Ingate E-SBC

Ingate SIParator® 95/96/97
– The high performance Enterprise SBC

Ingate SIParator® 95/96/97 are high performance, high capacity Enterprise session border controllers (E-SBCs) providing a secure solution for bringing SIP into the local area network. The Ingate SIParator® makes secure unified- and SIP communication possible while working seamlessly with your existing network firewall to allow the traversal of SIP traffic through the enterprise edge. The Ingate E-SBCs harness the productivity and cost saving benefits of VoIP and Unified Communications while maintaining current investments in security technology with Ingate's proven, cost effective SIParator®.

The Ingate SIParator® 95/96/97 are high capacity, high performance E-SBCs designed for large enterprises and service providers and has the capability to serve enterprises with up to 80,000 employees.

The SIParator® 95 and 96 models are based on the same hardware platform, which makes the product a flexible solution for growing companies as it gives them the ability to software upgrade their S95 to S96 via a license key when capacity is needed.

Included in the base performance of all three models are 50 concurrent RTP sessions, allowing up to fifty calls to traverse at the same time but then the Ingate SIParator® 95 can handle up to 1,800 concurrent RTP sessions. The Ingate SIParator® 96 can handle up to 3,000 concurrent RTP sessions and the Ingate SIParator® 97 can handle up to 8,000 concurrent RTP sessions and has the highest capacity of any Ingate product.

The SIParator® 95/96/97 features six 6 Gbit/s interfaces, a RAID 1 mirrored hard disk solution and redundant power supplies to ensure availability for mission-critical applications. The SIParator® 97 also features a new faster processor making it the fastest Ingate E-SBC available today.

Ingate's award-winning SIParators are fully featured, supporting stateful inspection and packet filtering with rules defined and maintained by the network security administrator utilizing the GUI. Ingate SIParators 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 encrypted 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 spoofers.

Intrusion Detection System/Intrusion Prevention System (IDS/IPS) has become a crucial security measure for enterprise deployments of SIP. IDS/IPS works in tandem with Ingate's existing security technologies, further strengthening security for VoIP, SIP trunking, Unified Communications and other SIP applications.

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 SIParators, 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 SIParator to meet the specific demands of your business:

- Ingate Remote SIP Connectivity allows remote and mobile workers to work from behind a NAT-ing device at home, a hotel or wireless hotspot and make and receive calls using the PBX located at the corporate headquarters.
- Ingate Enhanced Security allows support for Transport Layer Security (TLS) and encrypted SRTP (Secure Realtime Transport Protocol).
- 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. 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**

Flexible deployment
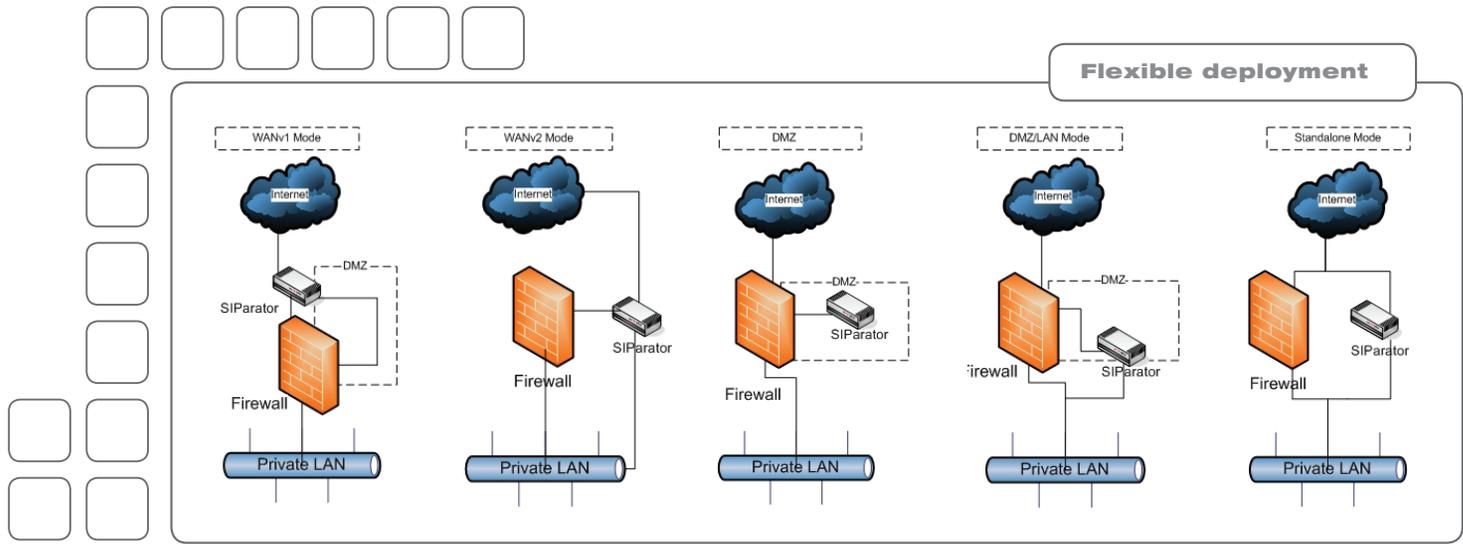
Technical Specifications Ingate SIParators

