

iSurf™ 1002 VoIP Broadband Media Gateway

Perfect Solution for Integrated Broadband Service Access

The iSurf™-1002 is an integrated access device (IAD) that combines the capabilities of a residential voice gateway and a residential switch/hub. It is equipped with two analog phone ports, one 10M/100M WAN link port and one 10M/100M LAN port. As the integrated access device, the iSurf 1002 connects POTS phones, PCs, IP set top boxes and other types of data devices to the broadband network via its Ethernet WAN port.

Product Highlights

- **Call control protocol support: SIP, H.323 and MGCP**
- **Basic and supplementary service option support**
- **Data networking support (PPPoE, NAT, DHCP, VLAN)**
- **NAT and firewall traversal support**
- **QoS management support for data and voice traffics**
- **Multiple network management options**



Advanced Features

The iSurf™ 1002 provides a complete set of voice gateway features, and it can readily provide IP phone services when deployed in conjunction with the soft switches and the VoIP gateways in a carrier network. It also supports 802.1p/q with superior QoS capabilities, ensuring the reliable transmission of voice services.

- **Support both data and voice** - Provides unified access to broadband IP voice, video and data simultaneously. Supports 802.1p/q, VLAN, TOS or DSCP marking of VoIP service, and QoS priorities at multiple virtual interfaces, ensuring greater service feasibility and reliability.
- **Rich feature set** - Support NAT/Firewall penetration, plug & play, roaming, authentication, voice encryption PSTN bypass, dual-mode calls (PSTN/IP), PPPoE authentication, and Z interface polarity reversal designed for ease of billing.
- **Flexible to deploy** - The compact design is well suited for home, SOHO and enterprise applications. The IP addresses can be statically allocated or dynamically obtained via DHCP.
- **Simple to manage** - Supports local management access, Telnet, WEB, SNMPv1/v2/v3, and remote online upgrade. Centralized provision and upgrade management support via KZ Tech iManager™ 2000 product.

Specification

Physical

Dimensions	150 mm × 100 mm × 36 mm
Weight	< 0.5kg
Power Consumption	< 15w
Power Supply	12V DC

Environmental

Temperature	-5 °C--50 °C
Humidity	90% maximum Non-condensing

System

<i>Interface</i>	1 10/100 M WAN side FE 1 10/100M LAN side FE 2 RJ11 analog phone ports
<i>LED</i>	System status, Power status, Phone status, Ethernet port status
<i>Line Distance</i>	3Km - 5Km

Voice

<i>Compression</i>	G.711 G.723.1 G.729 A
<i>Comfort Noise</i>	Comfort noise insertion and level control
<i>Echo Cancellation</i>	G.165/G.168-2000 echo cancellation
<i>Silence Suppression</i>	Silence detection and suppression
<i>Fax</i>	T.30 and T.38
<i>Delay/Jitter/Loss</i>	Delay, jitter, packet loss compensation
<i>DTMF Relay</i>	Inband DTMF Relay and RFC 2833
<i>Call Duration</i>	Uninterrupted for >48 hours continuously

Service

Basic Voice

- Local and domestic/international long distance calls
- Flexible dial plan configuration support

Complementary Voice Services

- Caller ID, Caller ID suppression, call screening, speed dial, call tracing, hotline, unconditional call forwarding, call forwarding when no answer, call forwarding when busy, call waiting, call back, call blocking, no disturbance, alarm, 3-way call etc.

Data

- Supports routing functionality for dedicated data access by user PC, set top box and etc.
- Supports DHCP or static IP address assignment
- Supports VLAN, TOS or DSCP tagging for service differentiation and QoS prioritization
- Supports plug and play and multi-service application

Networking

- Soft Switch based network configuration
- IAD inter-working

Industry Standards

IEEE

IEEE 802.3	10Base Ethernet
IEEE 802.3u	Fast Ethernet
IEEE 802.1p	CoS Priority Protocol
IEEE 802.1Q	VLAN Tagging

IETF

IP voice	SIP/H.323/MGCP
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Security criterion

FCC	part 15
CE	EN55022, EN55024

Additional Features

NAT/Firewall traversal, PPPoE authentication, VoIP encryption, Z interface polarity reversal

Management

Local console, Telnet, Web, SNMP v1/v2/v3; Remote online upgrade, centralized management via iManager 2000