



Virtualization, Orchestration and Automation of the Data Center

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Driving Recognition By Key Industry References



**Rated Data Center 'Champion' and 'Exemplary'
Rated Campus 'Innovator'**

November 2011 report
April 2012 report



**INFONETICS
RESEARCH**

#5 Global 10G vendor after Cisco, HP, Dell, IBM

May 2012 report



**Independent tests called our core switch (BDX8)
3X-10X faster than competition**

November 2011 report



**Goldman
Sachs**

**CIO survey of US Cisco customers, called
Extreme a Top 4 Alternative Network Vendor**

September 2011 report



Morgan Stanley

**CIO survey of US Cisco customers,
"Extreme Gaining Momentum in Switching"**

April 2012 report

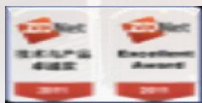


Gartner.

Rated 'Data Network Specialist in Data Center Report November 2011 report



**Network
Computing**
For IT By IT



Multiple Product Awards:

**Network Computing: Black Diamond X8
Named "Data Center Product of the Year"**

February 2012

ZDNet China Awards BDX "Best 40G Switch"

December 2011 report

Digital Times Korea "Hit Switch" Award for x670

November 2011 report



다지털시대 경제신문
다지털타임스

Cloud & Enterprise Data Centers – 1000+ Customers



Petro China is China's largest oil and gas company. Extreme Networks helps run its data centers to manage its energy supply chain



Sierra Trading Post is an online retailer. Extreme Networks deployed a complete 10GbE solution increasing its overall network performance, failover, reliability and availability.



Samsung is the world's biggest supplier of TVs and CE devices. For 10 years, Extreme Networks powered its R&D data centers



LINX is one of the global leaders of Internet Exchange Points. Extreme Networks has deployed BDX8 to meet the demands of the Summer Olympics.



Key Elements For Orchestration and Automation

Separate Control Plane from Data Plane



Centralize Network Intelligence



Abstract Network Infrastructure from Applications



Make Control and Management Plane Programmable



Extreme Networks Open Fabric with SDN

SDN Apps

VM Lifecycle
Management
(XNV)

User Identity
Management

VDI

Application
Performance
Management

....

Management Platforms

Ridgeline



XOS – Extensible, Open Secure

XML

Scripts

External App SDK

OpenStack
Quantum Plugin

OpenFlow

Modular

Predictable Performance

Memory Protected

Hardware Abstracted

High Performance Converged Open Fabric



Low Latency

High Capacity

MLAG

DCB



BlackDiamond X8 – Overview

Highest Consolidation

- 14.5 RU - 1/3rd of Rack
- 768 x 10GbE wirespeed
- 192 x 40GbE wirespeed



Lowest Latency

- 2.3 us – Port-to-Port*



Unmatched Performance

- 20+ Tbps Capacity/Switch
- 1.28 Tbps Bandwidth/Slot



Superior Availability

- 1+1 Management
- N+1 Fabric, Power & Fan
- N+N Power GRID



Server Virtualization

- 128K Virtual Machines
- VM Lifecycle Management
- VPP & XNV



Storage Convergence

- iSCSI, NFS, CIFS
- DCB (PFC/ETS/DCBX)
- FIP Snooping



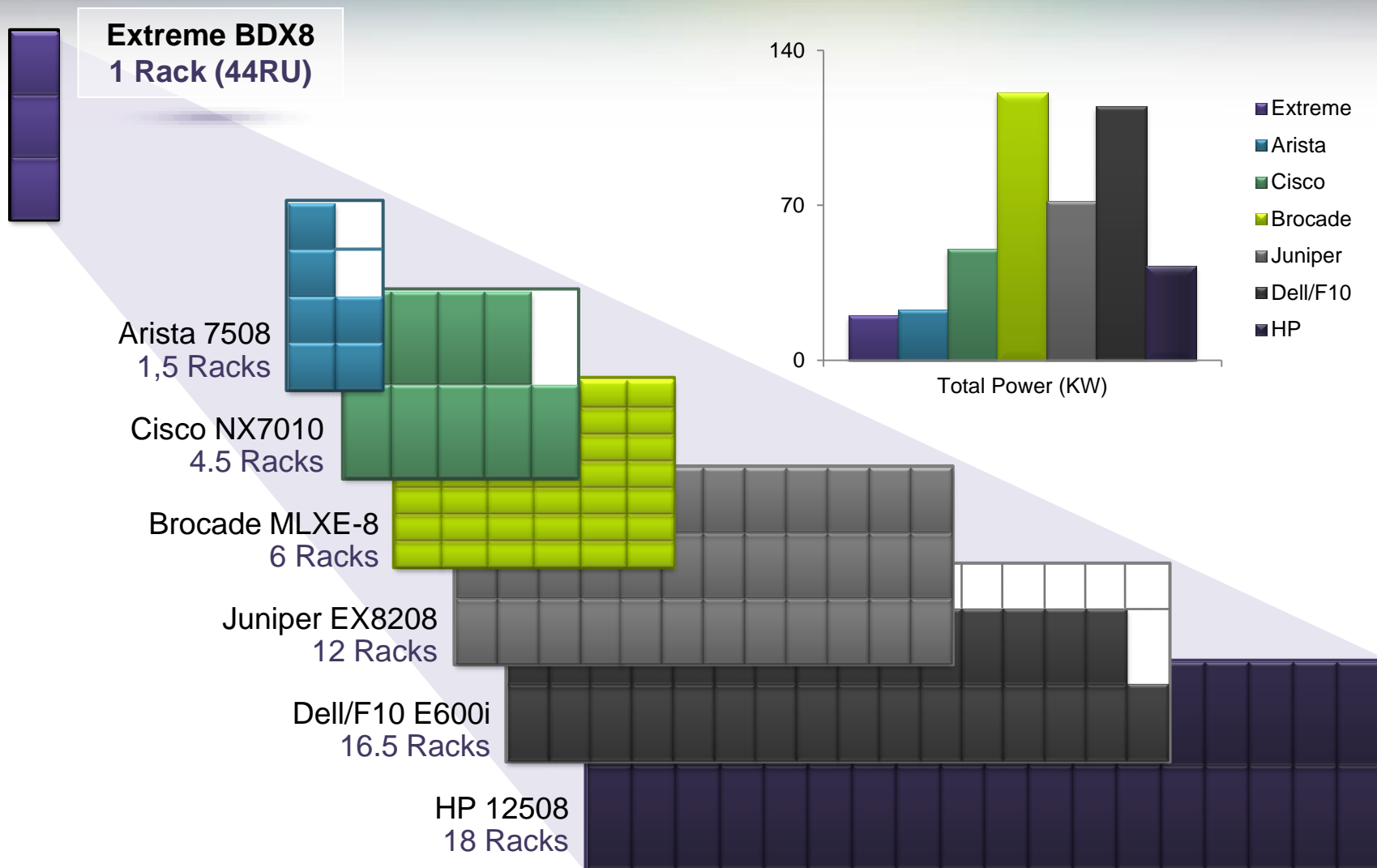
Power & Cooling

- Front-to-Back Cooling
- Variable Fan Speed
- Only 5W per 10GbE port
- Intelligent Power Mgmt.



*Based on Lippis Test Report October 2011

Vendor Comparison By 10 GE Rack



Data Center Space for Wire-Speed 2304x10GE Ports

THANK YOU

