Switches for NEC SIGMABLADE

BLADE SWITCHES

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Introducing switches for NEC SIGMABLADE H and M chassis. These switches work with the NEC Express5800 blade servers, and the NEC SIGMABLADE enclosure models.

About NEC SIGMABLADE

The NEC blade server system, SIGMABLADE, is designed to enable high-density system integration and cost optimization in your increasingly complex and expanding enterprise systems. They serve as a core platform for your technology infrastructure in today's competitive business environment. With the main server functions contained in their board-shaped slim form factors, the NEC server blades provide outstanding memory and I/O scalabilities, along with high processing power for robust server performance. The enclosures pack multiple server blades, realizing a space-efficient system environment, without any cabling complexity, and help reduce your management and maintenance costs.

Gigabit, 10 Gigabit, and Fibre Channel Blade Switches for NEC SIGMABLADE H and M Chassis

- Advanced networking features
- Lowest power consumption
- Interoperability with Cisco® and other network vendors
- Lowest cost compared to patch panels with external switches
- Fewest cables
- Easy integration with common network management systems

NEC 1Gb Intelligent L2 Switch

The NEC 1Gb Intelligent L2 Switch provides line-rate Layer 2 switching to the NEC SIGMABLADE H or M blade server system while minimizing the number of cables required to connect the enclosure to the network. It can be deployed in pairs for high availability and maximum uplink bandwidth.

NEC 1Gb Intelligent L3 Switch

The NEC 1Gb Intelligent L3 Switch provides the all the same robust features as the NEC 1Gb Intelligent L2 Switch, plus the following:

- Layer 3 static and dynamic routing protocols for network security, flexibility, and bandwidth conservation
- High availability based on Virtual Router Redundancy Protocol
- SFP Fiber uplink ports

NEC 10Gb Intelligent L3 Switch

The NEC 10Gb Intelligent Layer 3 Switch provides four 10Gb Ethernet uplinks and 16 10Gb connections to server blades in the NEC SIGMABLADE H or M blade server system. This switch features all the robust layer 2 and Layer 3 features of the NEC 1Gb Intelligent L3 switch, plus the following:

- 400 Gbps of switching capacity for today's bandwidth-intensive server virtualization workloads
- 10G Ethernet reduces network complexity, cable management and troubleshooting caused by aggregation of 1Gb links
- Much lower power consumption than typical standalone 10Gb switches

4G FC switch (12 & 24 ports)

- High Speed switching function
- Auto routing function
- Cascade connection of 4G FC Switches
- Zoning function

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NEC Blade Switches from BLADE Network Technologies and Brocade

Product Specifications Summary

				
Product	NEC 1Gb Intelligent L2 Switch	NEC 1Gb Intelligent L3 Switch	NEC 10Gb Intelligent L3 Switch	4G FC Switch (12/24 ports)
Form Factor	Single Wide – Blade Switch	Single Wide – Blade Switch	Double Wide - Blade Switch	Single Wide - Blade Switch
Ports	16 Downlinks & five 1G Copper Uplinks	16 Downlinks four port selectable RJ45/Fiber + one Fixed RJ45 Uplink	16 10G Downlinks & four 10G XFP Uplinks	12 Ports - 8/4 Interlink Ports/External Ports 24 Ports - 16/8 Interlink Ports/External Ports
10GbE Ports	-	-	20	
Management Ports	1	1	1	
Max Throughput (bi-directional Gbps)	48 Gbps	48 Gbps	400 Gbps	4.25 Gbps (12 & 24 ports)
Configuration and Management	SmartPanel, Browser, AOS, isCLI	Browser, AOS, isCLI	Browser, AOS, isCLI	**Internal Architecture** Shared Memory F / FL / E port support (Both 12 & 24 ports)
Software	AOS (L2)	AOS (L2/3)	AOS (L2/3)	
Max VLANS	1000	1000	1000	
Max MAC Entries	8K	8K	16K	**Safety Standard** VCCI Class-A (Both 12 & 24 ports)
Static Link Aggregation (Groups/Members)	12/6	12/6	12/6	
802.3ad Dynamic Link Aggregation with LACP	Yes	Yes	Yes	**Size** 1 slot width (Both 12 & 24 ports)
Jumbo Frames	9K	9K	9K	
802.1d Spanning Tree / PVST+	Yes	Yes	Yes	**Weight** 1.3kg (Both 12 & 24 ports)
802.1s Multiple Spanning Tree	Yes	Yes	Yes	
802.1w Rapid Spanning Tree	Yes	Yes	Yes	
Spanning Tree Groups	32	128	128	
802.1x Port Access Control	No	Yes	Yes	
802.3x Flow Control	Yes	Yes	Yes	
DHCP for Management Port	Yes	Yes	Yes	
BOOTP	Yes	Yes	Yes	
Port Fast Forwarding	Yes	Yes	Yes	
Manual MAC Address Entry	Yes	Yes	Yes	
Uplink Failure Detection	Yes	Yes	Yes	
RIP	No	v1/v2	v1/v2	
OSPF	No	v2	v2	
Virtual Router Redundancy Protocol (VRRP)	No	Yes	Yes	
SNMP	SNMP v1/v2c/v3	SNMP v1/v2c/v3	SNMP v1/v2c/v3	
Stacking	-	-	Future	
Power	25W	30W	70W	Up to 35W (12 & 24 Ports)
Supported NEC SIGMABLADE Chassis	SIGMABLADE H & M	SIGMABLADE H & M	SIGMABLADE H & M	SIGMABLADE H & M
Recommended when your main concern is:	Cost	Optical connectivity, low cost and full feature set	High bandwidth and low latency	When Fibre Channel is required

About BLADE Network Technologies is the market-leading supplier of Gigabit and 10 Gigabit Ethernet network solutions for NEC SIGMABLADE and NEC server and storage racks.

About Brocade is an industry-leading supplier of Fiber Channel Switch network solutions for NEC SIGMABLADE and NEC server and storage racks.

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Express5800

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