Nortel Networks
BayStack 5510 Switches

Part of Nortel Networks BayStack 5000 Series, BayStack 5510 Switches are next-generation stackable 10/100/1000 Mbps Ethernet Layer 3 routing switches. Designed to provide affordable, high-density Gigabit desktop connectivity to mid-size and large enterprise customers' wiring closets, BayStack 5510 Switches offer greater performance, security, resiliency, and more IP services to the network edge while maintaining low capital and operational expenses.

Available in two models—BayStack 5510-48T Switch with 48 10/100/1000BASE-T RJ-45 ports and BayStack 5510-24T Switch with 24 10/100/1000BASE-T RJ-45 ports—both feature two built-in SFP (small form factor) GBIC ports for uplink and two built-in stacking ports.

Key features comparison

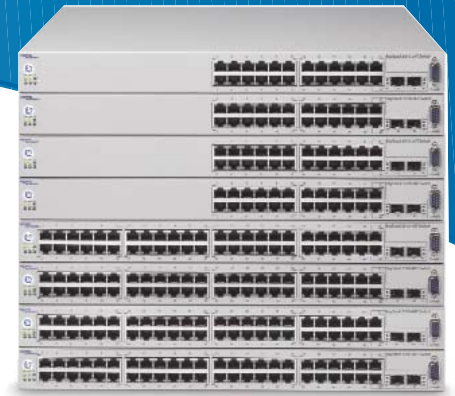| Features	BayStack 5510-48T	BayStack 5510-24T	Cisco Catalyst 3750G-24TS^^^
U.S. List Price	**$6,995**	**$4,995**	**$6,995**
Price per port	$146	$208	$291
10/100/1000 ports per unit	48 (1 RU)	24 (1 RU)	24 (1.5 RU)
Max.10/100/1000 per stack^^	384 (8 RU)	360^ (8 RU)	216 (11 RU)
Number of SFP ports	2	2	4
Compact 1RU high in all models	Yes	Yes	No
Fail-safe stackability	Yes	Yes	Yes
Stacking bandwidth	640 Gbps	640 Gbps	32 Gbps
Switch fabric	160 Gbps	160 Gbps	32 Gbps
Recessed stack connectors	Yes	Yes	No
Distributed Multi-Link Trunking	Yes	Yes	Yes
QoS (DiffServ) support	Yes	Yes	Yes
Hardware-based queues	8	8	4
802.1x Extensible Authentication	Yes	Yes	Yes
SNMPv3 support	Yes	Yes	Yes
Traffic policing & IP traffic shaping	Yes	Yes	No
IGMP snooping	Yes	Yes	Yes
Layer 3 routing	Yes[†]	Yes[†]	Yes

[†] Future software release
RU = Rack unit height
^ For a stack with 7 48-port & 1 24-port units
^^ For a stack with 16 SFP GBIC uplinks
^^^ Based upon information posted at www.cisco.com as of 4/4/2003.

Key features and benefits

- **High-density Gigabit desktop connectivity**—Up to eight switches can be stacked to achieve up to 384 10/100/1000 ports in a stack. *Pay as you grow while saving premium closet space.*

- **Innovative FAST stack design**— FAST (Flexible Advanced Stacking Technology) stack design allows for simultaneous bi-directional traffic flow on each stacking port, resulting in up to 640 Gbps stacking bandwidth for the stack—the highest stacking bandwidth in the industry today. *Faster traffic flow across the stack provides support for bandwidth-intensive applications.*

- **High-performance switch fabric of 160 Gbps**—Wire-speed performance. *No dropped packets. Helps future-proof.*

- **Compact form factor**—One-rack unit high design allows a stack to support up to 384 10/100/1000 ports in 8RU space. *Saves premium space in the wiring closet.*

- **Layer 3 routing**[†]– Allows hardware-based Layer 3 routing at wire-speed and across the stack. *Helps future-proof the network.*

[†] Future software release.

