

# Ingate Firewall 2950

## The Highest Level of Security for SIP, UC and Your Network – Ingate Firewall

**Ingate's enterprise-class Firewalls make secure SIP communications possible – including VoIP, SIP trunking and more -- while also protecting the network. They create one truly converged network for both data and VoIP, enabling Unified Communications (UC) with one simple, elegant solution – the Ingate Firewall.**

The Ingate Firewall® 2950 is a high capacity, high performance SIP security product made for large enterprises and service providers. The Firewall can handle up to 1,800 concurrent sessions, or simultaneous VoIP calls (RTP sessions), at any given time.

Ingate Firewalls are fully featured, supporting stateful inspection and packet filtering with rules defined and maintained by the network security administrator utilizing the GUI. Ingate Firewalls include an encrypted Virtual Private Network (VPN) termination module. They boast complete SIP support; they also have a proxy for all standard protocols, including TCP, UDP, FTP and DHCP.



### Trusted Network Security for VoIP

Ingate's SIP proxy architecture grants fully secure traversal of the SIP traffic. Ingate products support Transport Layer Security (TLS) for secure SIP signaling. They also support encrypting SRTP (Secure Realtime Transport Protocol), providing a high level of security for live data with advanced encryption, confidentiality, message authentication and replay protection. When combined, these protocols further shield users from eavesdroppers, hackers and spoofer.

### Support for SIP Trunking

More and more Internet Telephony Service Providers (ITSPs) offer SIP trunks – a combined Internet and voice connection that delivers exceptional cost-savings and proven ROI in less than a year. Ingate Firewalls, with Ingate SIP Trunking software module, make secure SIP trunking possible by solving Network Address Translation (NAT) traversal, allowing the enterprise to connect to the SIP trunk. They also ease compatibility issues between the IP-PBX and ITSP, ensuring a quick and simple deployment.

### Choose the Right Features for Your Network

Ingate's add-on software modules allow you to tailor the Firewall to meet the specific demands of your business:

- Ingate Remote SIP Connectivity allows remote and mobile workers to work from behind a NATing device at home, a hotel or wireless hotspot and make and receive calls using the PBX located at the corporate headquarters.
- Ingate Enhanced Security provides Intrusion Detection and Intrusion Prevention for SIP, as well as encryption of the communication.
- VoIP Survival allows an enterprise using a CENTREX or hosted PBX solution to fail over to the Ingate, to enable internal calls and redirect outside calls to a local PSTN gateway.
- Quality of Service (QoS) ensures excellent voice quality by setting priorities and allocating bandwidth properly.

### The Ingate Advantage

Ingate's standards-based solutions are interoperable with most major suppliers of SIP products, including 3Com, Audiocodes, Avaya, Cisco, Ericsson, Microsoft, Mitel, ShoreTel, snom, NEC, Sphere, Vegastream and many others. Ingate supports SIPconnect, allowing the enterprise to successfully connect to SIPconnect-compliant SIP trunking service providers quickly, easily and securely.

### Why Ingate?

- For secure SIP trunks, secure VoIP, secure network
- SIP normalization: resolving interoperability issues between IP-PBX and ITSP, for simplified installations
- Secure NAT traversal
- Proven, reliable

