

BlueFire™ 700 Series

Multilayer Switches

The NEC BlueFire 700 switches represent technological advances in reliability, capacity and service management of multilayer switching. IPv6 is enabled now in silicon within the BlueFire 700 switches to support future enhanced IP networking applications. The BlueFire solutions utilize hardware-based packet filtering enabling packet delivery without performance degradation. They offer non-blocking, full wire-speed layer 2 and layer 3 switching.

Proven Reliability

NEC's long-standing history of providing reliable, high quality solutions continues with BlueFire. The BlueFire family provides scalable solutions for the core and enterprise IP network, enabling convergence with reliability. Redundancy for CPU, fan and power modules provides excellent availability of network connections. Additionally, advanced routing and trunking functions support route and port redundancy. The BlueFire 700 family is fully interoperable with most major L2/L3 switching devices.

Advanced Architecture

NEC BlueFire 700 switches offer excellent multilayer switching mechanisms, implemented with a minimal number of NEC ASICs for packet forwarding and switching within line interface units and system switching fabrics. The interconnect-

ed, shared buffer (all models) and crossbar switching (750 model) architectures offer wire speed performance from any port!

IPv6 Enabled

BlueFire 700 switches are IPv6 enabled in silicon to support future IP networking applications.

Cost-Effective Solutions

The performance and reliability of NEC BlueFire switches, coupled with their excellent multilayer switching functions, make them ideal for enterprise applications, delivering quality performance at a very competitive price.

Simplified Management

Key management functions include a rich command line interface and an SNMP MIB interface with RMON probes. These make BlueFire switches easy to integrate, deploy and manage in both backbone and edge applications.



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NEC's Enterprise Open Network (NEON)

NEON embodies NEC's philosophy that drives development of complementary communication solutions for OPEN networks, delivering value-added capabilities and quality of service, while protecting investments; all without compromising the user experience. The BlueFire 700 family provides the flexible infrastructure needed for today's networks. The NEC QoS engine technology enables network performance that is engineered for voice. In addition, BlueFire products can easily be integrated into an existing open network to enhance performance.

Features

BLUEFIRE 700 SERIES

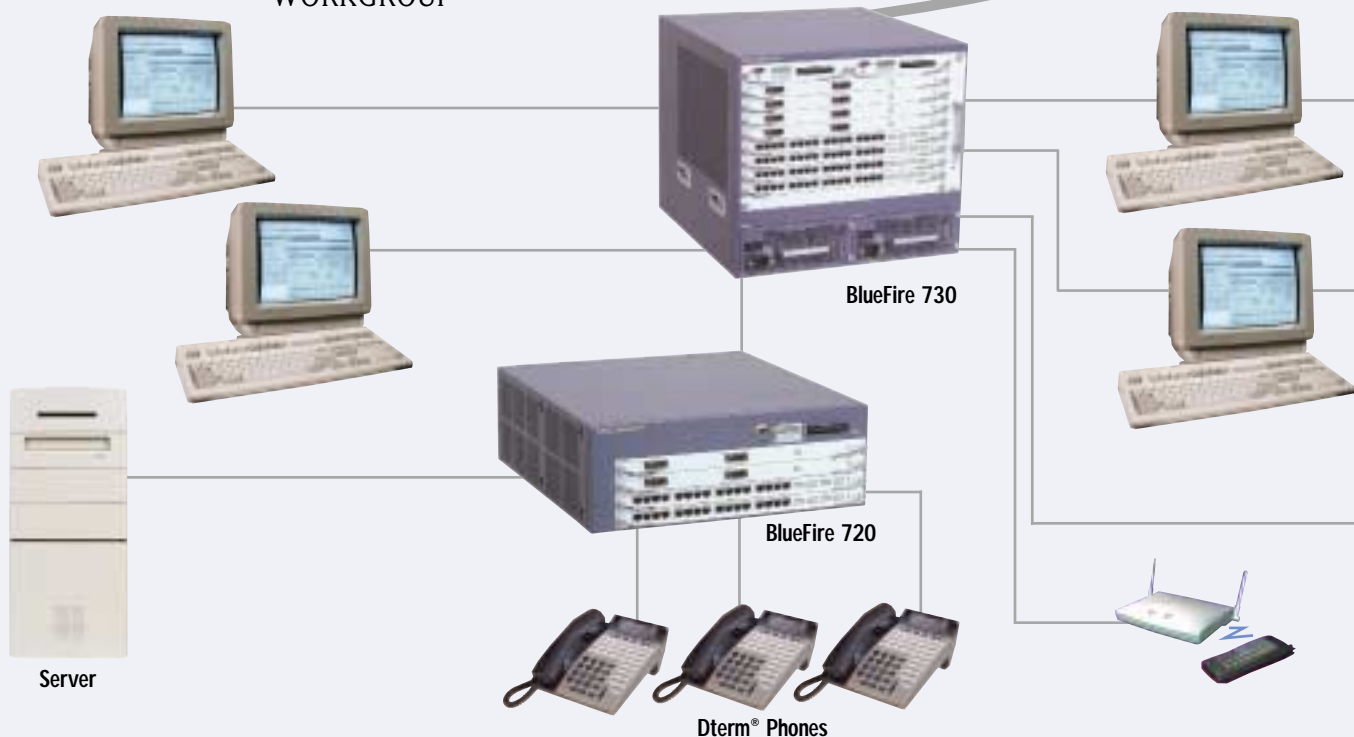
- Multi-layer (L2/L3) switching
- Advanced NEC ASIC-based packet forwarding and switching for unmatched performance
- Redundancy features on most models
- Supports various VLAN methods
- Hardware supported world class 8 levels queuing mechanism implementation
- Hot swappable modules for easy maintenance and increased uptime
- IPv6 support with various routing and multicast protocol support with Unicast – Multicast tunneling
- NAT / IP filtered
- Spanning tree protocol (IEEE802.1d) and VRRP support
- Fully SNMP manageable with RMON probe capabilities
- Advanced filtering mechanism based on physical port, VLAN, MAC address, Ether type code, SNAP type code
- Trunking support for port redundancy
- Port mirroring
- Full-wire speed routing and switching support

