

# Intel® NetStructure™ VPN Gateway Family

## **Intel's high-performance remote access, LAN-to-LAN and e-Business VPN solutions**



### KEY FEATURES

- *High speed, scalable performance for fast Internet connections such as cable and DSL*
- *Interoperable remote access, LAN-to-LAN and e-Business connectivity via IP networks*
- *Enhanced ease of use through automated management and deployment*

Now you can achieve a unique combination of powerful, inexpensive Internet-based business access and unparalleled communications security. The Intel® NetStructure™ 3110 VPN Gateway, Intel® NetStructure™ 3120 VPN Gateway and Intel® NetStructure™ 3130 VPN Gateway provide complete, end-to-end virtual private networking (VPN) to connect employees, customers and e-Business networks.

Intuitive interfaces make configuration and management exceptionally quick and easy. And with the optional Intel® NetStructure™ VPN Client Deployment Tool, you can automatically deploy and manage large numbers of clients via Web based technologies – the user simply clicks on a URL in an email message, and the client software installs and configures itself.

As the innovative successors to long distance dial-in, leased-line and Frame Relay connections, these VPN solutions from Intel enable you to reduce telecommunications costs by routing your corporate traffic over the public Internet through secure tunnels. For new Internet technologies such as cable and Digital Subscriber Line (DSL), the Intel NetStructure VPN Gateway Family delivers new levels of performance and throughput for enhanced user experiences.

Feature	Benefit
Scalable and stackable, supporting up to 10,000 simultaneous tunnels per gateway	Ease of network growth without disrupting network performance
Up to 95Mbps of throughput	Performance for today's fast Internet technologies
Strong encryption up to 168-bit 3DES	Trusted connections through the Internet
ICSA-certified, circuit-level firewall protects against unauthorized access	Trusted connections, enhanced security
Multiple authentication options including Intel® NetStructure™ Certificate Authority, Intel® NetStructure™ Access Manager, Entrust*, RADIUS*, Security Dynamics*, Windows NT*, Windows* 2000	Enhanced security and interoperability; manage AAA for both VPN and direct-dial remote access users
Windows* OS-based utilities for centralized and remote management	Easy to understand, install and use; flexibility to adapt as needs evolve
Exclusive Intel® NetStructure™ VPN Client Deployment Tool available	Widespread deployment without visiting desktops
VPN connectivity supporting client-to-network, network-to-client and extranet-to-network access	Reliable communications among all users including remote employees, vendors and business partners
Intel® NetStructure™ VPN Management Suite included with Intel® NetStructure™ 3130 VPN Gateway	Centralized account/tunnel management, remote provisioning and reporting



## Performance and Usability

Whether your goal is to improve performance or reduce costs, an Intel® NetStructure™ VPN Gateway is the answer. With a family of scalable solutions to choose from, customers can select the right performance levels to meet their specific requirements. Flexible options and an array of usability features make it easy to lower the cost of connectivity in a variety of situations.

- VPN gateway with full authentication, data encryption, routing and firewall features to provide a complete, scalable solution
- Support for the full range of remote access, Intranet (LAN-to-LAN) and e-Business applications
- ICSA 1.1 IPSec compliance
- Automated client DNS with point-and-click tunnel launcher (pick-list) for creating fast connections
- Tunnel status monitoring to ensure that each end of the connection is active
- Transparent security parameter negotiation, enabling the client to automatically receive a preconfigured key length, tunnel type, and secure network configuration for maximum adaptability
- Firewall traversal, which allows the gateway to be placed in multiple network configurations behind a general purpose firewall
- Client load balancing across multiple VPN gateways to provide modular deployment of additional capacity and optimum utilization and performance
- High availability configurations so that customers can deploy multiple units for extra reliability

## Intel® NetStructure™ VPN Client

Each Intel® NetStructure™ VPN gateway comes complete with Intel® NetStructure™ VPN Client software. From a desktop or laptop, the Intel NetStructure VPN Client offers encrypted tunnels for transferring mission-critical information securely via the Internet while maintaining overall network performance. To make deployment even easier, the optional Intel® NetStructure™ VPN Client Deployment Tool lets you automate the installation of large numbers of clients via the Web.

