Innovative triple-play networking solution with QoS

- All-in-one Internet-sharing Wireless-G broadband router with 4-port switch
- Two standard phone jacks enable feature-rich telephone service over a broadband Internet connection
- Simple, easy and secure Wi-Fi Setup with industry standard push-button WPS, wireless MAC address filtering, powerful firewall capability, and dual SSID capability
- Advanced Quality of Service (QoS) functionality for voice, video, and data services

Model: WRP400
PRODUCT DATA

Model: WRP400

Hardware Features

- One 10/100 802.3/u (RJ-45) WAN Interface
- Four 10/100 802.3/u (RJ-45) LAN Interfaces
- Integrated 802.11b/g Wireless Access Point
- Two FXS RJ-11 Interfaces
- Reset Button / Restore Factory Defaults
- LEDs – Power, Internet, Ethernet, Wireless, Phone(s), WPS
- Power – External, 5V DC, 2A (full range switching power adapter)
- Wi-Fi Protected Setup (WPS) Button

Software Features

- Static and Dynamic Routing (RIP 1, RIP2)
- Multicast Pass-Through
- Denial of Service (DoS) Prevention
- Web Based Configuration
- VPN Pass-Through with IPSec, L2TP and PPTP
- Event Logging
- DHCP Server
- Access Control Lists
- Universal Plug and Play (UPnP)
- Password Protected Configuration or Management Sessions for Web Access
- Remote Management (SIP SUBSCRIBE and NOTIFY message, use NOTIFY message to reset the box remotely) and Remote Web Management
- IGMP Multicast and IGMP Snooping (v1/v2/v3) Support
- 802.1p Prioritization QoS Support
- DiffServ, ToS Classification
- DMZ Hosting
- WPA and WPA2
- WMM (Wi-Fi Multimedia)
- Dual SSID

Voice Features

- Session Initiation Protocol (SIP v2, RFC3216)
- Sending SIP Messages via UDP/TCP
- G.711a, G.711u, G.729, G.726 Codec
- G.711 Pass-Through
- Echo Cancellation (G.167 and G.168)
- Dynamic Jitter Buffer
- Simple Traversal of UDP through NAT (STUN, RFC 3489)
- Session Description Protocol (SDP, RFC 2327)
- RTP/RTCP over UDP
- Three-Way Conferencing
- Remote Firmware Upgrade
- Session Initiation Protocol (SIP v2)
- DTMF Tone Detection and Generation
- Voice Activity Detection (VAD)
- Silence Suppression
- Comfort Noise Generation (CNG)
- Caller ID Generation and Detecting (FSK and DTMF)
- Media Loopback
- SIP TLS (Transport Layer Security)
PRODUCT DATA

Model: WRP400

Package Contents

- Wireless-G Broadband Router with 2 Phone Ports
- Setup CD-ROM with Norton Internet Security
- User Guide on CD-ROM
- Ethernet Cable
- Power Adapter
- Quick Installation

Minimum Requirements

- High-Speed Internet Connection (cable/DSL/other)
- Activated Voice Over IP Service

Specifications

Model | WRP400

* Note: Many specifications are programmable within a defined range or list of options. Please see the SPA ATA Administration Guide for details. The target configuration profile is uploaded to the WRP400 at the time of provisioning.

Data Networking

- MAC Address (IEEE 802.3)
- IPv4 - Internet Protocol v4 (RFC 791) Upgradeable to v6 (RFC 1883)
- ARP - Address Resolution Protocol
- DNS - A Record (RFC 1706), SRV Record (RFC 2782)
- DHCP Client - Dynamic Host Configuration Protocol (RFC 2131)
- DHCP Server - Dynamic Host Configuration Protocol (RFC 2131)
- PPPoE Client - Point to Point Protocol over Ethernet (RFC 2516)
- ICMP - Internet Control Message Protocol (RFC 792)
- TCP - Transmission Control Protocol (RFC 793)
- UDP - User Datagram Protocol (RFC 768)
- RTP - Real Time Protocol (RFC 1889) (RFC 1890)
- RTCP - Real Time Control Protocol (RFC 1889)
- TFTP
- RTSP
- HTTP
- NAT (RFC 1631)
- Reverse NAT
- SDP
- SNTP - Simple Network Time Protocol (RFC 2030)
- Type of Service - TOS (RFC 791/1349)
- QoS - Packet Prioritization by Type
- Router or Bridge Mode of Operation
- MAC Address Cloning
- Port Forwarding
- IP Multicast / IGMP v1, v2, v3 / IGMP Proxy