Advantages

BLUEFIRE 700 SERIES

- Enables finer QoS controls by adopting WFQ (Weighted Fair Queuing) and strict priority queuing with per class shaping mechanism
- Enables easy QoS parameter setting by collaboration with policy servers
- Diffserv/RSVP/LDAP/COPS support
- Transmit physical port/Receive physical port
- Transmit VLAN/Receive VLAN
- Destination MAC address/Source MAC address
- Ethernet Type Code(Maskable)
- Zero packet loss (<0.001%) bi-directional throughput L2/L3 using 64-, 512- and 1,518- byte packets
- Jumbo packet frames supported
- Common QoS support for VoIP from PBX trunk and IP stations
 - Common QoS Queuing Mechanisms
 - Traffic shaping for VLAN tagging allows priority queuing for voice traffic
 - Common differentiated services classes supported between NEC PBX and IP switches and routers

WORKGROUP





Reliable Enterprise Converged Networking Solution



CORE
WAN or MAN

CAMPUS



BlueFire IX5010



Server



NEAX® 2400 IPX



BlueFire 710



Dterm Phones



BlueFire 710



Dterm Phones



Headset



Smartphone



BlueFire 700 Series Specifications

Description	710	720	730	750
Switch Capacity	4 Gbps	8 Gbps	16 Gbps	96 Gbps
Packet Forwarding Capacity	6 Mpps	12 Mpps	24 Mpps	144 Mpps
Configurable Slots	2	4	8	12
Port Capacity (Maximum)	16 10/100 (fixed) 2 GbE 16 10/100	64 10/100 8 GbE	128 10/100 16 GbE	384 10/100 Mbps + 32 GbE 96 GbE ports
Management	SNMP, Telenet, Serial, RMON			
Queuing	8 levels of transmit queue per output port			
Switching	← Interconnected Shared Buffer →			Redundant Crossbar
Temperature	1.25A @120VAC	2.75A @120VAC	5.5A @120VAC	22A @120VAC
AC Power	5-40° C with 10-80% humidity (non-condensing)			

Interface Options

Physical Layer	Data Rate	Connector	Ports per Card	Model
10/100 Base-T Ethernet	10/100 Mbps	RJ45	8	BlueFire 710
10/100 Base-T Ethernet	10/100 Mbps	RJ45	16	BlueFire 720/730
10/100 Base-T/1000 Base-X Ethernet	10/100/1000 Mbps	RJ45/Mini-GBIC	32 + 4	BlueFire 750
1000 Base-X Ethernet	1000 Mbps	GBIC	1	BlueFire 710
1000 Base-X Ethernet	1000 Mbps	GBIC	2	BlueFire 720/730
1000 Base-X Ethernet	1000 Mbps	GBIC	8	BlueFire 750

