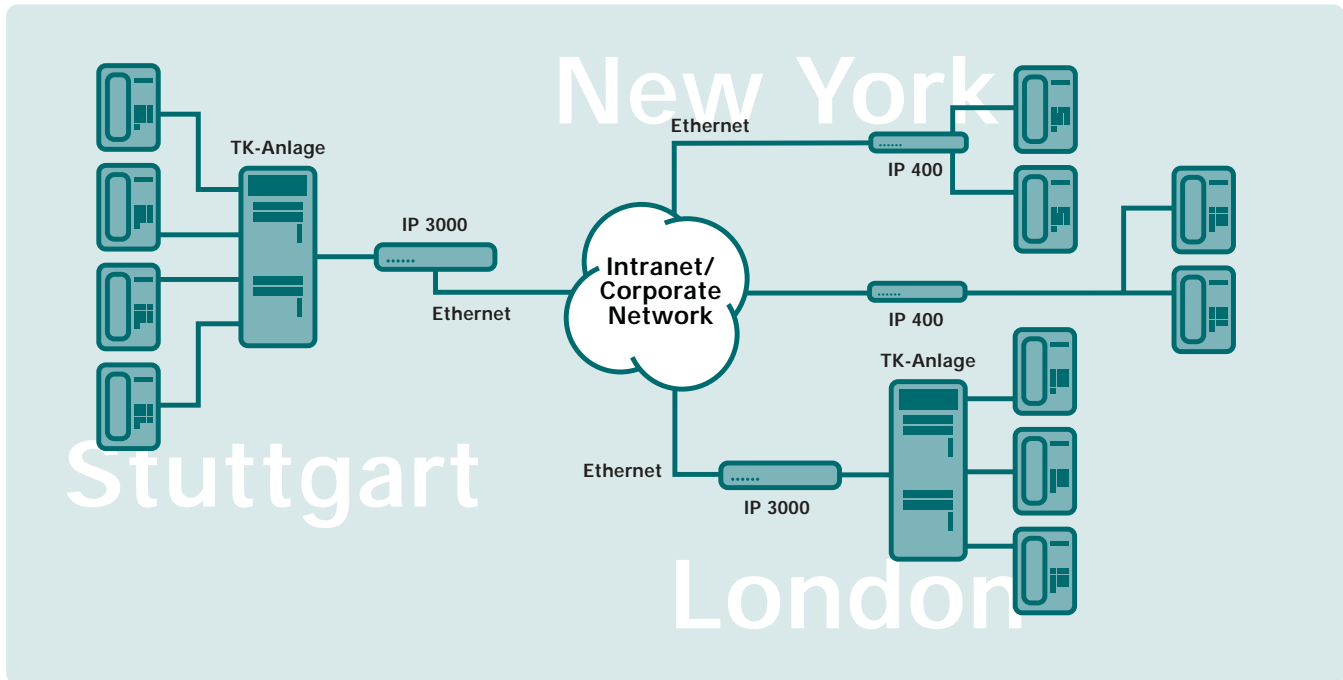


IP 3000

Scenario



Technical Specification IP 3000

Interfaces:

- 1x Primary rate (E-1 PRI) interface, TE-mode
- 1x Primary rate (E-1 PRI) interface, NT-mode
- 1x Basic rate S/T-interface, TE-mode
- 1x Ethernet 100BASE-TX

Hardware:

- Housing: 42.4 x 29.2 x 4 cm
- Power supply: Internal Power Supply
230V AC+10%-15%, 47-62Hz, 25W
- Memory: 16 MB DRAM, 2 MB Flash,
Remotely upgradeable
- CPU's: RISC CPU for protocol data
processing, Digital Signalling
Processor (DSP) for voice data
processing, Compression and
Coding of up to thirty calls
concurrently, scalable to 10, 20 or
30 concurrent calls
- Temperature Range: Operating Temperature:
0°C to +45°C, 10 % to 90 % relative
humidity, non-condensing
Storage temperature: -10°C to +70°C
- Weight: 4000 g

