

# GSX9000™ High-Density Media Gateway

Signal Processing Server 80 (SPS80) DSP Resource Module

The Ribbon Communications' SPS80 module is the Digital Signal Processing (DSP) module for the GSX9000 high-density media gateway platform. A single SPS80 module supports circuit-to-packet compression capacity of up to 4,464 codec channels.

## Compression Capacity

- Circuit-to-Packet: Up to 4,464 codec channels

	Codec Channels	TPADS (Tone Processing)	BPADS (Bridge Conferencing)
100% Universal XPAD-Type 1	4,464	-	-
100% Universal XPAD-Type 2	3,348	-	-
4:1 XPAD/TPAD-Type 1	4,056	1,400	225
4:1 XPAD/TPAD-Type 2	3,042	1,400	225
1:1 XPAD/TPAD-Type 1	3,312	4,500	225
1:1 XPAD/TPAD-Type 2	2,484	4,500	225
100% BRPADs	-	-	11,700



## Management Interface

- RS-232 Serial Asynchronous Management Port

## Redundancy

- Floating resource

## Status Indicators

- Module Indicators
  - Power
  - Status
  - Activity
  - Fault
  - Redundancy

## Voice Handling

- G.711 (A/μ-law) via RTP or AAL1 encapsulation
  - RTP Packet Sizes: 10 to 40ms in 5ms increments
  - RTCP
- G.168 Echo Cancellation up to 128ms
- Silence Suppression
- Comfort Noise Generation
- Adaptive Jitter Compensation with Packet Re-Ordering
- Fixed Gain Control

- Optional Codecs
  - Type 1: G.729A+B, G.726, T.38 fax relay
  - Type 2: Same as Type 1, G.723.1A, ice
- TPAD – Tone processing
- BPAD – Bridge conferencing

## Tones and Announcements

- ISUP Continuity Test Tones
- Long Digit Detection
- DTMF/MF Collection and Generation
- Call Progress Generation and Detection
- Announcement Support

## Environmental

- Operating Temperature: 5° to 40° C
- Short-Term Operating Temperature: -5° to 55° C
- Non-Condensing Operating Humidity: 5% to 90%

## Power

- Nominal Consumption: 1.5 Amps
- Peak Consumption: 1.8 Amps

## Weight

- 5.0 lbs

## About Ribbon

Ribbon Communications (Nasdaq: RBBN) delivers communications software, IP and optical networking solutions to service providers, enterprises and critical infrastructure sectors globally. We engage deeply with our customers, helping them modernize their networks for improved competitive positioning and business outcomes in today's smart, always-on and data-hungry world. Our innovative, end-to-end solutions portfolio delivers unparalleled scale, performance, and agility, including core to edge software-centric solutions, cloud-native offers, leading-edge security and analytics tools, along with IP and optical networking solutions for 5G. We maintain a keen focus on our commitments to Environmental, Social and Governance (ESG) matters, offering an annual Sustainability Report to our stakeholders. To learn more about Ribbon, please visit [rbbn.com](https://rbbn.com).

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