

INGATE FIREWALL 1880

Your advanced enterprise network has the highest requirements on capacity and reliability. You also need the capability to connect and communicate securely and efficiently with branch offices and traveling and telecommuting employees. Ingate's firewalls are the first SIP-capable enterprise firewalls, making Ingate the solution for enterprises that want access to SIP-based communications including presence, instant messaging, audio/video conferencing and VoIP. The Ingate Firewall 1880 is designed for enterprises requiring the most demanding applications and features high throughput, dual processors, redundant power supplies, mirrored disks, gigabit interfaces and state of the art firewall protection while allowing the use of SIP-based communications.



The Ingate Firewall 1880 – a High Capacity, High Reliability SIP capable Firewall

The largest of the Ingate Firewall series, the Ingate Firewall 1880 continues Ingate's tradition of providing complete firewall security with minimal effort and risk. Features such as VPN, SIP-capability, and TLS support for encrypted SIP signaling are included – all able to support the needs of the most demanding enterprise applications. The Ingate Firewall 1880 is rack mounted and offers redundancy features and a variable number of 10/100 Mbit/s or Gbit/s interfaces. As with all Ingate Firewall security feature updates are free of charge and security administrators can configure the firewall to automatically detect available updates via the Web.

Internet, the LAN and firewalls

Every business has a Local Area Network (LAN) with Internet access. To maintain privacy and security on the LAN, it is protected and separated from the public Internet by a firewall. Current firewalls are designed to allow communication from computers on the LAN, inside the firewall, to servers on the Internet and to allow sharing of one single public IP address for enterprises having their own hidden and private IP addresses on the LAN. Today, there are more efficient methods of Internet communications, including presence, instant messaging (IM), conferencing and VoIP. However, these applications require a firewall that handles the SIP protocol.

Port Configurations

In its basic configuration the Ingate Firewall 1880 contains one four port 10/100 Mbit/s Ethernet interface card. Additional interface cards can be installed, including up to two Gigabit Ethernet cards and up to three additional four port 10/100 Mbit/s cards. The different configurations allowed are shown in the table below.

No. of ports	Basic Configuration	Additional 10/100 Mbit/s cards		
10/100 Mbit/s	4	8	12	16
Gbit/s	0	0	0	0

No. of ports	One additional Gbit/s card	One additional 10/100 Mbit/s and one additional Gbit/s card	Two additional Gbit/s cards	One additional 10/100 Mbit/s and two additional Gbit/s cards
10/100 Mbit/s	4	8	4	8
Gbit/s	1	1	2	2

The first SIP-capable enterprise firewalls

Ingate Firewalls are the first of their kind. Ingate's suite of firewalls cover the needs of the entire enterprise market and have everything necessary for SIP traversal, including a SIP registrar and a SIP proxy. They also handle SIP clients such as telephones or a PC-based client like MSN Messenger (part of Windows®XP) on a LAN using Network Address Translation (NAT) to reach private IP addresses. Ingate's truly unique support for SIP over TLS also solves the security concerns often associated with the use of realtime communications applications by allowing encryption of the SIP signalling. As instant messages are sent over the SIP signaling, this feature will also bring the additional benefit of protecting the message content for an instant message.

SIP is brought seamlessly and securely to the enterprise with the addition of a single piece of hardware: the Ingate Firewall.

The Ingate Firewall 1880 includes a SIP software module that allows for a set number of SIP clients to be registered with the firewall. As needs increase, the module is easily extended for additional users though the purchase of software license upgrades. When fully enabled the Ingate Firewall 1880 can handle up to 800 simultaneous sessions in a VoIP application or 8000 registered users (assuming 0.1 Erlang per user).



