

SURFBOARD®
VT1000
VOICE TERMINAL



Add telephone service to your high speed data connection with the SURFboard VT1000 Voice Terminal.

The VT1000 enables subscribers to cost-effectively upgrade their existing high speed cable modem service to include telephony. The VT1000 provides VoIP telephone service by connecting to a DOCSIS cable modem. To configure for telephony service, subscribers connect the VT1000 to their cable modem (WAN) and Personal Computer (PC) via two Ethernet ports that function as a pass-through. This pass-through configuration allows the VT1000 to prioritize voice traffic over data traffic to ensure high-quality telephone service. The VT1000 also has an optional USB host-style port to connect to a DOCSIS cable modem embedded in a set-top box or other device.

The VT1000 is equipped with up to two telephone lines and is compatible with existing telephone termination systems.

FEATURES INCLUDE:

- Up to two telephone lines (RJ-11)
- Compatible with DOCSIS cable modems
- Two 10/100Base-T Ethernet ports (RJ-45) for Ethernet pass-through functionality
- Optional USB host-style port
- Voice over Data prioritization ensures high-quality telephone service
- Supports PacketCable DQoS (RSVP+), provisioning, security and NCS signaling
- Compact, low-profile design
- Telephony interface configures to meet multiple market standards
- LED on front panel to indicate power status
- Supports all CLASS services provided today by the phone company
- Permits simultaneous usage of phone lines and high speed data services
- Safety and regulatory approval for multiple markets (CE, UL, FCC and CB)



GENERAL SPECIFICATIONS

General

Dimensions:	1.6" H x 5.5" W x 6.5" L
Input Power:	12 VDC
WAN (Cable Modem) Interface:	10/100Base-T Ethernet (auto sensing) RJ-45 Port
PC Interface:	10/100Base-T Ethernet (auto sensing) RJ-45 Port
Telephony Termination:	1 or 2 RJ-11 Ports

Environmental

Operating Temperature:	0° to 40° C
Storage Temperature:	-40° to 65° C
Operating Humidity:	5 to 95% Relative Humidity, (non-condensing) 0° to 35° C
Storage Humidity:	95% Relative Humidity

Telephony

Line Type:	2 Wire
Hook State Signaling:	Loop start
Maximum Line Length (One-way):	500 feet (AWG 26/0.4 mm @ 65° C)
Off Hook Threshold (Line Seizure):	Rdc ≤ 1000 ohms
On Hook Threshold (Line Release):	Rdc ≥ 10000 ohms
Rdc DC	
Supervisory Range:	Rdc ≥ 450 ohms
DTMF Level	
Sensitivity Range:	0 And -20 dBm
Speech Coding:	64 kbps PCM, u-law or A-law companding, support for G.711 plus other low-rate CODECs
Line Termination:	Configurable based on market needs
Loss Plan:	Receive (D/A) 4 dB/transmit (A/D) 2 dB
Loss Plan Tolerance (One-way):	+/- 1 dB
60/50 Hz Loss (Referenced To Off Hook Loss At 1004 Hz):	> 20 dB
Ringing Wave Form:	Quasi-trapezoidal
Ringing Crest Factor:	1.2 ≤ CF ≤ 1.6
Ring Trip (Maximum):	200 mS with 300 W termination

CONCLUSION

With the VT1000 you can enhance the functionality of your subscribers existing cable modems by offering VoIP telephone service. Cost effective and easy to use, the VT1000 bridges the gap between telephone service and Internet access. It can accommodate two telephone lines, allows for simultaneous telephone and Internet usage, and is compatible with all CLASS services currently provided by the phone company.