Feature	Ingate IX78*	Ingate SIParator 21	Ingate SIParator 51	Ingate SIParator 56	Ingate SIParator 66	Ingate SIParator 95	Ingate SIParator 96	Ingate SIParator 97
Interfaces (10/100/1000 Mbit/s)	5, 100 Mbit/s	4	4	4	4	6	6	6
Redundant power supply	No	No	No	No	No	Yes	Yes	Yes
Type of disk	Flash	Compact Flash	HDD	HDD	HDD	RAID 1	RAID 1	RAID 1
Dimension WxDxH (mm)	154x165x35	300x145x44	426x365x44	426x365x44	426x365x44	426x772x43	426x772x43	434x700.5x42.8
Certifications	CE, FCC, CB	CE, FCC, UL	CE, FCC, UL	CE, FCC, UL	CE, FCC, UL	CE, FCC, UL	CE, FCC, UL	CE, FCC, UL
Power consumption (typical)	8 W	25 W	100 W	100 W	100 W	200 W	200 W	200 W
Power supply 100 – 240 VAC, 50-60 Hz	External	External	Internal	Internal	Internal	Internal	Internal	Internal
Automatic check for new releases	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Management/Configuration options: Web GUI (HTTP, HTTPS) and CLI (SSH, serial cable)	Web GUI, CWMP, TR-069	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SNMP V2, V3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Max numbers of VLANs	8	16	32	64	128	256	256	256
Internal log to HD	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Logging to PCAP file	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Syslog	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
E-mail events	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
External RADIUS server authentication for GUI and SIP	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Support for multiple ISPs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Free software upgrades	Yes	First year	First year	First year	First year	First year	First year	First Year
SIP Functionality								
SIP proxy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SIP registrar	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SIP traffic to private IP addresses (NAT/PAT)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SIP Connection set up (SIP + RTP) max calls/s	1 - 8	15	30	30	30	50	50	75
RTP data delay (10 Mbps/100 Mbps) network	1 ms	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	0.19/0.08 ms	0.19/0.08 ms
Max number of concurrent calls (20 ms voice packets)	50	50	150	400	1000	1800	3000	8000
Concurrent encrypted voice RTP sessions, both trans-coding SRTP and TLS. (With Enhanced Security Module)	No Transcoding	25	150	400	700	1300	1300	4000
Billing and authentication of SIP users from an external RADIUS	via CWMP TR-069	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Add-on modules								
SIP Trunking (connecting an IP-PBX to an ITSPs SIP-trunk)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Remote SIP Connectivity (Far-end NAT Traversal incl STUN-server)	Included	Yes	Yes	Yes	Yes	Yes	Yes	Yes
QoS (bandwidth limitation and prioritization)	Included	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Enhanced Security (SRTP and TLS)	TLS	Yes	Yes	Yes	Yes	Yes	Yes	Yes
VoIP Survival (VoIP redundance if Internet connection fails)	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SIP Registrar (Ingate is used as the primary SIP registrar)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

*IX78 is only for Service Provider Volume Deployment.

Ingate® and SIParator® are registered trademarks of Ingate Systems. Other trademarks belong to their respective owners.

inGate