Protocols:

- Internet: IP, TCP, UDP, RTP, DHCP, TFTP, ICMP
- Configuration: Telnet, HTTP
- ISDN: ETSI DSS1, Q.SIG (in preparation)
- Voice over IP: H.323, H.225, H.245
- Speech Coding: G.711 A-law, G.711 μ -law,
G.723.1 5.3 and 6.3 kbps with
Voice Activity Detection (VAD) and
Comfort Noise Generation (CNG),
G.729A
- Echo compensation: G.165
- Specific features: Overlapped or non-overlapped
sending
Supports Direct Dialing In (DDI)
Supports presentation of the
calling subscriber number
(Calling Line Identification; ANI),
Supports call progress tones
Supports IP <-> ISDN Routing
Gatekeeper support (in preparation)
Can be hooked into a PBX's
trunk line

innovaphone

IP 3000

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IP 3000 Voice over IP Gateway

The Benefits of IP-Telephony

To maintain two separate infrastructures for voice and data communication doubles the cost of your network. The Voice over IP Gateway IP 3000 allows customers to send voice and data traffic over the same IP-network. Companies with an intranet for communication between remote offices and the main office may benefit substantially by using Voice over IP. The IP 3000 can be integrated in any IP-network, regardless of the network hardware (i.e. router, bridges, radio-LANs, Frame Relay, ATM).

The Scenario

The IP 3000 is ideally suited for larger offices which have voice traffic daily to the same remote, perhaps even international partners. These are typically larger locations or company headquarters, which are possibly connected with their branch offices. The IP 3000 may also be used to connect PBX's of two larger locations.

Product Features

The IP 3000 supports up to 30 concurrent voice calls. Two Primary Rate interfaces attach the gateway to almost all common PBX-systems (i.e. those of Bosch Telekom, Siemens etc.) as well as to the trunk line. A 100 BASE-T Ethernet interface connects the gateway to the IP network. The IP 3000 can be configured via Telnet or a web browser.

voice quality

The IP 3000 uses several different standardised voice compression algorithms, such as G.723.1, G.729A and G.711. Thus, interoperability with other VoIP products such as Cisco's or ITK's is possible. There is very little or no difference to "normal" analogue or digital voice calls regarding voice quality. Due to the fact that the IP 3000 is a standalone box (no PC-based solution), and due to additional features such as voice compression and echo compensation, voice quality is excellent, provided that enough bandwidth is given.

Owing to special features such as call progress tone generation (tone signals like normal telephones: dialling tone, operator and busy tone etc.) and overlap sending (phone-like dialling) the user can keep his/her phoning habits and does not even realize that the call is taking place via Voice over IP.

Scalability

In order to extend the VoIP infrastructure and support additional ports, two or more IP 3000 may be used in a row. The gateway is designed for a 19-inch rack. If a company chooses to enlarge their network later on, further IP 3000 can easily be added to the existing environment. Furthermore, the IP 3000 is part of a product family with different numbers of ports and ISDN-interfaces supported (i.e. the IP 400 as a 4-Port Basic Rate Gateway).

Usability

The IP 3000 can be pre-configured, using the inbuilt flash memories, so that the gateway can be installed without problems at the customer's premises.

Since the IP 3000 can be integrated into a company's existing telecommunication infrastructure the user does not need any additional know-how in order to use voice-over IP, he/she does not even notice that the call is routed over IP instead of a 'normal' carrier.

Key features and benefits IP 3000

- reduces telecommunication costs
- requires 9 kbps bandwidth per phone call (including protocol overhead)
- remote maintenance
- pre-configuration
- interoperability with other VoIP products
- excellent voice quality
- additional features such as overlap sending, call progress tone generation
- can be attached to the PBX or the trunk line