Parlay VoXip 104, 108 and 116
SIP Gateways with ISDN interfaces

Data Sheet

Mechanics

Height:	1 unit (44 mm)
Width:	19" rack fit (438 mm)
Depth:	7" (176 mm)
Weight:	2.25 kg

Environment

Compliant to:	ETS 300 019, part 1-3
Operating temperature:	5 – 45 deg. C, no direct sunlight
Operating humidity range:	5 – 95 % R.H., non-condensing
Heat Dissipation:	55 BTU

Regulatory Information

R&TTE Directive 99/5/EEC:
- ISDN TBR 3
- Protection ETS 300 047-3

Low Voltage Directive 73/23/EEC:
- EN 60950-A4: 1996

EMC Directive 89/336/EEC:
- Emission EN 55022 Class B
- Immunity EN 55024
- Harmonics EN 61000-3-2

Power Supply

Switch mode power supply built-in

Input voltage:	95 - 263 VAC, 50 – 60 Hz
Power consumption:	10 VA average, 20 VA peak

Data Interface, physical

Ethernet 802.3, 10/100BaseT auto-sensing
RJ45, with Rx/Tx and Link indicator
RS232 serial console interface

ISDN Interfaces, physical

RJ45 according to ISO 8877, with bi-colour LED
NT mode parameters:
- terminal feeding, normal power condition, short circuit proof
- 100 ohms termination

TE mode parameters:
- 100 ohms termination (or infinite, BRI-port 0)
- sync source from BRI-port 0

ISDN interface variants:
- VoXip 104 interfaces in NT/TE mode: 0/2, 1/1 and 2/0
- VoXip 108 interfaces in NT/TE mode: 0/4, 2/2 and 4/0
- VoXip 116 interfaces in NT/TE mode: 0/8, 2/6, 4/4, 6/2 and 8/0

ISDN Signalling

Euro-ISDN protocol according to ETS 300 102.
Point-Point and Point-Multipoint, including line hunting.
En-bloc and Overlap sending / receiving.
QSIG tunneling.
Supports national dialects: VN2 – VN6 (France), 1TR6 (Germany), BAKOM (Switzerland), INS64 (Japan).

Codecs

Voice Codecs:	G.711 (64 kbit/s PCM), A-/µ-law G.726 (32 kbit/s ADPCM), A-/µ-law

Silence Suppression, Voice Activity Detection, Comfort Noise Generation.

Average bandwidth:	On Ethernet: 87 kbit/s (G.711), 55 kbit/s (G.726)
Number of IP calls:	4 (VoXip 104), 8 (108) or 16 (116) simultaneous calls
DTMF Support	Sends and receives in-band
De-jitter Buffer	Programmable up to 150 msec
Echo Cancellation:	G.165 with 32 msec tail

SIP Features

SIP:	SIP 2.0 (RFC 3261, RFC 2543)
Operation Mode:	Client in Proxy and Redirect Mode
Multi-Proxy:	Supports 5 Proxies simultaneously
Registrations:	100 accounts (DDI) at the Proxy
IP-link supervision:	Re-routing via ISDN in case of poor IP-link
QoS means:	IP Type of Service (DSCP marking)

ISDN tunneling over IP

Proprietary ISDN and QSIG tunneling over IP between 8 Parlay VoXip endpoints. RTP Multiplexing to reduce IP overhead.

Voice Switching Features

Local switching, allowing internal calls between ISDN interfaces of the Parlay VoXip.
Local call progress tone generation.
Local Advice of Charge (AOC) generation, also at SIP calls.
Call Transfer, Call Forwarding.
Calling Number modification (e.g. present corporate numbers).
Called Number modification (e.g. add Carrier Selection Code).
Voice Routing Table specifying handling of calls:
- Least Cost Routing (e.g. corporate and international calls via IP)
- Toll bypass (e.g. via IP to branch and drop out to ISDN there)

Synchronisation and Time

Sync onto ISDN TE line, port 0.
Sync onto built-in free running clock, precision better than 50 ppm.
Clock sync from ISDN or NTP.

Programming

Via built-in web server, providing a Graphical User Interface.
Via Telnet session, menu-driven user interface.
Via RS232 using terminal program, menu-driven user interface.
Routing Table upgrade via built-in web server.
Software upgrade/backup using FTP or HTTP.

Operational Security

Relay bridging between first ISDN TE and NT interface in case of power failure.
Built-in ISDN protocol analyser for OSI layers 1, 2 and 3.
Built-in test call generator.

Interoperability

The Parlay series of ISDN Multiplexers have been serving more than 1 million ISDN B-channels in Europe, Africa, Asia and Australia.

Reservation is made for adjustments of specifications and printing errors.
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