Cisco SPA514G 4-Line IP Phone with 2-Port Gigabit Ethernet Switch, PoE, and LCD Display

Cisco Small Business IP Phones
Advanced, Affordable, Feature-Rich IP Phone for Business or a Home Office

Highlights

- Full-featured 4-line business-class IP phone supporting Power over Ethernet (PoE)
- Connects directly to an Internet telephone service provider or to an IP PBX
- Dual Gigabit Ethernet switched ports, speakerphone, caller ID, call hold, conferencing, and more
- Easy installation and secure remote provisioning, as well as menu-based and web-based configuration
- Supports up to two Cisco SPA500S Expansion Modules adding up to 64 additional keys
- Supports both SIP and SPCP Protocol with Cisco Unified Communication 500 Series

Rich Phone Features and SIP Compatibility

The Cisco® SPA514G 4-Line IP Phone with 2-Port Gigabit Ethernet Switch provides advanced voice and data communications features small businesses need to stay productive and responsive. Based on Session Initiation Protocol (SIP), the Cisco SPA514G (Figure 1) has been tested to ensure complete interoperability with leading voice over IP (VoIP) equipment from voice over IP 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 SPA514G addresses the requirements of traditional business users while building on the advantages 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 of the SPA514G.

Stylish and affordable, the Cisco SPA514G IP Phone can also be used with productivity-enhancing features such as VoiceView Express, and Cisco XML Applications when interfacing with Cisco Unified Communication 500 Series in SPCP Mode.

Secure and Easy to Manage

The Cisco SPA514G was designed to simplify installation, while providing enhanced security for complete peace of mind. It utilizes standard encryption protocols to perform secure remote provisioning and unobtrusive in-service software upgrades. 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 time and expense of managing, preloading, and reconfiguring customer premises equipment.

Figure 1.   Cisco SPA514G 4-Line IP Phone with 2-Port Gigabit Ethernet Switch

Telephony Features

- Four voice lines
- Backlit pixel-based display: 128 x 64 monochrome graphical liquid crystal display (LCD)
- Line status: active line indication, name and number
- Menu-driven user interface
- Shared line appearance*
- Speakerphone
- Call hold
- Music on hold*
- Call waiting
- Caller ID name and number
- Outbound caller ID blocking
- Call transfer: attended and blind
- Three-way call conferencing with local mixing
- Multiparty conferencing via external conference bridge
- Automatic redial of last calling and last called numbers
- 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): made, answered, and missed calls
- Redial from call logs

- Personal directory with auto-dial (100 entries)
- Do not disturb (callers hear line busy tone)
- Digits dialed with number auto-completion
- Anonymous caller blocking
- 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
- Ability to call number using name: directory matching or via caller ID
- Subsequent incoming calls show calling name and number
- Date and time with support for intelligent daylight savings
- 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
- 12 user-customizable ring tones
- Speed dialing, eight entries
- Configurable dial/numbering plan support
- Intercom*
- Group paging
- NAT Traversal, including STUN support
- DNS SRV and multiple A records for proxy lookup and proxy redundancy
- Debug, syslog, report generation, and event logging
- Secure call encrypted voice communication support
- Built-in web server for administration and configuration with multiple security levels
- Automated remote secure provisioning via TFTP, HTTP or HTTPS
- Option to require administrator password to reset unit to factory defaults

* Feature requires support by call server.

Hardware Features

- Pixel-based display: 128 x 64 monochrome LCD graphical display with backlight
- Dedicated illuminated buttons for:
  - Audio mute on/off
  - Headset on/off
  - Speakerphone on/off
- Four-way rocking directional knob for menu navigation
- 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
- Electronic Hook Switch (EHS) Support with selected Plantronics headsets with adapter
- Gigabit Switch Port and PC Port: 10/100/1000BASE-T RJ-45
- 802.3af compliant Power over Ethernet (PoE)
- Optional 5 VDC universal (100–240V) switching power supply is ordered separately

Regulatory Compliance

- FCC (Part 15, Class B), CE Mark, A-Tick

Security Features

- 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 SPA514G IP Phone, handset, and stand
- Handset cord
- RJ-45 Ethernet cable
- Quick Installation Guide
- CD

Specifications

Table 1 gives specifications for the Cisco SPA514G 4-Line IP Phone with 2-Port Gigabit Ethernet Switch, PoE and LCD Display.

Table 1. Specifications for the Cisco SPA514G 4-Line IP Phone with 2-Port Gigabit Ethernet Switch, PoE, and LCD Display
Note: Many features are programmable within a defined range or list of options. Please see the SPA Administration Guide for details. The target configuration profile is uploaded to the SPA514G at the time of provisioning.