Ingate Systems AB
 Box 10013
 Stockholm-Globen
 SE-121 26 Sweden

Ingate Systems Inc.
 7 Farley Road
 Hollis NH
 03049 USA

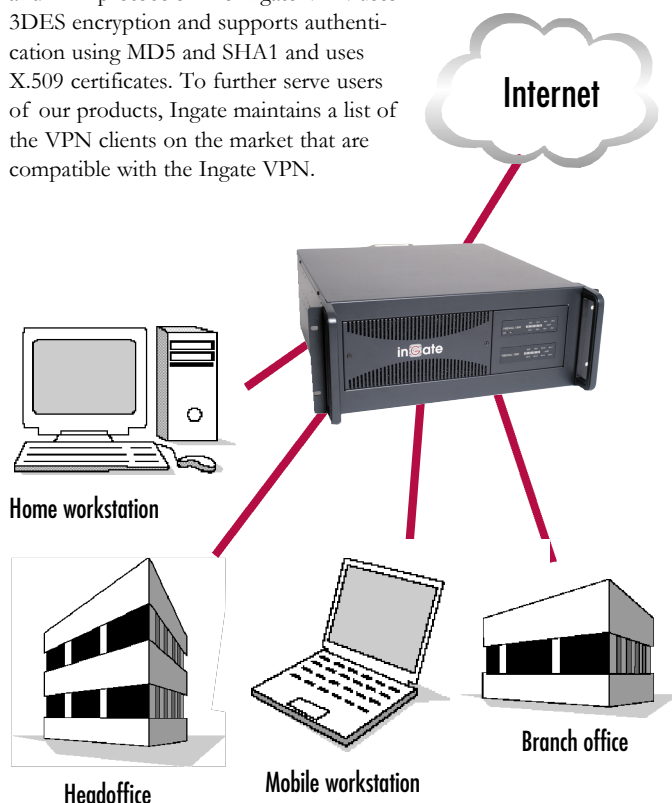
For information about products, sales or partnerships, contact:
 Headquarters: +46 (0)8-600 77 50 U.S.: 1-603-883-6569
 E-mail: info@ingate.com www.ingate.com

Firewall features

The Ingate Firewall 1880 supports both stateful inspection and packet filtering. In addition to the unique SIP proxy, the Ingate Firewall 1880 contains proxies for all standard protocols, including TCP, UDP, FTP and DHCP. The Ingate Firewall 1880 also supports Network Address Translation (NAT) and Port Address Translation (PAT) in combination with all other features.

Ingate VPN

A Virtual Private Network (VPN) can be installed as an extension module to any Ingate Firewall. The Ingate VPN can communicate with any VPN clients, firewalls and other products supporting IPsec and IKE protocols. The Ingate VPN uses 3DES encryption and supports authentication using MD5 and SHA1 and uses X.509 certificates. To further serve users of our products, Ingate maintains a list of the VPN clients on the market that are compatible with the Ingate VPN.



Management User Interface

The management interface for the Ingate Firewall 1880 is a Web-based graphic user interface (GUI) that has proven very popular among users of Ingate Firewalls. The management interface is common across the Ingate range of firewalls and enables efficient, centralized management of all firewall assets throughout an enterprise. The GUI leads the administrator step by step through the user-friendly installation and management process, reducing the risk of errors that often occur during setup. Ingate customers and the media have cited our easy to use management interface as one of the hallmarks of Ingate products.

Management Security

In order to maintain the highest levels of security, the Ingate Firewall 1880 can be set up to be configured from designated computers or subnets. The management connection can use Secure Socket Layer (SSL) encryption, and RADIUS to provide maximum security through identification and authentication.

Logging / Alarm

The Ingate Firewall 1880 comes with a comprehensive logging and alarm functionality. The log files, stored on the hard disk, are searchable on a variety of parameters and can be exported for use in a dedicated log analysis application. When alarms are raised they can be sent to the administrator via e-mail or a syslog server.

Technical Specification Ingate Firewall 1880

Processor	Athlon MP 2200
Operating System	Linux 2.4
Interfaces (10/100 Mbit/s)	4-16
Interfaces (1 Gbit/s)	0-2
Redundant Power Supply	Yes
RAID Disks	Yes
Throughput (Mbit/s)	800
Dimensions WxDxH (mm, inch)	482.6x460x177 19"x18"x7"
Environment – op (Temp, Humidity)	5-45°C, 20-90%
Environment – storage (Temp, Hum)	0-70°C, 5-95%
Certifications	CE, FCC, UL
Management	
Automatic check for new release	Yes
Web GUI	Yes
DHCP Client	Yes
SNMP	Yes
Mass configuration option	Planned January 2003
Syslog	Yes
E-mail events	Yes
Firewall Functionality	
Stateful inspection	Yes
Packet filtering	Yes
DHCP Proxy	Yes
Proxies for TCP, UDP and FTP	Yes
NAT/PAT	Yes
QoS (bandwidth limitation and priority)	Yes
Authentication	RADIUS
VPN Functionality	
Encryption	3DES
Authentication algorithms	MD5, SHA1
X.509-certificates	Yes
SIP Functionality	
SIP Proxy	Yes
SIP Registrar	Yes
SIP traffic out&in without extra proxy	Yes
SIP traffic to private IP addresses (NAT/PAT)	Yes
TLS encryption	Yes
SIP connection set up (SIP+RTP)	<0.10 s
RTP-data delay (10mbps/100mbps network)	0.19/0.08 ms
Number of concurrent RTP sessions	800
Registered SIP users included	10
Max registered SIP users (appr)	8000