Voipac ISDN BRI Gateway

Because ISDN (Integrated Services Digital Network) technology raised worldwide popularity and had become optimal solution for telecommunication services and connection to the Internet, Voipac Company is keeping in touch with recent trends and is introducing its product - ISDN Gateway.

Voipac ISDN Gateway provides high performance Internet connection solution, file transfer, remote access service (RAS) by the means of existing modem applications via ISDN network.

Voipac ISDN Router works as ISDN dialing client, or as ISDN incoming calls acceptance server. You can set dial-up connection either as dial on-demand (on request) or as permanent connection (leased line simulation). Public IP address (provided through ISP) can be used as default router gateway.

Voipac ISDN Gateway is integrated voice and data gateway. Its ISDN basic rate interfaces and Ethernet port, thus provides ideal solution for voice LAN applications or broadband access via DSL or cable. It is specially designed for office applications, for which it provides access to IP networks. On-board PXA processor supports multiple voice codecs and provides up to 4 VoIP calls at once.

Voice compression is done by G.723.1 high-compression CODEC system, recommended by ITU-T for the use in IP telephony. Therefore, H.323 protocol is used for call transmission. It works as the gateway between H.323 compatible PC phones and allows calls between all types of PC telephone terminal devices supporting H.323 and standard telephones.

Technical Data:

System

- CPU: XScale
- Security: according to EN 60950
- Memory: 8 MB Flash, 64 MB SDRAM
- Input power: max. 5W
- According to CE: EMC EN55022 and EN55024

Connections

- 1xRJ-45 (10Base-T / 100Base-TX), automatic rate detection
- 2xRJ-45 ISDN BRI S/T, configurable for TE port or NT port
- Simultaneous activation of 4 channels

Voice processing

- ITU G.711/64kbps, G.723.1A/5.3, 6.3kbps, G.729A/B/8kbps, Transparent
- G.168 echo cancellation
- DTMF detection and generation
- Silence suppression and Comfort Noise generation (CNG)
- Configurable dejitter-buffer
- Tone customization (dialing, ringing, engaged)
- Configurable transit packet length
- RTP/RTCP (RFC 1889)

Voice signaling

- Euro ISDN EDSS-1 / ETSI BRI / NET3
- ETS 300 012-1 (ITU-T I.430)
- ETS 300 402-2 (ITU-T Q.921)
- ETS 300 403-1/2 (ITU-T Q.931)
- ETS 300 102-1 (ITU-T Q.931)
- Q-SIG (PSS-1)
- ECMA-143
- ETSI a ISO/ECMA channel numbering
- H.323 v4
- RAS, H.225, H.245
- Fast-connect, early H.245
- Gatekeeper auto-discovery
- Alias registration
- Overlap sending
- Empty capability set (call transfer, hold)
- H.323 v4 call transfer, hold
- ISDN over IP (ISoIP)
- H.323 Gateway and Gatekeeper compatible
- ISDN/Q-SIG feature tunneling
- ISDN supplementary services

Call Routing

- Local switching
- Interface hunt groups
- ISDN broadcast message routing
- Routing criteria interface, dialing/dialed number; day time, day of week, date, ISDN carrying ability
- Number manipulation: number substitution, add/erase number

IP Quality of Services

- Transmission classification
- Transmission speed adjustment
- TOS and Diffserv tags
- IEEE 802.1p/Q
- WFQ, fixed priority and flow-split scheduler

Management

- Software upgrade: SCP/TFTP
- Console: 1x RS-232, DB-9
- Management: HTTPS, SSH
- Built-in diagnostic tools

Packaging

- Desktop / rack / wall mountable metal base
- Dimensions: 225/34/155 mm (W/H/D)
- Weight: 620 g

Emissions

- EMI: FCC part 15, CE
- PTT: FCC part 68

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