The Intel® NetStructure™ VPN Client interoperates with other industry-standard authentication and authorization schemes to deliver seamless connectivity across a wide range of last-mile technologies:

- IPSec-standard or SST tunnels across public or private networks
- Asymmetric 3 DES encryption up to 168-bit keys
- RSA technology at up to 2,048 bits for authentication and key management
- Support for standard authentication protocols
- Transparent to the end-user



## Architecture

The Intel® NetStructure™ VPN Gateway features an Intel® Pentium® processor-based PC architecture with solid-state design (no moving parts), protected OS kernel and optional hardware acceleration. The optional acceleration card offloads intensive encryption/decryption onto a dedicated ASIC, freeing server bandwidth for other processing tasks.

### Intel® NetStructure™ Certificate Authority and Intel® NetStructure™ Certificate Authority Pro

Add X.509 digital certificate capability to your Intel® NetStructure™ VPN Gateway with the Intel® NetStructure™ Certificate Authority or Intel® NetStructure™ Certificate Authority Pro features. You can automatically generate, issue, renew and revoke digital certificates for each network user, and any changes you make are instantly communicated to all other users in the network.

Based on award-winning technology, this software employs asymmetric public key cryptography to generate 512-, 1,024- and 2,048-bit certificate key lengths for trusted connections. Simplified control enables authorized users to manage local and remote certification functions.

#### *Capabilities include:*

- Standard X.509 digital certificates
- Support for up to 2,048-bit public key length
- RSA technology to protect key transfers
- Certificate changes transparent to users
- Invalid users automatically locked out of the system

## Applications

The Intel® NetStructure™ VPN Gateway performs in a variety of settings, as illustrated by the following examples.

- For service providers who are hosting applications or selling managed VPN services, the Intel® NetStructure™ VPN Gateway offers high throughput, allowing thousands of simultaneous subscriber connections and dozens of concurrent, fully-utilized broadband sessions. The service provider can scale this solution further by adding multiple gateways at the central site.
- The Intel® NetStructure™ VPN Gateway is interoperable with solutions supporting IPSec and L2TP. Therefore, hosting service providers or application service providers who deploy the Intel gateways their data centers can lower the cost of provisioning their service by connecting subscribers who have other brands of VPN equipment that support these standards. Additionally, subscribers that have deployed Microsoft Windows 2000 will be able to utilize the embedded VPN client to connect to the Service Provider's Intel solution. This greatly simplifies the deployment of the solution, saving time and money.
- Service providers who offer managed VPN services will greatly decrease the complexity and expense of deploying hundreds or thousands of remote clients by using the optional Intel® NetStructure™ VPN Client Deployment Tool. The tool automatically generates an email to remote access users, providing them with a simple link to a website where they can download a pre-configured client. This eliminates the need to ship notebook computers to a central site for configuration.
- Rather than utilizing a traditional dial-up solution and 56kbs modem, a telecommuter accesses the corporate network via ISP connection using VPN technology and a cable modem. She saves her company money and increases the maximum speed of the connection from 56kbs to 500kbs, more than nine times faster than an analog-modem connection allows.
- A network administrator wants to establish trusted WAN connections between corporate headquarters and the branch offices on his network. He installs an Intel NetStructure VPN Gateway at headquarters. With this product, he establishes trusted connections by encrypting the data that travels over the WAN.

