



## **IP Phone**

## **PRODUCT DATA**

# 6-Line IP Phone with Color Display **Enhances Business Communication** Requirements



#### Comprehensive Interoperability and SIP **Based Feature Set**

Based on the SIP standard, the SPA962 has been tested to ensure comprehensive interoperability with equipment from VoIP infrastructure leaders enabling service providers to quickly roll out competitive, feature rich services to their customers. With hundreds of features and configurable service parameters, the SPA962 addresses the requirements of traditional business users while leveraging the advantages of IF telephony. Features such as easy station moves, presence, and shared line appearances (across local and geographically dispersed locations) are just some of the many advantages

#### Carrier-Grade Security, Provisioning, and Management

The SPA962 uses standard encryption protocols to provide secure remote provisioning and unobtrusive in-service software upgrades. Linksys secure remote provisioning tools include detailed performance measurement and troubleshooting features, enabling network providers to deliver high quality support to their subscribers. Remote provisioning also saves service providers the hassle and expense of managing, preloading, and re-configuring customer premise equipment (CPE).

## PRODUCT DATA

Model No.

**SPA962** 

#### **Features**

#### **SPA962 Key Telephone Functions and Features**

- Up to Six Lines with Independent Configuration and Registration
- 320 x 240 True Color, Four Inch, Liquid Crystal Display (LCD)
- · Secure Call Support SIP over TLS, and SRTP
- · Line Status Active Line Indication, Name and Number
- Menu Driven User Interface Multiple Languages Supported
- Digits Dialed with Number Auto-Completion
- Shared / Bridged Line Appearance \*\*
- · High Quality Speakerphone
- · Call Hold
- Music on Hold \*\*
- · Call Waiting
- · Caller ID Name and Number and Outbound Caller ID Blocking
- · Outbound Caller ID Blocking
- · Call Transfer Attended and Blind
- Call Conferencing
- Automatic Redial
- On-Hook Dialing
- Call Pick Up Selective and Group \*\*
- Call Park and UnPark \*\*
- · Call Swap
- Call Back on Busy
- · Call Blocking Anonymous and Selective
- · Call Forwarding Unconditional, No Answer, On Busy
- · Hot Line and Warm Line Automatic Calling
- · Call Logs (60 entries each): Made, Answered, and Missed Calls
- Redial from Call Logs
- Personal Directory with Auto-dial (100 entries)
- Do Not Disturb (callers hear line busy tone)
- URI (IP) Dialing Support (Vanity Numbers)
- On Hook Default Audio Configuration (Speakerphone and Headset)
- Multiple Ring Tones with Selectable Ring Tone per Line
- · Called Number with Directory Name Matching
- · Call Number using Name Directory Matching or via Caller ID
- Subsequent Incoming Calls with Calling Name and Number
- Date and Time with Intelligent Daylight Savings Support
- · Call Duration and Start Time Stored in Call Logs
- Call Timer
- · Name and Identity (Text) Displayed at Start Up
- · Distinctive Ringing Based on Calling and Called Number
- Ten User Downloadable Ring Tones Ring Tone Generator Free from www.linksys.com
- · Speed Dialing
- Configurable Dial/Numbering Plan Support per Line
- Intercom \*\*
- Group Paging \*\*
- DNS SRV and Multiple A Records for Proxy Lookup and Proxy Redundancy
- Syslog, Debug, Report Generation, and Event Logging
- Secure Call Encrypted Voice Communication Support SIP over TLS, and SRTP
- Built-in Web Server for Administration and Configuration with Multiple Security Levels
- Automated Provisioning, Multiple Methods. Up to 256 Bit Encryption: (HTTP, HTTPS, TFTP)
- · Optionally Require Admin Password to Reset Unit to factory Defaults
- \*\* Feature requires support by SIP server

