

ARCTICA 4806XT

A CUSTOMIZABLE 10G BASE-T SWITCH IDEAL FOR TOP, MIDDLE, OR END-OF-ROW DEPLOYMENTS



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 4806xt provides full line-rate switching at Layer 2 or Layer 3 across 48 x 10GbE ports and 6 x 40GbE uplinks. The Arctica 4806xt was designed as a top-of-rack switch for virtualized data centers, however, the longer transmission distance of Ethernet (up to 330 ft) also makes it an ideal option to be located in MoR (middle-of-row) or EoR (end-of-row) positions.

FEATURES & BENEFITS

- 48x 10G Base-T RJ45 host ports provide natural connection for 10G Ethernet LOM, and deployment flexibility of MoR or EoR
- Achieve optimal uplink bandwidth and support any mix of 10 and 40 GbE host and spine interconnections with 6x 40 Gigabit QSFP+ uplink ports
- 12V DC power option for OCP deployment environments
- Easily integrate server administration tools with a x86-based control plane

FEATURE	TECHNICAL SPECIFICATIONS
Form Factor	1U Top-of-Rack Form Factor
Chassis	Ports: <ul style="list-style-type: none">• 48x RJ-45 1/10GbE ports + 6x QSFP 10/40GbE ports Maximum Power Consumption: <ul style="list-style-type: none">• 348W Airflow: <ul style="list-style-type: none">• Choice of front-to-back and back-to-front RJ-45 Serial Console: <ul style="list-style-type: none">• 1 RJ-45 1/10/100 Base-T Management: <ul style="list-style-type: none">• 1 USB Type A Storage: <ul style="list-style-type: none">• 1
Hardware	Data Plane: <ul style="list-style-type: none">• Broadcom BCM56864 "Trident II+"• Cut-through operation, store and forward mode available for speed conversions• Forwarding Capacity<ul style="list-style-type: none">- 720 Gbps (full bidirectional line rate on all ports)• Packet Buffer<ul style="list-style-type: none">- 16MB Control Plane: <ul style="list-style-type: none">• Management Processor<ul style="list-style-type: none">- Intel Atom quad-core 2.4Ghz x86 processor- 8GB RAM- 8GB NAND flash Storage

FEATURE	TECHNICAL SPECIFICATIONS
Network OS	Loaded with Open Network Install Environment (ONIE) <ul style="list-style-type: none"> • Compatible with Cumulus Linux • Layer-2 and Layer-3 Architectures Layer 2 <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 Layer 3 <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	VXLAN Bridging VXLAN Routing

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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