Description	Specification
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 (RFC 792) - TCP – Transmission Control Protocol (RFC793) - UDP – User Datagram Protocol (RFC 768) - RTP – Real Time Protocol (RFC 1889) (RFC 1890) - RTCP – Real Time Control Protocol (RFC 1889) - DiffServ – Differentiated Services (RFC 2475) - ToS – Type of Service(RFC 791, 1349) - VLAN tagging 802.1p/Q – Layer 2 quality of service (QoS) - SNTP – Simple Network Time Protocol (RFC 2030)
Voice gateway	- SIP v2 – Session Initiation Protocol version 2 (RFC 3261, 3262, 3263, 3264) - SPCP – Smart Phone Control Protocol with UC500 - SIP proxy redundancy – dynamic via DNS SRV, A records - Reregistration with primary SIP proxy server - SIP support in NAT networks (including STUN) - SIPFrag (RFC 3420) - Secure (encrypted) calling via SRTP - Codec name assignment - Voice algorithms: - G.711 (A-law and μ-law) - G.726 (16/24/32/40 kbps) - G.729 A - G.722 - Dynamic payload support - Adjustable audio frames per packet - DTMF – Dual-tone multifrequency, in-band and out-of-band (RFC 2833) (SIP INFO) - Flexible dial plan support with interdigit 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 – Voicemail waiting indicator, via NOTIFY, SUBSCRIBE - Caller ID support (name and number) - Third-party call control (RFC 3725)

Description	Specification
Provisioning, administration, and maintenance	• Integrated web server provides web-based administration and configuration • Telephone keypad configuration via display menu/navigation • Automated provisioning and upgrade via HTTPS, HTTP, TFTP • TR-69, TR-104, and TR-111 Provisioning • Asynchronous notification of upgrade availability via NOTIFY • Nonintrusive in-service upgrades • Report generation and event logging • Statistics transmitted in BYE message • Debug and syslog server records: configurable per line
Power supply	• Power supply is optional and is purchased separately ◦ Models: PA100-NA, PA100-EU, PA100-UK, PA100-AU • Switching type (100–240V) automatic • DC input voltage: +5 VDC at 2.0A maximum • Power adapter: 100–240V50–60 Hz (26–34 VA) AC input
Physical interfaces	• Two 10/100/1000BASE-T RJ-45 Ethernet ports (IEEE 802.3) • Handset: RJ-9 connector • Built-in speakerphone and microphone • Headset 2.5-mm port
Indicator lights/LED	• 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
Dimensions (W x H x D)	0.42 x 8.35 x 1.73 in. (214 x 212 x 44 mm)
Unit weight	2.43 lbs (1.1 kg)
Operating temperature @ sea level	32º ~ 113ºF (0º ~ 40ºC)
Storage temperature @ sea level	−13º ~ 185ºF (−20º ~ 70ºC)
Operating humidity @ sea level	5% to 95% noncondensing
Storage humidity @ sea level	5% to 95% noncondensing

Table 2 compares the SPA514G with other Cisco Small Business SPA500 Series IP Phones.

Table 2. Cisco Small Business SPA500 Series IP Phone Comparison

Model	Voice Lines	Ethernet Ports	Gigabit Ethernet Ports	EHS	High- Resolution Graphical Display	PoE Support
SPA501G	8	2	No	No	No	Yes
SPA502G	1	2	No	No	Yes	Yes
SPA512G	1	2	Yes	Yes	Yes	Yes
SPA504G	4	2	No	No	Yes	Yes
SPA514G	4	2	Yes	Yes	Yes	Yes
SPA508G	8	2	No	No	Yes	Yes
SPA509G	12	2	No	No	Yes	Yes
SPA525G2	5	2	No	No	Color	Yes

Table 3. Ordering Information

Part Number	Description
SPA514G	4 Line IP Phone with Gigabit Ethernet Ports
CON-SBS-SVC1	3YR Small Business Support Service

Table 4.   Optional Accessories

Part Number	Description
MB100	Wall-mount brackets for SPA500, CP500, and SPA900 Series
PA100-NA	Power supply for SPA500, CP500, and SPA900 Series-5V/2A (North America style plug)
PA100-UK	Power supply for SPA500, CP500, and SPA900 Series-5V/2A (UK style plug)
PA100-EU	Power supply for SPA500, CP500, and SPA900 Series-5V/2A (EU style plug)
PA100-AU	Power supply for SPA500, CP500, and SPA900-5V/2A (AU style plug).
WBPN	Wireless-N Bridge for Phone Adapters

Service and Support

The Cisco Small Business Support Service provides three years affordable peace-of-mind coverage, to help protect your investment and derive maximum value from your Cisco Small Business solution. The subscription-based service offers software updates, telephone and online chat access to the Cisco Small Business Support Center, and next business day hardware replacement.

Cisco Small Business products are supported by professionals in Cisco Small Business Support Center locations worldwide who are specifically trained to understand your needs. The Cisco Small Business Support Community, an online forum, enables you to collaborate with your peers and reach Cisco technical experts for support information.

Warranty

This Cisco Small Business product is covered by a Cisco 1-year limited hardware warranty with return to factory replacement and a 90-day limited software warranty. In addition, Cisco offers software updates for bug fixes for the warranty term, and telephone and online chat 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/cisco/web/download/index.html.

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

For More Information

To learn more about the Cisco SPA500 Series IP Phones, please visit: http://www.cisco.com/go/500phones.

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

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