## Technical Specifications Ingate Firewall

Features	Ingate Firewall 1190	Ingate Firewall 1500	Ingate Firewall 1550	Ingate Firewall 1650	Ingate Firewall 2950
Interfaces (10/100 Mbit/s)	3	0	0	0	0
Interfaces (10/100/1000 Mbit/s)	0	4	4	4	6
Redundant power supply	No	No	No	No	Yes
Type of disk	Flash	HD	HD	HD	RAID 1
Dimensions WxDxH (mm)	228x146x44	430x369x44	430x369x44	430x369x44	426x772x43
Certifications	CE, FCC, UL	CE, FCC, UL	CE, FCC, UL	CE, FCC, UL	CE, FCC, UL
<b>Performance</b>					
Throughput (Mbit/s) (1500 byte packets)	50	330	380	385	4 500
Packets per sekund (46 byte packets)	4500	28500	75000	125000	400000
VPN tunnels	25	100	200	400	1600
3DES (168-bit) (Mbit/s) (1438 byte packets)	10	45	55	65	130
AES (128-bit) (Mbit/s) (1438 byte packets)	15	60	80	85	270
SIP connection set up (SIP+RTP)	0.15 s	0.15 s	0.15 s	0.15 s	<0.15 s
RTP data delay (10 Mbit/s/100 Mbit/s)	0.19/0.08 ms	0.19/0.08 ms	0.19/0.08 ms	0.19/0.08 ms	0.19/0.08 ms
Number of concurrent RTP sessions (voice sessions G.711)	50	150	300	650	1800
Secure VoIP sessions (TLS + SRTP)	20	75	150	330	900
Busy hour call attempt	36000	72000	79200	79200	234000
<b>Administration</b>					
Automatic check for new releases	Yes	Yes	Yes	Yes	Yes
Configuration options: Web GUI (HTTP, HTTPS) and CLI (SSH, serial cable)	Yes	Yes	Yes	Yes	Yes
DHCP client and PPPoE	Yes	Yes	Yes	Yes	Yes
DHCP server	Yes	Yes	Yes	Yes	Yes
SNMP	Yes	Yes	Yes	Yes	Yes
Max number of VLANs (802.1q compliant)	16	32	64	128	512
Internal log to HD	No	Yes	Yes	Yes	Yes
Logging to PCAP file	Yes	Yes	Yes	Yes	Yes
Syslog	Yes	Yes	Yes	Yes	Yes
E-mail events	Yes	Yes	Yes	Yes	Yes
Support for failover multiple ISPs	Yes	Yes	Yes	Yes	Yes
External RADIUS server authentication for IPsec, GUI and SIP	Yes	Yes	Yes	Yes	Yes
Unlimited data users	Yes	Yes	Yes	Yes	Yes
Free software upgrades	First year	First year	First year	First year	First year
<b>Firewall functionality</b>					
Stateful inspection	Yes	Yes	Yes	Yes	Yes
Packet filtering	Yes	Yes	Yes	Yes	Yes
DHCP proxy	Yes	Yes	Yes	Yes	Yes
Proxies for TCP, UDP and FTP	Yes	Yes	Yes	Yes	Yes
Flexibel NAT and PAT	Yes	Yes	Yes	Yes	Yes
<b>VPN functionality</b>					
X.509 certificate or shared secret	Yes	Yes	Yes	Yes	Yes
Generating of X.509 certificates for clients	Yes	Yes	Yes	Yes	Yes
PPTP server	Yes	Yes	Yes	Yes	Yes
IPsec (3DES, AES, NULL, MD5 and SHA1)	Yes	Yes	Yes	Yes	Yes
<b>SIP functionality</b>					
SIP proxy	Yes	Yes	Yes	Yes	Yes
SIP registrar	Yes	Yes	Yes	Yes	Yes
SIP traffic to private IP addresses (NAT/PAT)	Yes	Yes	Yes	Yes	Yes
Billing and authentication for SIP users from external RADIUS server	Yes	Yes	Yes	Yes	Yes
SIPconnect compliance	Yes	Yes	Yes	Yes	Yes
<b>Add-on modules</b>					
SIP Trunking (connecting an IP-PBX to an ITSPs SIP-trunk)	Yes	Yes	Yes	Yes	Yes
Remote SIP Connectivity (Far-end NAT-passing incl STUN-server)	Yes	Yes	Yes	Yes	Yes
QoS (bandwidth limitation and prioritization)	Yes	Yes	Yes	Yes	Yes
Enhanced Security (IDS/IPS for SIP, SRTP and TLS)	Yes*	Yes	Yes	Yes	Yes
VoIP Survival (VoIP redundance if Internet connection fails)	Yes	Yes	Yes	Yes	Yes
SIP Registrar Module (Ingate is used as the primary SIP registrar)	Yes	Yes	Yes	Yes	Yes

\*IDS/IPS is not available for the Ingate Firewall 1190