Voice Features

- Voice Algorithms
  - G.711 (a-law and µ-law)
  - G.726 (16/24/32/40 kbps)
  - G.729 AB
  - G.723.1 (6.3 kbps, 5.3 kbps)
- Call Forwarding: No Answer/Busy/Unconditional
- Support for Two Simultaneous Calls
- SIP TLS (Transport Layer Security)
- Call Transfer
- Call Waiting/Hold/Retrieve
PRODUCT DATA

Model: WRP400

Specifications

Three-way Conferencing
Call ID Number & Name (Primary Line & On Call Waiting)
Call-ID Block (Prevent Send out the Caller ID)
Anonymous Call Blocking
Distinctive Ringing
Do not Disturb Setting
Repeat Dialing on Busy
Call Return
Emergency Call Support
Dial Plan
Speed Dial
Auto-Attendant
Multi-Room Meet-Me Conference
In-Band / SIP-INFO DTMF Translation

Provisioning, Administration, & Maintenance
Web Browser Administration & Configuration via Integral Web Server
Telephone Key Pad Configuration with Interactive Voice Prompts
Automated Provisioning & Upgrade via HTTP, TFTP, HTTPS
Asynchronous Notification of Upgrade Availability via NOTIFY
Non-Intrusive, In-Service Upgrades
Report Generation & Event Logging
Stats in BYE Message
Syslog & Debug Server Records
Per Line and Purpose Configurable Syslog and Debug Options

Physical Interfaces
4 100Base-T RJ-45 Ethernet Port (IEEE 802.3)
2 RJ-11 FXS Phone Ports - For Analog Circuit Telephone Device
USB 2.0 (reserved for future use via firmware upgrade)
Reset, WPS

Buttons
Subscriber Line Interface Circuit (SLIC)

Ring Voltage: 40-90 Vpk
Ring Frequency: 20 to 25Hz
Ring Waveform: Trapezoidal with 1.2 to 1.6 Crest Factor
Maximum Ringer Load: 3 REN
On-Hook/Off-Hook Characteristics:
   On-Hook Voltage (Tip/Ring): - 46 to -56V
   Off-Hook Current: 18 to 25mA
   Terminating Impedance:
      600 ohm Resistive
      270 ohm + 750ohm//150nF Complex Impedance
Frequency Response: 300 – 3400Hz

Regulatory Compliance
FCC (Part 15 Class B), CE, ICES-003, RoHS

Number of Antennas
1
Connector type
Fixed
Detachable (y/n)
No
RF Pwr (EIRP) in dBm
(Average, not Including Antenna)
   802.11g: Typ. 18 dBm @ Normal Temp Range (with PA)
   802.11b: Typ. 20 dBm @ Normal Temp Range (with PA)
Antenna Gain in dBi
2 dBi
UPnP able/cert
Yes
Power Supply
Switching Type (100-240V) Automatic
DC Input Voltage: +5 VDC at 2.0 A Max.
Power Consumption: 7.9 watts (Average)
Power Adapter: 100-240V - 50-60Hz (26-34VA) AC Input, 1.8 m Cord
**Model:** WRP400  