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#### **Features**

#### **Hardware**

- 320 x 240 True Color, Four Inch, Liquid Crystal Display (LCD)
- · Four Illuminated Call Appearance Line Buttons with Tricolor LED's
- · LED Indicates Line State Active, Idle, On-Hold, Unregistered
- Line LED Configurable to 13 Different States (On/Off, Color, Flash)
- · Dedicated Illuminated Buttons for:
- · Audio Mute On/Off
- Headset On/Off
- Speakerphone On/Off
- · Four Soft Key Buttons
- Four Way Rocking Directional Knob for Menu Navigation
- Support for up to two attached Attendant Consoles; adds up to 64 programmable buttons
- Voice Mail Message Waiting Indicator Light
- · Voice Mail Message Retrieval Button
- Dedicated Hold Button
- Settings Button for Access to Feature, Set-up, and Configuration Menus
- · Volume Control Rocking Up/Down Knob Controls Handset, Headset, Speaker, Ringer
- · Standard 12-Button Dialing Pad
- · High Quality Handset and Cradle
- · Built-In High Quality Microphone and Speaker
- · Headset Jack 2.5 millimeter
- · LED Test Function
- Two Ethernet LAN Ports with Integrated Ethernet Switch 100BaseT RJ-45
- 802.3af Compliant Power over Ethernet (PoE)
- Optional 5 volt DC Universal (100-240 Volt) Switching Power Supply is Ordered Separately

## Regulatory Compliance Security

FCC, CE, Class B Canadian ICES-003, A-Tick Certification

- Password Protected System, Preset to Factory Default
- · Password Protected Access to Administrator and User Level Features
- HTTPS with Factory Installed Client Certificate
- HTTP Digest Encrypted Authentication via MD5 (RFC 1321)
- Up to 256-bit AES Encryption

#### **Documentation**

- · Quick-Start Installation and Configuration Guide
- User Guide
- · Administration Guide
- · Provisioning Guide For Service Providers Only

## **Package Contents**

- 1 SPA962 IP Phone, Handset, and Stand
- 1 Handset Cord
- 1 RJ45 Ethernet Cable
- 1 Quick Installation Guide
- Power Supply is Ordered Separately -- Models: PA100-NA, PA100-EU, PA100-UK, PA100-AU

#### **Environmental**

Dimensions 8" x 7.63" x 7.50" (203 x 194 x 191 mm) W x H x D

Unit Weight 2.4 lbs (1.088 kg)
Operating Temp. 41°~113°F (5°~45°C)
Storage Temp. -13°~185°F (-25°~85°C)
Operating Humidity 10~90% Non-condensing
Storage Humidity 10~90% Non-Condensing

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## **Specifications**

Model SPA-962

Voice

\* Note: Many specifications are programmable within a defined range or list of options.

Data Networking MAC Address (IEEE 802.3)

IPv4 - Internet Protocol v4 (RFC 791) ARP - Address Resolution Protocol

DNS - A Record (RFC 1706), SRV Record (RFC 2782)

DHCP Client - Dynamic Host Configuration Protocol (RFC 2131)

ICMP - Internet Control Message Protocol (RFC792) TCP - Transmission Control Protocol (RFC793) UDP - User Datagram Protocol (RFC768) RTP - Real Time Protocol (RFC 1889) (RFC 1890) RTCP - Real Time Control Protocol (RFC 1889)

DiffServ (RFC 2475), Type of Service - TOS (RFC 791/1349)

VLAN Tagging 802.1p/q - Layer 2 QoS

SNTP - Simple Network Time Protocol (RFC 2030)

SIPv2 - Session Initiation Protocol Version 2 (RFC 3261, 3262, 3263, 3264)

SIP over TLS

SRTP

Secure (Encrypted) Calling via Pre-Standard Implementation of Secure RTP

SIP Proxy Redundancy - Dynamic via DNS SRV, A Records

Re-registration with Primary SIP Proxy Server

SIP Support in Network Address Translation Networks - NAT (including STUN)

SIPFrag (RFC 3420)

