SBO500
Transcoding VoIP Gateway

Brief Introduction:

With the popularity of IP communications, increasing need for transcoding between various protocols and coding formats becomes more important. Large-capacity VoIP applications call for high efficient transcoding functionality. Normally, designated hardware-enabled transcoding equipment, not software-based, would be the best option for high demanding VoIP carrier.

To address the transcoding issue, Synway’s hardware-based SBO transcoding gateway could help VoIP operators achieve multiple transcoding in IMS or PSTN network.

SBO adopts 1U standard design and built in LINUX OS based upon POWERPC+DSP hardware infrastructure. Each chasis supports dual Ethernet interfaces. With transcoding, routing, number filtering, number transformation and other functionalities, SBO serves as the perfect connectivity point between IP network and any IP devices.

Key Features and Benefits:

• **Compliance with diverse protocols**
  Supports SIP signaling protocols: SIP V1.0/2.0, the RFC3261); diverse codecs: G.711A, G.711U, G.729, G723, G722, AMR, iLBC DTMF mode RFC2833, SIP info, INBAND; Network protocols: TCP / UDP, HTTP, ARP/ RARP, DNS, NTP, TFTP, Telnet, STU.

• **User-friendly GUI**
  With web-based management software, you can administrate and configure the SBO gateway remotely and check running status, call statistics, call routing, etc.

• **Optimize Communication Efficiency**
  Process large capacity voice forwarding and up to 500 concurrent IP transcoding, ensuring high efficiency for whole VoIP system. With SBO transcoding capability, systems could handle highly scalable surging calling traffic. With intelligent routing configurations, SBO could conduct flexible IP-IP routing in distributed or centralized communication system.

• **Advanced Features for Different Network Environments**
  Supports dual Ethernet interface for telecom redundancy. With number transformation and filtering functionality, SBO could remove the head or end of number, or add a prefix or suffix, while needed.

• **Embedded Infrastructure, Crystal Clear Voice Quality**
  Introducing embedded hardware for transcoding, as well as Telco-grade echo cancellation technology to ensure HD voice quality. SBO gateway also embraces dual power for redundancy.
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Typical Application:

Functional Description

• **Dimensions**
  440mm*44mm*267 mm

• **Weight**
  3.1kg

• **Environment**
  Operating temperature: 0°C -55°C
  Storage temperature: -20°C -85°C
  Operating Humidity: 8%—90% non-condensing
  Storage humidity: 8%—90% non-condensing

• **Input/output Interface**
  Amount: 2(10/100/1000 BASE-TX(RJ-45))
  Self-adaptive bandwidth: Supported
  Auto MDI/MDIX: Supported

• **Console Port**
  Amount: 1(RS-232)
  Baud rate: 115200bps
  Connector: RJ45
  Data bits: 8 bits
  Stop bit: 1 bit
  Parity: Unsupported
  Flow control: Unsupported
  Note: Please configure the console ports according to the above configurations to avoid abnormal situations.

• **Power Requirements**
  Input voltage: 100-240V AC
  Maximum power consumption: ≤22W

• **Signaling Protocols**
  SIP: SIP V1.0/2.0, RFC3261

• **Audio Encoding & Decoding**
  G.711A  64 kbps
  G.711U  64 kbps
  G.729  8 kbps
  G723  5.3/6.3 kbps
  G722  64 kbps
  AMR  4.75/5.15/5.90/6.70/7.40/7.95/10.20/12.20kbps
  iLBC  15.2 kbps

• **Sampling Rate**
  8 kHz

• **Safety**
  Lightning resistance: Level 4
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Synway adheres to management principle of “open, cooperative, win-win”; explore close cooperation with industry peers proactively, and flourish applications of relevant technical standards in communication industry together. We sincerely welcome more companies to join “SMG Gateway market cooperation promotion plan” or contact us by info@synway.net for further communication and discussion. Meanwhile, Synway declares that our company would reserve the rights to take legal action at any time for any unauthorized usage of SMG Gateway related patents, trademark and other violations of intellectual property rights. Synway reserves the rights to claim against the principals who infringe her legal rights.