# NetComm®
## Broadband Solutions

# V300
## VoIP Telephone Adaptor/Router



- ⊙ **Make and receive VoIP or PSTN calls from one telephone handset**
- ⊙ **Landline telephone backup when your Broadband/VoIP service is down**
- ⊙ **Choose to call out on either your VoIP or landline telephone service**
- ⊙ **QoS (Quality of Service) router to maintain VoIP call quality**
- ⊙ **FXS/FXO telephone ports and 3-port LAN switch**
- ⊙ **Supports supplementary Call services – Caller ID, Call On-Hold, Call Forward, Call Waiting and Transfer – service provider dependent**
- ⊙ **Simple web-based setup and configuration**

### Single line – 2 port VoIP Adaptor with 3-Port Router

NetComm's V300 VoIP Telephone Adaptor/Router has been designed for residential and small business users to deliver predictable real-time voice quality over the Internet. It connects directly to any broadband modem and service (Cable or DSL) which supports VoIP.

A standard analogue telephone (desktop or cordless) is connected to the FXS (Phone) port on the back of the V300, allowing the user to route calls over the Internet to anywhere in the world using VoIP, significantly reducing or even eliminating long distance call charges.

The V300 is also equipped with a standard PSTN RJ-11 (Line) port which allows for the connection of a regular telephone line. With this feature you can make and receive regular telephone calls with the same handset you use to make VoIP calls. This feature also acts as a Lifeline or backup should your VoIP or Broadband service experience difficulties.
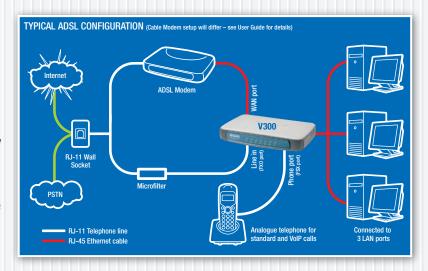
To enhance your VoIP experience and simplify network integration, the V300 is equipped with a 3-port switch and Quality of Service (QoS) router. The V300's QoS feature ensures you maintain high-quality VoIP calls during periods of heavy Internet use by dynamically calculating and shaping the required upstream bandwidth without the need for complex user configuration.

QoS Router | 3-Port Switch | PSTN Lifeline

# V300 VoIP Telephone Adaptor/Router

## KEY FEATURES

◎ Make and receive VoIP or PSTN calls from one telephone handset

◎ Landline telephone backup when your Broadband/VoIP service is down

◎ Choose to call out on either your VoIP or landline telephone service

◎ QoS (Quality of Service) router to maintain VoIP call quality

◎ FXS/FXO telephone ports and 3-port LAN switch

◎ Supports supplementary Call services – Caller ID, Call On-Hold, Call Forward, Call Waiting and Transfer – service provider dependent

◎ Simple web-based setup and configuration

◎ **3-YEAR WARRANTY WHEN YOU REGISTER ONLINE**
1 year warranty out of the box. Extra 2 years FREE with online registration at www.netcomm.com.au
(Conditional upon online registration)



TYPICAL ADSL CONFIGURATION (Cable Modem setup will differ – see User Guide for details)

Internet • ADSL Modem • WAN port • V300 • RJ-11 Wall Socket • Line in (FXO port) • Phone port (FSX port) • Microfilter • PSTN
— RJ-11 Telephone line
— RJ-45 Ethernet cable
Analogue telephone for standard and VoIP calls • Connected to 3 LAN ports

## TECHNICAL SPECIFICATIONS

### V300 PORTS
- 1 x WAN port RJ-45 IEEE 802.3 10/100 Base-T, Auto-crossing
- 3 x LAN port RJ-45 IEEE 802.3 10/100 Base-T, Auto-crossing
- 1 x FXS RJ-11 for connection to analogue telephone
- 1 x PSTN RJ-11 for connection to normal telephone line to provide lifeline and PSTN pass-through

### WAN PROTOCOL SUPPORT
- DHCP client (RFC 2131) • Static IP
- PPP over Ethernet client (RFC 2516)

### INTERNET SUPPORT
- IP, TCP, UDP, ICMP, ARP protocols • HTTP • DNS

### VoIP PROTOCOL SUPPORT
- Session Initiation Protocol (SIP, RFC 3261)
- Session Description Protocol (SDP, RFC 2327)
- Transport Protocol for Real-Time Applications (RTP, RFC 1889)

### VoIP AUDIO CODEC
- G.729a • G.711 alaw • G.711 ulaw

### DTMF RELAY
- In-band • Out-band (RFC 2833)

### VOICE FEATURES
- Echo Cancellation (G.168) • Voice Activity Detection (VAD)
- Comfort Noise Generation (CNG) • Silence Suppression
- Jitter Buffer • Adjustable RTP packetisation interval

### TELEPHONE FUNCTION SUPPORT
- Lifeline (enables PSTN voice service if VoIP service is unavailable)
- PSTN pass-through (enables you to receive PSTN and VoIP calls using a single analogue phone)
- Caller ID (On/Off hook Caller ID ETSI based)
- DTMF tone generation
- Dial tone, Busy tone, Ring back tone generation

### VoIP CALL TYPES
- SIP proxy • Phone Book for Peer-to-Peer IP Call

### QUALITY OF SERVICE (QoS)
- Internal Bandwidth Shaping ( The system dynamically calculates the necessary bandwidth required to maintain optimal voice quality)

### BUILT-IN ROUTER
- DHCP client/server • NAT Firewall • Port forwarding
- DMZ • Virtual server

### VPN SUPPORT
- IPSec and PPTP pass-through

### SECURITY
- PAP/CHAP for PPPoE authentication
- MD5 for SIP registration authentication

### OTHER VoIP CALL FUNCTIONS*
- Call Transfer • Call Waiting • Call Hold/Resume
- Call Forward • Call Switch • CFU (Call Forward Unconditional) • CFB (Call Forward Busy)

### LED
- Power, WAN, LAN 1x, LAN 2x, LAN 3x, Line, Phone

### POWER SUPPLY
- External power adapter 240V AC (in) ~ 12V DC/1.5A (out)

### ENVIRONMENTAL CONDITIONS
- Operating temperature 0 ~ 50°C
- Relative humidity 5 ~ 90% (non-condensing)

### DIMENSIONS
- 227 mm (W) x 40 mm (H) x 144 mm (D)

### MINIMUM SYSTEM REQUIREMENTS
- An account with a VoIP Service Provider • Broadband service – ADSL or Cable • Broadband Modem/Router with Ethernet Port (bridge-mode capable^) • Analogue telephone with RJ-11 line cord (desktop, cordless or DECT) • RJ-11 line splitter and ADSL micro filter† • A PC with Ethernet port and Web browser (for V300 configuration only)

### PACKAGE CONTENTS
- V300 VoIP Telephone Adaptor/Router
- 12V DC 1.5 Amps power supply
- RJ-11 line connection cable
- RJ-45 10/100 Ethernet cable
- CD with User Manual
- Package Contents List
- Quick Start Guide

*Note: The availability of some listed call features are dependent on the service supported by your VoIP service provider. Please consult them for further information.

^In some cases, you may need to configure your broadband Modem/Router in bridge-mode. The V300 will perform the routing on your network.

†A micro filter is required if you plan on using your existing telephone service (landline) with the V300 and your ADSL Modem.

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