

## Cisco SPA962 6-Line IP Phone with 2-Port Switch Cisco Small Business IP Phones

IP Phone with Color Display Enhances Business Communication Requirements

### Highlights

- Full-featured 6-line business-class IP phone supporting Power over Ethernet 802.3af
- Connects directly to an Internet telephone service provider or to an IP PBX
- Dual switched Ethernet ports, speakerphone, caller ID, call hold, conferencing, and more
- Appealing 4-inch, true color LCD

### Comprehensive Interoperability and SIP-Based Feature Set

Based on Session Initiation Protocol (SIP), the Cisco® SPA962 has been tested to ensure comprehensive interoperability with equipment from leading voice over IP (VoIP) infrastructure suppliers, enabling service providers to quickly roll out competitive, feature-rich services to their customers.

With hundreds of features and configurable service parameters, the Cisco SPA962 addresses the requirements of traditional business users while taking full advantage of IP telephony. Features such as easy station moves and shared line appearances (across local and geographically dispersed locations) are just some of the many capabilities of this phone.

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

The Cisco SPA962 uses standard encryption protocols to provide secure remote provisioning and unobtrusive in-service software upgrades.

Secure remote provisioning tools offer detailed performance measurement and troubleshooting, enabling network providers to deliver high-quality support to their subscribers. Remote provisioning also saves service providers the time and expense of managing, preloading, and reconfiguring customer premises equipment.

Stylish and functional in design, the Cisco 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 uses industry-leading VoIP technology from Cisco to deliver a high-quality IP phone that is unparalleled in features, value, and support.

Standard features on the Cisco SPA962 include six active lines, dual switched Ethernet ports, support for 802.3af Power over Ethernet (PoE), a high-resolution color display, a speakerphone, and a 2.5-mm headset port. Each line can be configured independently to use as 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 is required if PoE capability is not implemented.

**Figure 1.** Cisco SPA962 6-Line IP Phone with 2-Port Switch



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

- Up to six lines with independent configuration and registration
- Highly secure call support: SIP over Transport Layer Security (TLS), and Secure Real-Time Transport Protocol (SRTP)
- Line status: active line indication, name and number
- Menu-driven user interface, with support for multiple languages
- 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
- Outbound caller ID blocking
- Call transfer: attended and blind
- Call conferencing
- Automatic redial
- On-hook dialing
- Call pickup: 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) list calls made, answered, and missed
- Redial from call logs
- Personal directory with auto-dial (100 entries)
- Do not disturb (callers hear busy signal)

- Uniform Resource Identifier (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, via directory matching or 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 startup
- Distinctive ringing based on calling and called number
- 10 user-downloadable ring tones:
  - 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
- Built-in web server for administration and configuration with multiple security levels
- Automated provisioning, multiple methods: up to 256-bit encryption: (HTTP, HTTPS, Trivial File Transfer Protocol [TFTP])
- Option to require administrator password to reset unit to factory defaults

\*\*Feature requires support by SIP server

## Other Features

### Hardware

- 320 x 240 true color, 4-inch LCD
- Six illuminated call appearance line buttons with tricolor LEDs
- 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
- 4-way rocking directional knob for menu navigation
- Support for up to two attached attendant consoles, adding up to 64 programmable buttons
- Voicemail message waiting indicator light
- Voicemail message retrieval button

- Dedicated hold button
- Settings button for access to feature, setup, 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 mm
- LED test function
- Two Ethernet LAN ports with integrated Ethernet switch: 100BASE-T RJ-45
- 802.3af-compliant PoE
- Optional 5 VDC universal (100–240V) switching: power supply is ordered separately

### **Regulatory Compliance**

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

### **Security**

- 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 Advanced Encryption Standard (AES) encryption

### **Documentation**

- Quick-start installation and configuration guide
- User guide
- Administration guide
- Provisioning guide: for service providers only

### **Package Contents**

- Cisco SPA962 IP phone, handset, and stand
- Handset cord
- RJ-45 Ethernet cable
- Quick installation guide
- Power supply is ordered separately; models PA100-NA, PA100-EU, PA100-UK, PA100-AU

### **Specifications**

Table 1 contains the specifications for the Cisco SPA962. Table 2 compares the Cisco SPA962 with other Cisco Small Business IP Phones.