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- **Single software image**—BoSS (BayStack operating system Switching Software) allows BayStack 5510-48T, BayStack 5510-24T, and future BayStack 5510 Switches to stack together. *Simplifies software upgrades.*

- **Auto stack configuration**—Allows for easy addition and deletion of a switch to the stack without service interruption. *Lowers deployment time.*

- **Unit replacement feature**—Allows for retrieval of the failed switch's configuration from a server on to the new switch. *Easier configuration.*

- **Higher uplink capacity**—Allows the use of 16 GBIC ports for uplink in a full stack. *Faster data flow between the stack and the core.*

- **Resilient connectivity for minimal network downtime**—Distributed Multi-Link Trunking (DMLT) and Split Multi-Link Trunking (SMLT) features allow multiple active connections to the network core for fail-safe connectivity to mission-critical servers and the network center. *Assures network uptime. Doubles the bandwidth to the core.*

Ordering Information

Order No.	Description	U.S. List Price
AL1001?01**	BayStack 5510-48T Switch with 48 10/100/1000 ports plus 2 built-in SFP GBIC ports and built-in stacking ports	$6,995
AL1001?02**	BayStack 5510-24T Switch with 24 10/100/1000 ports plus 2 built-in SFP GBIC ports and built-in stacking ports	$4,995
AL1904007	-48 V DC-to-DC converter for BayStack 5000 for use with BayStack 10 Power Supply System	$339
AL2018009	BayStack 5000-SRC Cascade Return Cable (3 foot)	$295
AL2018010	BayStack 5000-SSC Cascade Spare Cable (1 foot)	$195
AA1419013	1-port 1000BASE-SX SFP GBIC (LC connector)	$345
AA1419014	1-port 1000BASE-SX SFP GBIC (MT-RJ connector)	$345
AA1419015	1-port 1000BASE-LX SFP GBIC (LC connector)	$995
AA1419025	1-port 1000BASE-CWDM Small Form Factor GBIC – 1470nm, Wavelength (40km), LC connector	$4,995
AA1419026	1-port 1000BASE-CWDM Small Form Factor GBIC – 1490nm, Wavelength (40km), LC connector	$4,995
AA1419027	1-port 1000BASE-CWDM Small Form Factor GBIC – 1510nm, Wavelength (40km), LC connector	$4,995
AA1419028	1-port 1000BASE-CWDM Small Form Factor GBIC – 1530nm, Wavelength (40km), LC connector	$4,995
AA1419029	1-port 1000BASE-CWDM Small Form Factor GBIC – 1550nm, Wavelength (40km), LC connector	$4,995
AA1419030	1-port 1000BASE-CWDM Small Form Factor GBIC – 1570nm, Wavelength (40km), LC connector	$4,995
AA1419031	1-port 1000BASE-CWDM Small Form Factor GBIC – 1590nm, Wavelength (40km), LC connector	$4,995
AA1419032	1-port 1000BASE-CWDM Small Form Factor GBIC – 1610nm, Wavelength (40km), LC connector	$4,995
AA1419033	1-port 1000BASE-CWDM Small Form Factor GBIC – 1470nm, Wavelength (70km), LC connector	$6,995
AA1419034	1-port 1000BASE-CWDM Small Form Factor GBIC – 1490nm, Wavelength (70km), LC connector	$6,995
AA1419035	1-port 1000BASE-CWDM Small Form Factor GBIC – 1510nm, Wavelength (70km), LC connector	$6,995
AA1419036	1-port 1000BASE-CWDM Small Form Factor GBIC – 1530nm, Wavelength (70km), LC connector	$6,995
AA1419037	1-port 1000BASE-CWDM Small Form Factor GBIC – 1550nm, Wavelength (70km), LC connector	$6,995
AA1419038	1-port 1000BASE-CWDM Small Form Factor GBIC – 1570nm, Wavelength (70km), LC connector	$6,995
AA1419039	1-port 1000BASE-CWDM Small Form Factor GBIC – 1590nm, Wavelength (70km), LC connector	$6,995
AA1419040	1-port 1000BASE-CWDM Small Form Factor GBIC – 1610nm, Wavelength (70km), LC connector	$6,995

