

## VDSL2 Home Gateway

# Proteus932+



By introducing latest VDSL2 technology, Iskratel brings carrier class high-end networking solution for real triple play services, including multiple HDTV channel support. VDSL2 Home Gateway Proteus932+ combines VDSL modem and powerful home networking engine in single device. It enables service providers to offer connections of 50 Mbps downstream and more with the new VDSL2 technology. Furthermore, Proteus932+ enables multiple profile arrangement to gain symmetrical or asymmetrical connections from CO or remote access module deployments and to provide desired bandwidths even on longer subscriber loops. The VDSL2 Home Gateway Proteus932+ supports delivery of all triple play services: internet data, Voice over IP (VoIP) and IP video including bandwidth consuming HDTV. For packet based terminal devices it provides four Ethernet ports as well as wireless access point 802.11g as an option that brings relief to those troublesome wirings.

Additionally two ports for telephony services are provided using Voice over IP technology compatible with SIP server environments.

With embedded firewall and IP sharing technology this Home Gateway delivers secure broadband Internet access to be shared by all connected clients. Featuring per port/VLAN/IP DiffServ functions, quality of service (QoS) can be easily achieved for real-time multimedia services, such as IPTV and telephony services.

Additionally two USB2.0 host ports are available to enable value-added features such as file server or hub connectivity.



## Key Features and Benefits

- **Powerfull Home Gateway engine for offering 3Play services on broadband connectivity.**
- **Multiple interface options: USB2.0, Ethernet, FXS for POTS, WLAN, DECT**
- **Real 3Play proven Home Gateway to provide multiple HDTV IP streams**
- **Service separation and prioritization with bandwidth reservation**
- **Fully featured Router and Firewall, secure wireless transmitting and authentication**
- **Line rate routing performance (90/60Mbps)**
- **Support for centralized management node of multiple CPE (e.g. controlled mass remote SW upgrade and auto configuration provisioning), TR-069 compliant**

# Technical specifications

## Local Interface

- 4 port Ethernet 10/100Base-TX (RJ-45), complies with IEEE802.3 and IEEE802.3u
- Automatic MDI/MDIX crossover, Auto-negotiation and speed-auto-sensing, Half/Full duplex support
- Support for 802.1Q and 802.1p VLAN
- 2x USB 2.0 host connectors
- External 802.11g WLAN Access Point (optional)
- 2x FXS (RJ-11) for POTS connection
- 1x FXO (RJ-11) for PSTN/PBX connection (optional)

## WAN Specifications

- Copper pair loop, 100 ohm line impedance, RJ-11
- Conexant VDSL2-PTM or EFM solution
- Comply with VDSL2 ITU-T G.993.2 (DMT), ETSI TS 101-270-1 V1.3.1 and ETSI TS 101-270-2 V1.2.1
- Profiles supported 8c, 8d, 12a, 12b, 17a
- Support for 997 and 998 Band plan
- Support for US0 band
- Support for ISDN and POTS complementary services

## Bridging

- Transparent Bridging (IEEE 802.1D)
- RFC2684 (RFC1483) Bridged
- Spanning Tree Protocol (IEEE 802.1D)
- VLAN tagging (IEEE 802.1Q)
- Service based tagging (SBT)
- Supporting QoS (IEEE 802.1p)
- Supporting IP and PPPoE packets filter function
- Supporting Zero Installation PPP Bridge (ZIPB)
- IGMP transparent snooping

## Routing

- IP routing: RIP1, RIP2, and static routing
- RFC2684 (RFC1483) Routed
- PPPoE client
- PPPoE pass-through
- DHCP client, server & relay (RFC2131)
- DDNS client & relay
- Multihoming (IP Aliasing)
- IP Multicast IGMP Proxy

## Security & QoS

- NAT (RFC3022) basic Firewall support with extensive ALG support
- Firewall with well known applications setup
- URL filtering
- Time Scheduler (parental control)
- IPsec VPN gateway
- DMZ/IP pass-through
- VPN pass-through
- ToS/DSCP to CoS mapping
- Bandwidth reservation
- Voice traffic prioritization

## Visual Indicators

- Power – indicates power status
- Broadband – indicates DSL connection status
- Data – indicates LAN connection status.
- Wireless – indicates status of WLAN
- Phone – indicates VoIP is ready

## Environment

- Operating Temperature: 0°C ~ 45°C, Humidity: 5% ~ 95% (non condensing)
- Storage Temperature: -20°C ~ +85°C, Humidity: 5% ~ 95% (non condensing)

## Configuration & Network Management

- UPnP
- Easy sign-on
- Simple port configuration
- DHCP server for IP management
- Telnet for local or remote management
- WEB for firmware upgrade and configuration
- WEB-based configuration and management (multi-level GUI)
- Centralized SI3000 CPE Management Node as option: solid DB, FTP with auto identification
- TR-069 data-frame model support, including TR-098, TR-104 and TR-106

## Voice support

- Voice compressions G.711 (64kbps, A-law, μ-law PCM), G.729ab (8kbps)
- Asymmetric operation of audio coders (US and DS can have different coder types)
- Line Echo Cancellation G.168 with configurable tail
- Voice Activity Detection (VAD), Comfort Noise Generation (CNG)
- Adaptive jitter buffer and Packet Loss Compensation (PLC)
- DTMF (tone) dialing, modem/fax tone detection and pass-through
- Supports SIPv2 (RFC 3261), MGCP (RFC 3435), RTP (RFC3550)
- Supports RTP Profile for Audio and Video Conferences with minimal control (RFC 3551)
- Supports RTP payload for DTMF events (RFC2833)
- Caller ID (Type-1 and 2)

## USB2.0 applications

- WiFi Access Point (by using external USB WiFi dongle)
- File server (by using USB2.0 disk, flash or HDD)

## Wireless (with external USB dongle)

- WiFi Protected Setup (WPS)
- WEP: 64 or 128 bits key length
- WPA/WPA2 (Wi-Fi Protected Access) in PSK mode or using EAP with RADIUS
- Access control list based on MAC address

## Power

- External 115-230 VAC, 50 - 60 Hz, 15VDC 1,6A
- Power consumption, less than 15W

## Physical Dimensions

- 260mm x 185mm x 40mm (W x D x H), weight 0.5 kg

## Certification

- CE mark, CB, RoHS compliant

## Optional accessories

- WiFi AP USB dongle

## Ordering info

WAN interface	model
VDSL over POTS	Proteus932+ B/POTS
VDSL over ISDN	Proteus932+ B/ISDN

**Note:** some features are hardware dependant, some feature may not be included in dedicated software release



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