

## Cisco SPA942 4-Line IP Phone with 2-Port Switch Cisco Small Business IP Phones

Advanced, Feature-Rich, Multiline IP Phone for SIP-Based VoIP Service

### Highlights

- Industry-leading VoIP technology from Cisco that delivers a high-quality IP phone that is unparalleled in features, value, and support.
- Standard features include four active lines, dual-switched Ethernet ports, Power over Ethernet, a high-resolution graphical display, full-duplex speakerphone, and a headset port
- Business-grade reliability with advanced voice quality of service
- Comprehensive interoperability with the Cisco® Small Business SPA9000 Voice System, SIP-based phone systems, and SIP phone services from your Internet telephony service provider

**Figure 1.** Cisco SPA942 4-Line IP Phone with 2-Port Switch



### Product Overview

Stylish and functional in design, the Cisco SPA942 4-Line IP Phone with 2-Port Switch (Figure 1) is ideal for a residence or business using a hosted IP telephony service, an IP private branch exchange (PBX), or a large-scale IP Centrex deployment. The Cisco SPA942 uses industry-leading voice over IP (VoIP) technology from Cisco to deliver an upgradeable high-quality IP phone that is unparalleled in features, value, and support.

Based on the Session Initiation Protocol (SIP), the Cisco SPA942 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 Cisco SPA942 addresses the requirements of traditional business users while taking advantage of the benefits 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 advantages.

Standard features on the Cisco SPA942 include four active lines, dual-switched Ethernet ports, 802.3af Power over Ethernet (PoE)\* support, a high-resolution graphical display, full-duplex speakerphone, and a 2.5-mm headset port. Each line can be independently configured to use a unique phone number (or extension), or can use a shared number that is assigned to multiple phones.

The Cisco SPA942 uses standard encryption protocols to provide secure remote provisioning and unobtrusive in-service software upgrades. Highly 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 reconfiguring customer premises equipment (CPE).

\*The power supply for the SPA942 is sold separately and is required if PoE capability is not implemented.

## Features

- Up to four lines with independent configuration and registration
- Active line indication, with name and number
- Menu-driven user interface, with support for multiple languages
- Digits dialed with number auto-completion
- Shared line appearance\*\*
- Full-duplex 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 retrieval\*\*
- Call swap
- Call back on busy
- Call blocking - anonymous and selective
- Call forwarding - unconditional, no answer, or busy
- Hot line and warm line automatic calling
- Call logs (60 entries each) - 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 - 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 startup
  - Distinctive ringing based on calling and called number
  - Speed dialing
  - Configurable dial/numbering plan support (per line)
  - Intercom\*\* and group paging\*\*
  - DNS SRV and multiple A records for proxy lookup and proxy redundancy
  - Syslog and debug server records (configurable per line)
  - Report generation and event logging
  - Statistics transmitted in BYE message
  - Secure call encrypted voice communication support - SIP over Transport Layer Security (TLS), and Secure Real-Time Transport Protocol (SRTP)
  - 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])
  - Asynchronous notification of upgrade availability via NOTIFY
  - Nonintrusive, in-service upgrades
  - Optionally require administrator password to reset unit to factory defaults
- \*\* Feature requires support by SIP server

## Specifications

Table 1 contains the specifications, package contents, and documentation for the Cisco SPA942 4-Line IP Phone with 2-Port Switch. Table 2 compares the SPA942 with other Cisco Small Business IP Phones.

