

Cisco Unified IP Phones and TelePresence System Video Endpoints Guide



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This guide provides key technical information for Cisco Unified IP Phones.
This document will be updated periodically.






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presented in it, send e-mail to IPphoneguide@cisco.com







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Cisco Unified IP Phones







	3905	6901	6911	6921	6941
					
Integral Switch	10/100	No	10/100	10/100	10/100
Display	128 x 32 pixel-based, graphical monochrome LCD without backlit	No	No	396 x 81 pixel-based, anti-glare graphical monochrome display with white backlight	396 x 162 pixel-based, anti-glare graphical monochrome display with white backlight
Touch Screen	No	No	No	No	No
Speakerphone	Yes	No	Yes	Yes	Yes
Number of Line Keys	1	1	1	2	4
Programmable (Soft) Keys	0	No	No	4	4
Fixed Feature Keys	8	4	10	11	11
Advanced Features				Multi-call per-line appearance	Multi-call per-line appearance
Handsfree	Yes	No	Yes	Yes	Yes
Message Waiting Indication	Yes	Yes	Yes	Yes	Yes
Third-Party XML Support	No	No	No	Yes	Yes
Headset Port	No	No	No	Yes	Yes
Signaling Protocol	SIP	SCCP and SIP	SCCP and SIP	SCCP and SIP	SCCP and SIP
802.3AF	Yes	Yes	Yes	Yes	Yes
Cisco Power	N/A	No	No	No	No
PoE Classification	Class 1	Class 1	Class 1	Class 2	Class 2
DHCP	Yes	Yes	Yes	Yes	Yes
802.1p/q	Yes	Yes	Yes	Yes	Yes
CODECS	G.711a, G.711u, G.729, G.729a, and G.729b	G.711a, G.711u, G.729a, G.729b, and G.729ab. and Internet Low Bitrate Codec (iLBC)	G.711a, G.711u, G.729a, G.729b, and G.729ab and Internet Low Bitrate Codec (iLBC)	G.711a, G.711u, G.729a, G.729b, G.729ab, and Internet Low Bitrate Codec (iLBC)	G.711a, G.711u, G.729a, G.729b, G.729ab, and Internet Low Bitrate Codec (iLBC)
Supported Cisco Call Control Platform(s)	CUCM 7.1(5) or later CUCMBE3000 - 8.6 CUCMBE5000 - 8.5 CUCMBE6000 - 8.5	CUCM 7.1(3) and later	CUCM 7.1(3) and later	CUCM 7.1(3) and later	CUCM 7.1(3) and later
UC Manager Encryption Support (TLS/SRTP)	No	Yes	Yes	Yes	Yes




	6945	6961	Expansion Module 7915	Expansion Module 7916
				
Integral Switch	10/100/1000	10/100	N/A	N/A
Display	396 x 162 pixel-based, anti-glare graphical monochrome display with white backlight	396 x 162 pixel-based, anti-glare graphical monochrome display with white backlight	4.3" high-resolution (480 x 272), graphical monochrome 4-bit grayscale	4.3" graphical (TFT) backlit (480 x 272) 16-bit color
Touch Screen	No	No		
Speakerphone	Yes	Yes		
Number of Line Keys	4	12	24 (12 buttons, 2 display pages)	24 (12 buttons, 2 display pages)
Programmable (Soft) Keys	4	4		
Fixed Feature Keys	11	11		
Advanced Features	Gig Ethernet, Wideband Audio	Multi-call per-line appearance		
Handsfree	Yes	Yes		
Message Waiting Indication	Yes	Yes		
Third-Party XML Support	Yes	Yes		
Headset Port	Yes	Yes		
Signaling Protocol	SCCP and SIP	SCCP and SIP	SCCP/SIP (with appropriate UCM firmware release)	SCCP/SIP (with appropriate UCM firmware release)
802.3AF	Yes	Yes		
Cisco Power	No	No		
PoE Classification	Class 1	Class 2		
DHCP	Yes	Yes		
802.1p/q	Yes	Yes		
CODECS	G.711a, G.711u, G.729a, G.729ab, G.722, and Internet Low Bitrate Codec (iLBC)	G.711a, G.711u, G.729a, G.729b, G.729ab, and Internet Low Bitrate Codec (iLBC)		
Supported Cisco Call Control Platform(s)	CUCM 7.1(3) and later	CUCM 7.1(3) and later		
UC Manager Encryption Support (TLS/SRTP)	Yes	Yes	N/A	N/A