SPECIFICATIONS	Intel® NetStructure™ 3110 VPN Gateway	Intel® NetStructure™ 3120 VPN Gateway	Intel® NetStructure™ 3130 VPN Gateway
Encrypted Throughput	2Mbps	20Mbps	95Mbps
Simultaneous Tunnels	100	2,000	10,000
Processor	233Mhz INTEL® Pentium® processor	733Mhz INTEL® Pentium® III processor	733Mhz INTEL® Pentium® III processor
Memory	32Mb	128Mb	512Mb
Options Encryption	56-, 112-, 168-bit DES. Direct WAN connection through a CSU/DSU	56-, 112-, 168-bit DES. Direct WAN connection through a CSU/DSU	56-, 112-, 168-bit DES Crypto accelerator card of dedicated ASICs that accelerate standard and triple-DES encryption. Direct WAN connection through a CSU/DSU
Software Included Intel® NetStructure™ VPN Client Intel® NetStructure™ VPN Management Suite including Intel® NetStructure™ VPN Client Deployment Tool, Intel® NetStructure™ Access Manager and Intel® NetStructure™ Reporting Tool	Yes No	Yes No	Yes Yes
Interfaces IEEE 802 Ethernet 10BASE-T/100BASE-TX (10/100Mbps) RS-232 for Administration Serial Interface	Yes Yes Yes v.35 standard	Yes Yes Yes v.35 optional X.21 optional	Yes Yes Yes v.35 optional X.21 optional
STANDARDS COMPLIANCE	IETF RFC standards # 1631, 1825, 1826, 1827, 1828, 1929 1851, 1852, 2138 and 2139	IPSec security specification proposed by the Internet Engineering Task Force (IETF) NIST FIPS 46-1-standard DES encryption IETF RFC Standards #1631, 1825, 17, 1828, 1929, 1851, 1852, 2138, 2139 and 2401-2412 ICSA 1.0 IPSec certification	
ELECTRICAL Line Voltage Frequency Maximum Power Consumption Power supply	100/240 VAC 50/60Hz 75W 40W	100/240 VAC 50/60Hz 300W 300W	100/240 VAC 50/60Hz 300W 300W
Physical Height Width Length 19-rack Mount Kit	1.7in (4.3cm) (EIA standard IU) 1.7in (43.2cm) 9.25in (23.5cm) Yes	7in (17.78cm) 16.75in (42.54cm) 18.5in (46.99cm) Yes	7in (17.78cm) 16.75in (42.54cm) 18.5in (46.99cm) Yes
Environmental Operating Temperature Storage Temperature Relative Humidity Altitude	41° - 104° F (5° - 40° C) -40° - 158° F (-40° - 70° C) 10% - 80%, non-condensing Up to 15,000 ft (4,573 m)	41° - 104° F (5° - 40° C) -40° - 158° F (-40° - 70° C) 10% - 80%, non-condensing Up to 15,000 ft (4,573 m)	41° - 104° F (5° - 40° C) -40° - 158° F (-40° - 70° C) 10% - 80%, non-condensing Up to 15,000 ft (4,573 m)
EMC	FCC part 15 (USA) Class B; EN 55022 (Europe) Class B VCCI, V3/93.01 (Japan); ICES-003 (Canada) Class B; AS/NZS 3548 (Australia), EN 55024 (Europe)		

## FOR PRODUCT INFORMATION

To speak to a customer service representative regarding Intel products, please check [www.intel.com/support/9089.htm](http://www.intel.com/support/9089.htm) for the telephone number in your area. For additional product information on the Intel Networking and Communication products, visit [www.intel.com/network](http://www.intel.com/network)

## INTEL® NETSTRUCTURE™ SUPPORT SERVICES

Intel offers a wide selection of product assistance including extended phone support, upgrades, parts replacement, on-site services and installation. For a complete listing of available services for the products listed on this document, please visit [www.intel.com/network/go/selector](http://www.intel.com/network/go/selector)

## CUSTOMER SUPPORT

Product warranty and update information is available at [www.intel.com/support/network](http://www.intel.com/support/network)  
Service and availability may vary by country.

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## ORDER CODES

Intel® NetStructure™ 3110 VPN Gateway	INS3110DES3xx	168-Bit 3DES
	INS3110DESxx	56-Bit DES
Intel® NetStructure™ 3120 VPN Gateway	INS3120DES3xx	168-Bit 3DES
	INS3120DESxx	56-Bit DES
Intel® NetStructure™ 3130 VPN Gateway	INS3130DES3xx	168-Bit 3DES
	INS3130DESxx	56-Bit DES
	xx = Power cord required	
	(US, AU, EU, UK)	

Options:

X21 Serial Interface Card for 3120 or 3130	CRDVPNX21
V35 Serial Interface card for 3120 or 3130	CRDVPN35
Acceleration Card for 3120	UPG3120ACCL

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