The Ribbon Communications’ CNS45 module processes circuit-based traffic on the Ribbon GSX9000 high-density media gateway. A single CNS45 module supports up to 864 DS0s on a T1 connection and up to 1,116 DS0s on an E1 connection. The CNS45 also supports optional codec-based compression. Each module features a redundant failure configuration and is hotswappable for live upgrades without service disruption or scheduled downtime.

**Protocol Support**
- IPv4, IPv6, IPv4/IPv6 interworking

**Call Capacity**
- Up to 864 DS0s (T1)
- Up to 1,116 DS0s (E1)

**Interface Options**
- Three (3) x 100 ohm T1 or 120 ohm E1 RJ-48H connectors

**Framing**
- T1
- D4/SF
- ESF
- E1
- MF
- MF-CRC

**Line Coding**
- AMI
- HDB3

**Standards**
- ANSI
- T1.102
- T1.107
- T1.403
- T1.404
- ITU-T
- G.703
- G.704
- G.706
- G.823
- CTR13

**Management Interface**
- RS-232 Serial Asynchronous Management Port

**Redundancy**
- N:1 server redundancy

**Status Indicators**
- Module Indicators
- Power
- Status
- Activity
- Fault
- Redundancy
- T1/E1 Span Indicators
- Status: Span is connected and in frame
- Yellow: Span is receiving RAI/FERF alarms
- Red: Span is receiving red alarms

**Channel Hunting**
- Circular Sequential
- Backward Circular Sequential
- Most Idle
- Least Idle
- Top to Bottom
- Bottom to Top
- High to Low
- Low to High
GSX9000™ High-Density Media Gateway

Voice Handling
- G.711 (A/u-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: Sames as Type 1, G.723.1A, iLBC
- 100% Universal XPAD–Type 1
  - Codec Channels: 1152
  - TPADS: 300
  - BPADS: 150
- 100% Universal XPAD–Type 2
  - Codec Channels: 972
  - TPADS: 300
  - BPADS: 150

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: 1.4 Amps
- Peak Consumption: 1.7 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.

Contact Us
We are here to help. Let us know if you are interested in a quote or if you have any questions.