

# NetBorder™ SS7 VoIP Media Gateway



Media Gateways

- ✓ All-in-one turnkey solution
- ✓ SS7 ISUP (including several national variants)
- ✓ Up to 16 SS7 Signalling links
- ✓ SIP RFC3261
- ✓ H.248 (Megaco)
- ✓ SIGTRAN M2UA
- ✓ H.323
- ✓ Supports a wide range of VoIP and wireless codecs
  - G.711      • G.723.1
  - G.726      • iLBC
  - G.729AB   • GSM
  - G.722      • AMR
  - G.722.1
- ✓ Sophisticated call routing via XML scripts
- ✓ Management
  - Web GUI
  - CLI
  - Statistics/logs
  - PCAP Protocol Capture for analysis via Wireshark
  - RADIUS Protocol
  - SNMP for Layer 1 reporting
- ✓ Distributed architecture and signalling relay
- ✓ 1U Form factor for up to 8 E1/T1s
- ✓ 2U Form factor for up to 32 E1/T1s
- ✓ Rack mountable
- ✓ AC/DC power options

**Sangoma's NetBorder SS7 VoIP Gateway is a feature-rich, cost-effective solution.**

## SS7 TO VOIP GATEWAY APPLIANCE

The NetBorder SS7 to VoIP Gateway allows telecom service providers to introduce VoIP in their networks with transcoding capabilities.

The appliance is provided in 2 form factors:

1U	4 E1/T1	
	8 E1/T1	
2U	16 E1/T1	
	32 E1/T1	

The solution supports up to 32 E1/T1 per appliance. For installations up to 256 E1/T1, distribution across multiple servers using the signalling relay feature provide maximum flexibility to support growth.

## FEATURES & BENEFITS

Feature	Benefit
Supports a wide range of SS7 PSTN protocols and variants	Provides maximum flexibility during implementation
Compact all-in-one design	Minimize footprint and the need to source components from multiple vendors
SIGTRAN M2UA	Enables better use of NSG as a distributed solution across multiple points of presence where SS7 Interconnect is required
MEGACO	Allows better control over the NSG by softswitches that utilize this industry standard protocol
M2UA & MEGACO	Enables maximum flexibility in large network deployments of the NSG
SNMP & Radius	Allows monitoring and management of NSG via both of these industry standards
H.323	Enables backward compatibility with older VoIP networks – no need for additional devices for interoperability

CONTINUE READING »

## TECHNICAL SPECIFICATIONS

### PSTN Protocols:

- SS7-ISUP
  - » ITU, ANSI, Bellcore, UK, China, India, France, and Russian variants
- Up to 16 A or F signalling links
- Up to 16 Originating Point Codes
- Up to 16 Destination Point Codes
- Up to 16 Linksets
- ISUP relay for larger configurations

### PSTN Interfaces:

- Up to 32 E1/T1 (960 ports) per server, available in these configurations:
  - » 4 E1/T1 in 1U appliance
  - » 8 E1/T1 in 1U appliance
  - » 16 E1/T1 in 2U appliance
  - » 32 E1/T1 in 2U appliance
- Extend capacity over 960 ports and single server via ISUP relay feature
- RJ-48 Connectors

### VoIP Protocols:

- SIP V2/RFC3261 • Megaco/H248
- SIGTRAN M2UA RFC 3331 • H.323
- SCTP RFC 2960

### Network Interfaces:

- 1U/2U Appliances
  - » 2 RJ-45 Ethernet ports
  - » 4 USB ports

### Video:

- 1 DVI output port

### Call Routing:

- Configurable and extendable XML-based dial plan and routing rules

### AC Power:

- 250W universal for 1U solution
- 350W universal for 2U solution
- DC 400W -48V for 2U (Special Order)

### Dimensions:

- 1U : 480.4(W) x 474(D) x 44(H) mm; 19”(W) x 18.7”(D) x 1.7”(H)
- 2U: 482(W) x 441.6(D) x 88.4(H) mm; 19”(W) x 17.4”(D) x 3.5”(H)

### Media Processing:

#### Transcoding:

- Wide range of codecs support via Sangoma transcoding hardware (D100/D150/D500):
  - » G.711                    » G.723.1
  - » G.726                    » iLBC
  - » G.729AB                » GSM
  - » G.722                    » AMR
  - » G.722.1
- T.38 Fax Relay

#### Echo Cancellation:

- G.168-2002 with 128ms tail

#### DTMF Detection and Generation:

- RFC2833 Tone relay
- In-band
- DTMF detection and generation

#### Management and Configuration:

- Web GUI
- Command line interface
- Call detail records in XML format
- Detailed logs with configurable filesize & auto-rotation
- SNMP
- Radius

#### Support and Professional Services:

Whether you need technical support and software maintenance, training, consultation and installation services, Sangoma can help you. Contact your Sales representative for more information.

#### Warranty:

Standard 12-month warranty is included. Additional warranty services available, contact your Sales representative for more information.

## ORDERING

SKU	Spans	Protocols	Signalling links	Point codes
SS7-NSG-AP04	4	ISUP, SIP, M2UA, Megaco	4	16
SS7-NSG-AP08	8		8	
SS7-NSG-AP16	16		16	
SS7-NSG-AP32	32		32	