Secure (Encrypted) Calling via Pre-Standard Implementation of Secure RTP

Codec Name Assignment

Voice Algorithms:

- G.711 (A-law and  $\mu$ -law, G.726 (16/24/32/40 kbps), G.729 A, G.723.1 (6.3 kbps, 5.3 kbps)

Dynamic Payload Support

Adjustable Audio Frames Per Packet

DTMF: In-band and Out-of-Band (RFC 2833) (SIP INFO) Flexible Dial Plan Support with Inter-Digit Timers

IP Address / URI Dialing Support Call Progress Tone Generation Jitter Buffer - Adaptive Frame Loss Concealment

VAD - Voice Activity Detection with Silence Suppression

Attenuation / Gain Adjustments MWI - Message Waiting Indicator Tones

VMWI - Voice Mail Waiting Indicator - Via NOTIFY, SUBSCRIBE

Caller ID Support (Name and Number) Third Party Call Control (RFC 3725)

Provisioning, Administration & Maintenance:

**Power Supply** 

Integrated Web Server Provides Web Based Administration and Configuration

Telephone Key Pad Configuration via Display Menu / Navigation Automated Provisioning and Upgrade via HTTPS, HTTP, TFTP Asynchronous Notification of Upgrade Availability via NOTIFY

Non-intrusive, In-Service Upgrades Report Generation and Event Logging Statistics Transmitted in BYE Message

Syslog and Debug Server Records - Configurable Per Line

Power supply is optional and is purchased as a separate line item -- Models: PA100-NA, PA100-EU, PA100-UK, PA100-AU

DC Input Voltage: +5 Volts DC at 1.0 Amps Maximum

Power Consumption: 5 Watts (tenative) Switching Type (100-240v) Automatic

Power Adapter: 100-240v - 50-60Hz (26-34VA) AC Input

Physical Interfaces: 2 100baseT RJ-45 Ethernet Ports (IEEE 802.3, including 802.3af)

Handset: RJ-7 Connector

Built-in Speakerphone and Microphone

Headset 2.5 mm Port

Indicator Lights/LED: Six (6) Line Buttons with Associated Tricolor LED

Line LED State Indication: Active, Idle, On Hold, Unregistered

Speakerphone On/Off Button with LED Headset On/Off Button with LED

Mute Button with LED

Message Waiting Indicator LED Voicemail Message Retrieval Button

Hold Button LED Test Function Stylish and functional in design, the SPA962 VoIP telephone is a must for businesses using a hosted IP telephony service, an IP PBX, or a large scale IP Centrex deployment. The SPA962 leverages industry leading VoIP technology from Linksys to deliver a high quality IP Phone that is unparalleled in features, value, and support.

Standard features on the SPA962 include six active lines, dual switched Ethernet ports, 802.3af PoE support, a high resolution color display, speakerphone, and a 2.5 mm head-set port. Each line can be independently configured to use a unique phone number (or extension), or can be configured to use a shared number that is assigned to multiple phones. The power supply for the SPA962 is sold separately and will be required if PoE functionality is not implemented.

- Full featured six line business class IP Phone supporting Power over Ethernet 802.3af
- Connect directly to an Internet Telephone Service Provider or connect to an IP PBX
- Dual switched Ethernet ports, Speakerphone, Caller ID, Call Hold, Conferencing, and more
- Appealing Four Inch, True Color Liquid Crystal Display (LCD)

## **Linksys Phone Adapter Comparison Chart**

SPA Model	Voice Lines	Ethernet Ports	High Resolution Graphical Display	Power over Ethernet Support
SPA901	1	1	N	N
SPA921	1	1	Y	N
SPA922	1	2	Y	Y
SPA941	2-4	1	Y	N
SPA 942	2-4	2	Y	Y
SPA 962	6	2	Color	Y

Linksys A Division of Cisco Systems, Inc. 121 Theory Drive Irvine, CA 92617 USA

E-mail: sales@linksys.com support@linksys.com

Web:http://www.linksys.com

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