging</p> <p>VXLAN Routing</p>

Learn More

Configure your ideal server at www.penguincomputing.com.

For pricing on your specific configuration, contact a representative by email at sales@penguincomputing.com or call 1-888-PENGUIN (736-4846).

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About Penguin Computing

Penguin Computing, Inc. is a 20-year-old, U.S.-based global provider of high-performance computing (HPC), artificial intelligence (AI), and data center solutions with more than 2,500 customers in 40 countries, across eight major vertical markets. Penguin Computing offers a comprehensive portfolio of hardware, software, and services, including solutions based on the Open Compute Project (OCP), as well as financing and top-rated customer support. Penguin Computing products include Linux-based servers, software, integrated, turn-key clusters, enterprise-grade storage, and bare metal HPC on cloud via Penguin Computing® On-Demand™ (POD).

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