### Specifications

<table>
<thead>
<tr>
<th>Indicator Lights/LEDs</th>
<th>Power, Ethernet, Wireless, Phone 1, Phone 2, Internet, WPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documentation</td>
<td>Quick Installation and User Guide are Downloaded from <a href="http://www.linksys.com">www.linksys.com</a> Linksys SPA ATA Administration Guide - Service Providers Only Linksys Provisioning Guide - Service Providers Only</td>
</tr>
<tr>
<td>Security Features</td>
<td>Password-Protected Configuration for Web Access Denial of Service (DoS) Prevention URL Filtering, and Keyword, Java, ActiveX, Proxy, Cookie Blocking VPN Passthrough for IPSec, PPTP, and L2TP Protocols 64, 128 bits WEP with Passphrase WEP Key Generation SSID Broadcast Disable Access Restriction by MAC and IP Addresses Wi-Fi Protected Setup (WPS), Wi-Fi Protected Access™ (WPA), Wi-Fi Protected Access™ 2 (WPA2)</td>
</tr>
<tr>
<td>Security Key Bits</td>
<td>64, 128</td>
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</tbody>
</table>

### Environmental

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>5.51” x 5.51” x 1.06” (140 x 140 x 27 mm)</th>
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</thead>
<tbody>
<tr>
<td>Weight</td>
<td>10/0.5 oz (285 g)</td>
</tr>
<tr>
<td>Power</td>
<td>External, Switching 5VDC 2A</td>
</tr>
<tr>
<td>Certification</td>
<td>FCC, CE, CB, IC, UL, Wi-Fi (802.11b + WPA2, 802.11g + WPA2, WMM)</td>
</tr>
<tr>
<td>Operating Temp.</td>
<td>32 to 104°F (0 to 40°C)</td>
</tr>
<tr>
<td>Storage Temp.</td>
<td>-4 to 158°F (-20 to 70°C)</td>
</tr>
<tr>
<td>Operating Humidity</td>
<td>0 to 85%, Relative Humidity, Noncondensing</td>
</tr>
<tr>
<td>Storage Humidity</td>
<td>5 to 90%, Noncondensing</td>
</tr>
</tbody>
</table>
The Linksys WRP400 Wireless-G Broadband Router with 2 Phone Ports is an impressive and versatile networking solution offering advanced triple-play services prioritization in a single intelligent compact device.

Whether it’s broadband internet sharing, VoIP service, or enhanced services like multimedia gaming, streaming media, or IPTV, the innovative development of the WRP400 provides users with the Quality of Service (QoS) requirements that must now be implemented to ensure guaranteed service delivery for the latest generation of applications that are becoming more prevalent.

The WRP400 itself has a wireless access router to link both Wireless-G (802.11g at 54Mbps) and Wireless-B (802.11b at 11Mbps) and also includes a built-in, 4-port, full-duplex, 10/100 Ethernet switch to connect PCs directly or attach additional hubs and switches to create as big a network that is needed. A robust firewall feature protects local computers and prevents malicious attacks from outside intruders. The two telephone ports enable high-quality feature-rich VoIP service utilizing existing analog phones.

With the Linksys Wireless-G Broadband Router with 2 Phone Ports at the center of your home or office network, customers will appreciate the higher level of quality associated with their on-line experience that ensures fault-tolerant data delivery, exceptional voice quality, and continuous, uninterrupted streaming media that they have now come to expect.

**Highlights**

**Toll Quality Voice and Carrier-Grade Feature Support**
The WRP400 delivers clear, high-quality voice communication in diverse network conditions. Excellent voice quality in a demanding IP network is consistently achieved via our advanced implementation of standard voice coding algorithms. The WRP400 is interoperable with common telephony equipment like voicemail, fax, and interactive voice response systems.

**Large-Scale Deployment and Management**
The WRP400 offers all the key features and capabilities with which service providers can provide customized services to their subscribers. The WRP400 can be remotely provisioned and supports dynamic, in-service software upgrades. A secure profile upload saves providers the time, expense and hassle of managing and pre-configuring or re-configuring customer premise equipment (CPE) for deployment.

**Ironclad Security**
Linksys understands that security for both end users and service providers is a fundamental requirement for a solid, carrier-grade telephony service. The WRP400 supports secure, encryption-based methods for communication, provisioning and servicing.