**Table 1.** Specifications for the Cisco SPA962 6-Line IP Phone with 2-Port Switch

<b>Data Networking</b>	<ul style="list-style-type: none"> <li>• MAC address (IEEE 802.3)</li> <li>• IPv4 - Internet Protocol v4 (RFC 791)</li> <li>• ARP - Address Resolution Protocol</li> <li>• DNS - A record (RFC 1706), SRV record (RFC 2782)</li> <li>• DHCP Dynamic Host Configuration Protocol Client (RFC 2131)</li> <li>• ICMP - Internet Control Message Protocol (RFC 792)</li> <li>• TCP - Transmission Control Protocol (RFC 793)</li> <li>• UDP - User Datagram Protocol (RFC 768)</li> <li>• RTP - Real Time Protocol (RFC 1889, 1890)</li> <li>• RTCP - Real Time Control Protocol (RFC 1889)</li> <li>• DiffServ - Differentiated Services (RFC 2475)</li> <li>• Type of Service - ToS (RFC 791, 1349)</li> <li>• VLAN tagging 802.1p/Q - Layer 2 quality of service (QoS)</li> <li>• SNTP - Simple Network Time Protocol (RFC 2030)</li> </ul>
<b>Voice</b>	<ul style="list-style-type: none"> <li>• SIP v2 (RFC 3261, 3262, 3263, 3264)</li> <li>• SIP over TLS</li> <li>• SRTP</li> <li>• SIP proxy redundancy: dynamic via DNS SRV, A records</li> <li>• Reregistration with primary SIP proxy server</li> <li>• SIP support in Network Address Translation NAT networks (including serial tunnel [STUN])</li> <li>• SIPFrag (RFC 3420)</li> <li>• Codec name assignment</li> <li>• Voice algorithms: G.711 (A-law and <math>\mu</math>-law), G.726 (16/24/32/40 kbps), G.729 A, G.723.1 (6.3 kbps, 5.3 kbps)</li> <li>• Dynamic payload support</li> <li>• Adjustable audio frames per packet</li> <li>• Dual-tone multifrequency (DTMF): in-band and out-of-band (RFC 2833) (SIP INFO)</li> <li>• Flexible dial plan support with interdigit timers</li> <li>• IP address/URI dialing support</li> <li>• Call progress tone generation</li> <li>• Jitter buffer - adaptive</li> <li>• Frame loss concealment</li> <li>• VAD - voice activity detection with silence suppression</li> <li>• Attenuation/gain adjustments</li> <li>• VMWI - voicemail waiting indicator - via NOTIFY, SUBSCRIBE</li> <li>• Caller ID support (name and number)</li> <li>• Third-party call control (RFC 3725)</li> </ul>
<b>Provisioning, Administration, and Maintenance</b>	<ul style="list-style-type: none"> <li>• Integrated web server provides web-based administration and configuration</li> <li>• Telephone keypad configuration via display menu/navigation</li> <li>• Automated provisioning and upgrade via HTTPS, HTTP, TFTP</li> <li>• Asynchronous notification of upgrade availability via NOTIFY</li> <li>• Nonintrusive, in-service upgrades</li> <li>• Report generation and event logging</li> <li>• Statistics transmitted in BYE message</li> <li>• Syslog and debug server records configurable per line</li> </ul>
<b>Physical Interfaces</b>	<ul style="list-style-type: none"> <li>• Two 100BASE-T RJ-45 Ethernet ports (IEEE 802.3, including 802.3af)</li> <li>• Handset: RJ-9 connector</li> <li>• Built-in speakerphone and microphone</li> <li>• Headset 2.5-mm mono jack</li> </ul>
<b>Power Supply</b>	<p>Power supply is optional and is purchased as a separate line item</p> <ul style="list-style-type: none"> <li>• Models: PA100-NA, PA100-EU, PA100-UK, PA100-AU</li> <li>• DC voltage: +5 VDC 2.0A</li> <li>• Switching type (100–240V) automatic</li> </ul>

<b>Indicator Lights/LED</b>	<ul style="list-style-type: none"> <li>• 6 line buttons with associated tricolor LED</li> <li>• Line LED state indication: active, idle, on hold, unregistered</li> <li>• Speakerphone on/off button with LED</li> <li>• Headset on/off button with LED</li> <li>• Mute button with LED</li> <li>• Message waiting indicator LED</li> <li>• Voicemail message retrieval button</li> <li>• Hold button</li> <li>• LED test function</li> </ul>
<b>Dimensions (W x H x D)</b>	8 x 7.63 x 7.50 in. (203 x 194 x 191 mm)
<b>Unit Weight</b>	2.4 lb (1.088 kg)
<b>Operating Temperature</b>	41°~113°F (5°~45°C)
<b>Storage Temperature</b>	-13°~185°F (-25°~85°C)
<b>Operating Humidity</b>	10 to 90% Non-condensing
<b>Storage Humidity</b>	10 to 90% Non-condensing

**Table 2.** Cisco Small Business IP Phone Comparison Chart

Model	Voice Lines	Ethernet Ports	High- Resolution Graphical Display	PoE Support
SPA901	1	1	No	No
SPA921	1	1	Yes	No
SPA922	1	2	Yes	Yes
SPA941	4	1	Yes	No
SPA942	4	2	Yes	Yes
SPA962	6	2	Color	Yes

### Cisco Limited Warranty for Cisco Small Business Series Products

This Cisco Small Business product comes with a 2-year limited hardware warranty with return to factory replacement. In addition, Cisco offers software application updates for bug fixes and telephone technical support at no charge for the first 12 months following the date of purchase. To download software updates, go to: <http://www.cisco.com/go/smallbiz>.

Product warranty terms and other information applicable to Cisco products are available at <http://www.cisco.com/go/warranty>.

### For More Information

For more information on Cisco Small Business products and solutions, visit: <http://www.cisco.com/smallbusiness>.



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