**Table 1.** Specifications for the Cisco SPA942 4-Line IP Phone with 2-Port Switch

Specifications	
<b>Hardware</b>	
<ul style="list-style-type: none"> <li>• Pixel-based display - 128 x 64 monochrome graphical liquid crystal display (LCD)</li> <li>• Four illuminated call appearance line buttons with tricolor LEDs</li> <li>• LED indicates line state - active, idle, on hold, unregistered</li> <li>• Line LED configurable to 13 different states (on/off, color, flash)</li> <li>• Dedicated illuminated on/off buttons for audio mute, headset, and speakerphone</li> <li>• 4 soft-key buttons</li> <li>• 4-way rocking directional button for menu navigation</li> <li>• Voicemail message waiting indicator light</li> <li>• Voicemail message retrieval button</li> <li>• Dedicated hold button</li> <li>• Settings button for access to feature, setup, and configuration menus</li> <li>• Volume control rocking up/down button controls handset, headset, speaker, ringer</li> <li>• Standard 12-button dialing pad</li> <li>• High-quality handset (RJ-7 connector) and cradle</li> <li>• Built-in high-quality microphone and full-duplex speakerphone</li> <li>• Headset jack - 2.5-mm port</li> <li>• LED test function</li> <li>• Two Ethernet LAN ports with integrated Ethernet Switch - 100BASE-T, RJ-45</li> <li>• 802.3af compliant PoE</li> <li>• Optional 5V DC universal (100-240V) switching (power supply is ordered separately)</li> </ul>	
<b>Data Networking</b>	
<b>MAC address</b>	IEEE 802.3
<b>IPv4</b>	IPv4 (RFC 791)
<b>ARP</b>	Address Resolution Protocol
<b>DNS</b>	A record (RFC 1706), SRV record (RFC 2782)
<b>DHCP</b>	Dynamic Host Configuration Protocol (RFC 2131)
<b>ICMP</b>	Internet Control Message Protocol (RFC 792)
<b>TCP</b>	Transmission Control Protocol (RFC 793)
<b>UDP</b>	User Datagram Protocol (RFC 768)
<b>RTP</b>	Real Time Protocol (RFC 1889) (RFC 1890)
<b>RTCP</b>	Real Time Control Protocol (RFC 1889)
<b>DiffServ</b>	Differentiated Services (RFC 2475)
<b>Type of service (ToS)</b>	RFC 791/1349
<b>VLAN tagging 802.1p/Q</b>	Layer 2 QoS
<b>SNTP</b>	Simple Network Time Protocol (RFC 2030)

<b>Voice</b>	
<ul style="list-style-type: none"> <li>• SIP version 2 (RFC 3261, 3262, 3263, 3264)</li> <li>• SIP proxy redundancy - dynamic via DNS SRV, A records</li> <li>• Re-registration with primary SIP proxy server</li> <li>• SIP support in NAT networks - NAT (including serial tunnel [STUN])</li> <li>• SIPFrag (RFC 3420)</li> <li>• Secure (encrypted) calling via SRTP (RFC 3711)</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 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>• MWI - message waiting indicator tones</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>Security</b>	
<ul style="list-style-type: none"> <li>• Password-protected system, preset to factory default</li> <li>• Password-protected access to administrator and user-level features</li> <li>• HTTPS with factory-installed client certificate</li> <li>• HTTP digest - encrypted authentication via MD5 (RFC 1321)</li> <li>• Up to 256-bit Advanced Encryption Standard (AES) encryption</li> </ul>	
<b>Environmental</b>	
<b>Dimensions</b> <b>W x H x D</b>	7.68 x 6.3 x 7.09 in. (195 x 160 x 180 mm)
<b>Weight</b>	2.15 lb (0.9752 kg)
<b>Power</b>	<ul style="list-style-type: none"> <li>• DC input voltage: +5V DC at 2.0A maximum</li> <li>• Power consumption: 5W</li> <li>• Switching type (100-240V) automatic</li> <li>• Optional power adapter (Cisco PA100 Power Supply for Small Business VOIP): 100-240V 50-60 Hz (26-34VA) AC input</li> </ul>
<b>Certification</b>	FCC (Part 15, Class B), CE, A-Tick, ICES-003
<b>Operating temperature</b>	32° to 113°F (0° to 45°C)
<b>Storage temperature</b>	-13° to 185°F (-25° to 85°C)
<b>Operating humidity</b>	10% to 90%, noncondensing
<b>Storage humidity</b>	10% to 90%, noncondensing
<b>Package Contents</b>	
<ul style="list-style-type: none"> <li>• Cisco SPA942 4-Line IP Phone with 2-Port Switch</li> <li>• Handset cord</li> <li>• RJ-45 Ethernet cable</li> <li>• Quick installation guide</li> </ul> (Optional power supply is ordered separately)	
<b>Documentation</b>	
<ul style="list-style-type: none"> <li>• Installation and configuration guide</li> <li>• User guide</li> <li>• Administration guide</li> <li>• Provisioning guide - for service providers only</li> </ul>	

<b>Product Warranty</b>
1-year limited hardware warranty with return to factory replacement and 90-day limited software warranty

**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	Yes, color	Yes

Check the product package and contents for specific features supported. Specifications are subject to change without notice.

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

This Cisco Small Business product comes with a 1-year limited hardware warranty with return to factory replacement and a 90-day limited software warranty. 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:

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