** The seventh character (?) of the switch order number is replaced with the proper code to indicate nationalization:
"A" – No power cord included
"B" – European "schuko" power cord common in Austria, Belgium, Finland, France, Germany, The Netherlands, Norway, and Sweden.
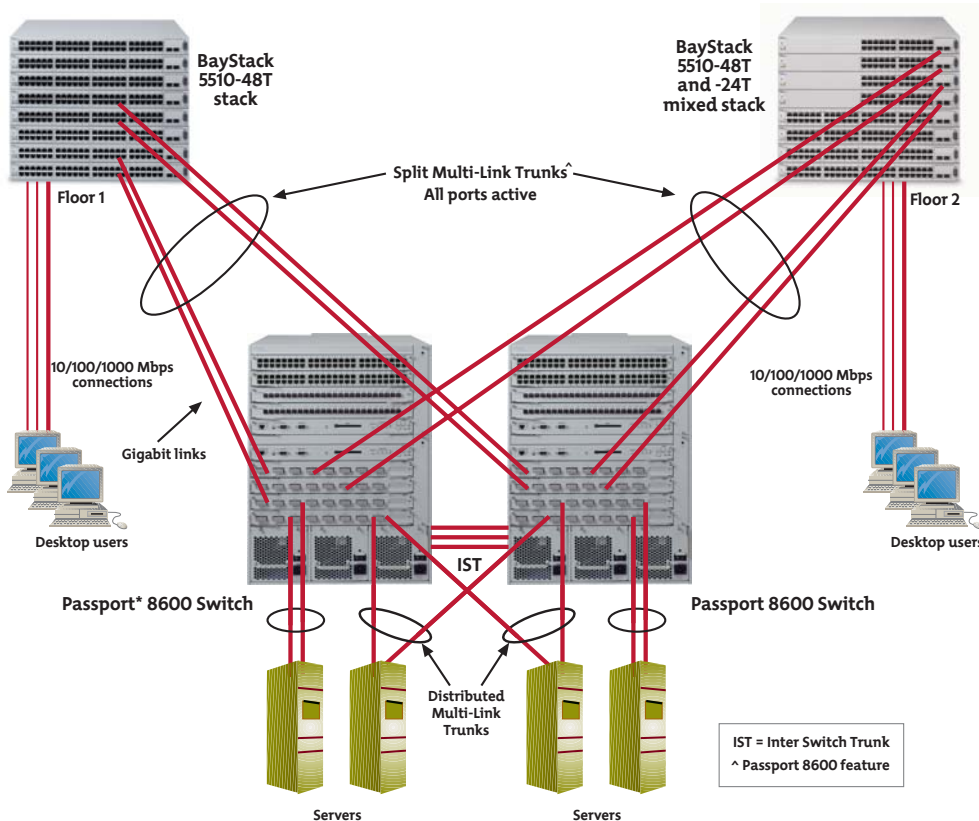"C" – Power cord commonly used in the United Kingdom and Ireland.
"D" – Power cord commonly used in Japan.
"E" – North American power cord.
"F" – Australian power cord, also commonly used in New Zealand and the People's Republic of China.

Figure 1. Enterprise solution

BayStack 5510-48T stack

BayStack 5510-48T and -24T mixed stack

Floor 1

Split Multi-Link Trunks^
All ports active

Floor 2

10/100/1000 Mbps connections

10/100/1000 Mbps connections

Gigabit links

Desktop users

Desktop users

Passport* 8600 Switch

IST

Passport 8600 Switch

Distributed Multi-Link Trunks

IST = Inter Switch Trunk
^ Passport 8600 feature

Servers

Servers

NN105040-072903

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