

iSurf™ 1016/1032 Series VoIP Broadband Media Gateway

Perfect Solution for Integrated Broadband Service Access

The iSurf™ 1016/1032 is an integrated access device (IAD) product that is designed to offer voice service over the IP network. It also provides data networking capabilities for local LAN traffic. The product is equipped with either 16 or 32 analog phone ports, two 10M/100M uplink port, and two 10M/100M downlink port. Multiple iSurf™ 1016/1032 devices can be stacked to increase the number of POTS lines available.

Product Highlights

- **Support multiple deployment scenarios**
- **Support multiple protocols: SIP, H.323, MGCP**
- **Support data and voice QoS**
- **Support multiple network management options**



Advanced Features

The iSurf™-1016/1032 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 and other superior QoS capabilities, ensuring the reliable transmission of voice service data.

- Ø **Security** - through a variety of security protocols to protect network data security. Firewall and VPN support; customer access control and voice data encryption; unique multi-network isolation technology to ensure the security of user data.
- Ø **Data and voice** - Provides unified access to broadband IP voice, video and data simultaneously. Supports 802.1p/q, flow classification, flow control, congestion management, congestion avoidance and traffic shaping to ensure greater voice quality and reliability.
- Ø **Rich feature set** - Support for Firewall and VPN, plug & play, roaming, authentication, data encryption, PPPoE authentication, and Z interface polarity reversal designed for ease of billing.
- Ø **Flexible to deploy** - The compact design is well suited for enterprise and carrier applications. The IP addresses can be statically allocated or dynamically obtained via DHCP. It supports a variety of wide area network protocols and routing protocols.
- Ø **Simple to manage** - Supports local management access, Telnet, WEB, SNMPv1/v2/, and remote online upgrade.

Specification

Operating Environmental

Dimensions	482.6mm (W) * 280mm (D) * 44.5mm (H)
Power Consumption	< 30w
Power Supply	90 - 250V AC
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 1 RS232 console port 16 or 32 RJ11 analog phone ports
<i>LED</i>	System status, Power status, WAN and LAN Ethernet port status
<i>Line transmission 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/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, network 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, service differentiation and 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/H.248
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Security criterion

FCC	part 15, 68
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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