	7821	7841	7861	Conference Station 8831	DX650
					
Integral Switch	10/100	10/100/1000	10/100	No	10/100/1000 802.11 a/b/g/n Wi-Fi
Display	396 x 162 pixel-based, anti-glare graphical monochrome display with white backlight	396 x 162 pixel-based, anti-glare graphical monochrome display with white backlight	396 x 162 pixel-based, anti-glare graphical monochrome display with white backlight	396 x 162 pixel-based, anti-glare graphical monochrome display with white backlight	7-in. diagonal (153.6 Horizontal x 90.0 Vertical) Backlit, WSVGA capacitive touchscreen LCD with 1024 x 600 pixel effective resolution. HD 1080p (30fps)
Touch Screen	No	No	No	No	Yes
Speakerphone	Yes	Yes	Yes	Yes	Yes
Number of Line Keys	2	4	16	1 line	Up to 15
Programmable (Soft) Keys	4	4	4	4	None
Fixed Feature Keys	11	11	11	9	10
Advanced Features	Multi-call per-line appearance Full Wideband Audio EHS Support (Through AUX Port)	Multi-call per-line appearance Full Wideband Audio EHS Support (Through AUX Port)	Multi-call per-line appearance Full Wideband Audio EHS Support (Through AUX Port)	Optional wired or wireless microphone kit Daisy-Chain Configuration	Android 4.x operating system & Google Play store access HDMI support for optional external monitor
Handsfree	Yes	Yes	Yes	Yes Speakerphone	Yes
Message Waiting Indication	Yes	Yes	Yes	No	Yes
Third-Party XML Support	Yes	Yes	Yes	Yes	No - Android
Headset Port	Yes	Yes	Yes	No	Yes
Signaling Protocol	SIP	SIP	SIP	SIP	SIP
802.3AF	Yes	Yes	Yes	Yes	Yes
Cisco Power	No	No	No	No	No
PoE Classification	Class 1	Class 1	Class 1	Class 3	Class 3/Class 4
DHCP	Yes	Yes	Yes	Yes	Yes
802.1p/q	Yes	Yes	Yes	Yes	Yes
CODECS	G.711a, G.711u, G.729a, G.729b, G.729ab, G.722, and Internet Low Bitrate Codec (iLBC)	G.711a, G.711u, G.729a, G.729b, G.729ab, G.722, and Internet Low Bitrate Codec (iLBC)	G.711a, G.711u, G.729a, G.729b, G.729ab, G.722, and Internet Low Bitrate Codec (iLBC)	G.711a, G.711u, G.722, G.729a, G.729b, G.729ab, iLBC	G.711a, G.711u, G.729a, G.729ab, G.722, iSAC and Internet Low Bitrate Codec (iLBC)
Supported Cisco Call Control Platform(s)	CUCM 8.5.1 and later	CUCM 8.5.1 and later	CUCM 8.5.1 and later	CUCM 7.1.5 and later	CUCM 7.1.5 and later
UC Manager Encryption Support (TLS/SRTP)	Yes	Yes	Yes	Yes	Yes





