

# ARCTICA NX3200C

A VERSATILE, NEXT GENERATION  
100GB DATA CENTER NETWORKING SWITCH



## OVERVIEW

As modern data centers and high-performance computing (HPC) 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 in the modern data center, Penguin Computing's Arctica NX3200c networking switch is capable of 100Gb, 50Gb, 40Gb, 25Gb, and 10Gb link speeds. With the latest generation, programmable Broadcom data plane (the BCM56870 "Trident 3"), the Arctica NX3200c is a great choice for anyone looking for a flexible networking solution for their data center.

## FEATURES & BENEFITS

- 3.2Tbps total bandwidth with 32M byte packet buffer to deliver high performance packet switching
- Innovative, programmable data plane to support current and future data center networking requirements
- Supports multi-rate port configuration (10/25/40/50/100 GbE) for Top-of-Rack (TOR) or CLOS connectivity
- x86-based control plane with Baseboard Management Controller (BMC) management provides easier integration of server administration tools

FEATURE	TECHNICAL SPECIFICATIONS	
Form Factor	1U fixed configuration, TOR form factor	
Chassis	Ports:	<ul style="list-style-type: none"><li>• 32x QSFP28 with each port supporting 1x40/100 GbE, 2x 50GbE, 4x 10/25 GbE using breakout cables</li></ul>
	Power Supplies:	<ul style="list-style-type: none"><li>• 2x 550W Redundant Power Supplies or 1x 12VDC Power Supply</li></ul>
	Airflow:	<ul style="list-style-type: none"><li>• Choice of front-to-back and back-to-front</li></ul>
	Serial Console:	<ul style="list-style-type: none"><li>• 1x RJ-45</li></ul>
	Management:	<ul style="list-style-type: none"><li>• 1x RJ-45 100/1000 Base-T</li><li>• 1x SFP+ 1/10GbE Management</li></ul>
	Storage:	<ul style="list-style-type: none"><li>• 1x USB Type A Storage</li></ul>
Hardware	Data Plane:	<ul style="list-style-type: none"><li>• Broadcom BCM56870 "Trident 3"</li><li>• Cut-through operation, or store- and-forward modes available for different applications</li><li>• Forwarding Capacity<ul style="list-style-type: none"><li>- 3.2 Tbps (full bidirectional line rate on all ports)</li></ul></li><li>• Packet Buffer<ul style="list-style-type: none"><li>- 32MB</li></ul></li></ul>
	Control Plane:	<ul style="list-style-type: none"><li>• Management Processor<ul style="list-style-type: none"><li>- Intel 2.1GHz, 4 cores, 64-bit</li><li>- 4GB RAM</li><li>- 16GB SSD Storage</li></ul></li></ul>

FEATURE	TECHNICAL SPECIFICATIONS
<b>Network OS</b>	<p>Loaded with Open Network Install Environment (ONIE)</p> <ul style="list-style-type: none"> <li>• Compatible with Cumulus Linux</li> <li>• Layer-2 and Layer-3 Architectures</li> </ul> <p>Layer 2</p> <ul style="list-style-type: none"> <li>• 802.1d Bridging</li> <li>• 802.1w RSTP</li> <li>• 802.1s MSTP</li> <li>• 802.1q VLAN 4096</li> <li>• 802.1ad (Q-in-Q) VLAN Double Tagging</li> <li>• 802.3ad Link Aggregation/LACP</li> <li>• Multi-Chassis LAG</li> <li>• Storm Control</li> </ul> <p>Layer 3</p> <ul style="list-style-type: none"> <li>• IGMP/MLD Snooping</li> <li>• IPv4/v6 Routing Protocols</li> <li>• OSPF</li> <li>• BGP</li> <li>• VRF</li> <li>• ECMP/WCMP</li> <li>• VEEP</li> <li>• IP Multicast</li> <li>• PIM-SM</li> <li>• PIM-DM</li> </ul>
<b>Data Center/Virtualization</b>	<p>VXLAN Bridging</p> <p>VXLAN Routing</p> <p>RoCE v1/v2</p>
<b>Warranty</b>	3-year Standard

## Learn More

Configure your ideal server at [www.penguincomputing.com](http://www.penguincomputing.com).

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

## Purchase with Financing

Finance products, services, even soft costs with Penguin Computing Capital. Choose from options such as no money down, flexible billing choices, extended repayment timelines, and a variety of end-of-term alternatives.

## 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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