	Wireless 7925G	7925G-EX	7926G	7931G	Conference Station 7937G
					
Integral Switch	N/A	N/A	N/A	10/100	No
Display	2" (5.1 cm) graphical, backlit, 176 x 220, color	Digital, 16-bit graphical backlit TFT Color, 2"	Digital, 16-bit graphical backlit TFT Color, 2"	4.3" (10.8 cm), graphical, backlit, 192 x 64, monochrome	Pixel-based
Touch Screen	No	No	No	No	No
Speakerphone	Yes	Yes	Yes	Yes	Yes
Number of Line Keys	N/A	N/A	N/A	24	1 line (0 line keys)
Programmable (Soft) Keys	2	2	2	4 soft keys, 22 line keys for use as lines, speed dials or PLKs	4
Fixed Feature Keys	5	5	5	7	9
Advanced Features	Bluetooth v2.0, Push-to-Talk via XML	Atmospheres Explosibles (ATEX) Zone 2/Class 22, IP64 rating	Integrated EA11 2D barcode scanner, MIDlets	Join across lines, Transfer across lines	Optional wired microphone kit
Handsfree	Yes	Yes	Yes	Yes	Yes Speakerphone
Message Waiting Indication	Yes	Yes	Yes	Yes	No
Third-Party XML Support	Yes	Yes	Yes	Text XML only	Yes
Headset Port	Yes	Yes	Yes	Yes	No
Signaling Protocol	SCCP	SCCP	SCCP	SCCP/SIP	SCCP
Other Protocols Supported	802.11a/b/g	802.11a/b/g	802.11a/b/g	None	None
802.3AF	N/A	N/A	N/A	Yes	Yes
Cisco Power	N/A	N/A	N/A	Yes	Yes
PoE Classification	N/A	N/A	N/A	Class 3	Class 3
DHCP	Yes	Yes	Yes	Yes	Yes + Static
802.1p/q	N/A	N/A	N/A	Yes	Yes
CODECS	G.711a, G.711u, G.729a, G.729ab, G.722, and Internet Low Bitrate Codec (iLBC)	G.711a, G.711u, G.729a, G.729ab, G.722, and Internet Low Bitrate Codec (iLBC)	G.711a, G.711u, G.729a, G.729ab, G.722, and Internet Low Bitrate Codec (iLBC)	G.711a, G.711u, G.729a, G.729b, and G.729ab	G.711a, G.722u, G.722, G.729a, G.729b, G.729ab
Supported Cisco Call Control Platform(s)	CUCM 4.1 and later	CUCM 4.1 and later	CUCM 4.1 or later	SCCP - CUCM 6.0 or later SIP - CUCM 7.0 or later	CUCM 4.1 and later
UC Manager Encryption Support (TLS/SRTP)	Yes	Yes	Yes	Yes (SCCP only)	No

	7942G	7945G	7962G	7965G	7975G
					
Integral Switch	10/100	10/100/1000	10/100	10/100/1000	10/100/1000
Display	5.0" (12.7 cm), graphical, 320 x 222, 4-bit, gray scale	5.0" (12.7 cm), graphical, 320 x 240, backlit, 16-bit, color	5.0" (12.7 cm), graphical, 320 x 222, 4-bit, gray scale	5.0" (12.7 cm), graphical, 320 x 240, backlit, 16-bit, color	5.6" (14.2 cm), graphical, 320 x 240, backlit, 16-bit, color with touch screen
Touch Screen	No	No	No	No	Yes
Speakerphone	Yes	Yes	Yes	Yes	Yes
Number of Line Keys	2 - lighted	2 - lighted	6 - lighted	6 - lighted	8 - lighted
Programmable (Soft) Keys	4 soft keys, 2 line keys for use as lines, or as a line plus a speed dial or PLK	4 soft keys, 2 line keys for use as lines, or as a line plus a speed dial or PLK	4 soft keys, 6 line keys for use as lines, speed dials or PLKs	4 soft keys, 6 line keys for use as lines, speed dials or PLKs	5 soft keys, 8 line keys for use as lines, speed dials or PLKs
Fixed Feature Keys	10	10	10	10	10
Advanced Features	High-resolution and many infrastructure integration options; support of Headset Hookswitch Control	High-resolution and many infrastructure integration options; support of Headset Hookswitch Control	High-resolution and many infrastructure integration options; support of Headset Hookswitch Control; key Expansion Module support with up to 2 7914s, 7915s or 7916s	High-resolution and many infrastructure integration options; support of Headset Hookswitch Control; key Expansion Module support with up to 2 7914s, 7915s or 7916s	High-resolution and many infrastructure integration options; key Expansion Module support with up to 2 7914s, 7915s or 7916s; Support of Headset Hookswitch Control
Handsfree	Yes, Wideband support	Yes, Wideband support	Yes, Wideband support	Yes, Wideband support	Yes, Wideband support
Message Waiting Indication	Yes	Yes	Yes	Yes	Yes
Third-Party XML Support	Yes	Yes	Yes	Yes	Yes
Headset Port	Yes, Wideband support	Yes, Wideband support	Yes, Wideband support	Yes, Wideband support	Yes, Wideband support
Signaling Protocol	SCCP/SIP	SCCP/SIP	SCCP/SIP	SCCP/SIP	SCCP/SIP
802.3AF	Yes	Yes	Yes	Yes	Yes
Cisco Power	Yes	No	Yes	No	No
PoE Classification	Class 2	Class 3	Class 2	Class 3	Class 3
DHCP	Yes	Yes	Yes	Yes	Yes
802.1p/q	Yes	Yes	Yes	Yes	Yes
Supported Cisco Call Control Platform(s)	CUCM 4.1 or later	CUCM 4.1 or later	CUCM 4.1 or later	CUCM 4.1 or later	CUCM 4.1 or later
UC Manager Encryption Support (TLS/SRTP)	Yes	Yes	Yes	Yes	Yes



	8941	8945	8961	9951	9971
					
Integral Switch	10/100	10/100/1000	10/100/1000	10/100/1000	10/100/1000 802.11 a/b/g Wi-Fi
Display	VGA video calling, and applications, 5-inch graphical TFT color display, 24-bit color depth, 640 x 480 pixel resolution	VGA video calling, and applications, 5-inch graphical TFT color display, 24-bit color depth, 640 x 480 pixel resolution	Digital, 24-bit graphical backlit TFT color, 5"	VGA presentation 5 in (10 cm) Graphical TFT color display, 24-bit color depth 640 x 480 effective pixel resolution	VGA presentation, 5.6 in. (14 cm) graphical color touch screen, 24 bit color depth 640 x 480 effective pixel resolution
Number of Line Keys	4	4	5	5	6
Programmable (Soft) Keys	4	4	4	4	4 (via touch screen)
Fixed Feature Keys	13	13	12	12	12
Advanced Features	Integrated Camera	Integrated Camera, Bluetooth	XML and Midlet apps QoS reporting, KEM support	XML and Midlet apps QoS reporting, KEM support	Desktop Wi-Fi Ethernet XML & Midlet apps QoS reporting, KEM support/SDIO Card
Handsfree	Yes	Yes	Yes	Yes	Yes
Message Waiting Indication	Yes	Yes	Yes	Yes	Yes
Third-Party XML Support	Yes	Yes	Yes	Yes	Yes
Headset Port	Yes	Yes	Yes HD Voice	Yes HD Voice	Yes HD Voice
Signaling Protocol	SCCP or SIP for signaling, H.264 for video	SCCP or SIP for signaling, H.264 for video	SIP	SIP for signaling H.264 for video	SIP for signaling H.264 for video
Other Protocols Supported	N/A	Bluetooth	USB port	Bluetooth/2 USB ports/Audio In-Out (GPIO)	WiFi/Bluetooth/2 USB ports/Audio In - Out (GPIO)
802.3AF	Yes	Yes	Yes	Yes	Yes
Cisco Power	No	No	No	No	No
PoE Classification	1	2	4	4	4
DHCP	Yes	Yes	Yes	Yes	Yes
802.1 p/q	Yes	Yes	Yes	Yes	Yes
CODECS	G.711a, G.711u, G.729a, G.729ab, G.722, and Internet Low Bitrate (iLBC)	G.711a, G.711u, G.729a, G.729ab, G.722, and Internet Low Bitrate (iLBC)	G.711a, G.711u, G.729a, G.729ab, G.722, iSAC and Internet Low Bitrate Codec (iLBC)	G.711a, G.711u, G.729a, G.729ab, G.722, iSAC and Internet Low Bitrate Codec (iLBC)	G.711a, G.711u, G.729a, G.729ab, G.722, iSAC and Internet Low Bitrate Codec (iLBC)
Supported Cisco Call Control Platform(s)	CUCM 7.1(5) and later	CUCM 7.1(5) and later	CUCM 7.1(3)su1	CUCM 7.1(3)su1	CUCM 7.1(3)su1
UC Manager Encryption Support (TLS/SRTP)	Yes	Yes	Yes	Yes	Yes







	Cisco Unified Video Camera	KEM
		
Integral Switch	N/A	N/A
Display		4.3 in. graphical (TFT) color display 16 bit color depth, 480 x 272 effective resolution
Number of Line Keys		2 x 18
Programmable (Soft) Keys		N/A
Fixed Feature Keys		Page Key
Advanced Features	For use on the 9951 and 9971. Optional cable and clip shipped with camera to mount on Laptop - Manual Shutter	Power save, sleep and inactivity mode line keys are programmable - Optional cable to tether KEM for limited desk space
Handsfree		
Message Waiting Indication		
Third-Party XML Support		
Headset Port		
Signaling Protocol		
802.3AF	Yes	No, 802.3AT
Cisco Power	No	No
PoE Classification	4	4
DHCP		
CODECS	H.264	
UC Manager Encryption Support (TLS/SRTP)	Yes	







Cisco TelePresence Endpoints

	SX20	EX60	EX90
			
CUCM Version	8.6(1)	8.6(1)	8.6(1)
Video Quality	1080p 60	1080p 30/720p 60	1080p 30/720p 60
Video Standards	H.263, H.263+, H.264	H.261, H.264, H.263+, H.263	H.261, H.264, H.263+, H.263
Screen Size/Resolution	16:9 widescreen/1920x1080	21.5"/1920 x 1080	24"/1920 x 1200
Camera Included	Options: 1080p 2.5x, 4x or 12x zoom	Yes, 1080p, 50° view Doc cam	Yes, 1080p, 45° - 65° view (zoom) Doc cam
MultiSite	Yes	No	Yes
Bandwidth	SIP up to 6 Mbps	SIP up to 6 Mbps point-to-point	SIP up to 6 Mbps point-to-point
Power	Auto-sensing power supply, 100-240 VAC, 50/60 Hz, 40 watts max	Autosensing power supply 100-240 VAC, 50/60 Hz, 75 watts max	Autosensing power supply 100-240 VAC, 50/60 Hz, 150 watts max
Audio	CD-Quality stereo, 2 acoustic echo canceller	CD-Quality Mono, 2 front speakers	CD-Quality stereo, 2 front speakers and subwoofer
Input Device	Cisco TelePresence Touch (optional)	Cisco TelePresence Touch	Cisco TelePresence Touch

Cisco Small Business SPA IP Phones

	SPA232D	SPA301	SPA302	SPA303	SPA500S
					
License (RTU)	N/A	N/A	N/A	N/A	N/A
Integral Switch	Yes 2 x 10/100	No	N/A	Yes: 10/100	N/A
Number of Line Keys	N/A	N/A	0	3	0
Display	N/A	N/A	1.8" (backlit, color)	128 x 64 pixel	N/A
Programmable (Soft) Keys	N/A	0	2	4	32
Fixed Feature Keys	N/A	4	5	7	0
Advanced Features	FXS/FXO, DECT base station, paging button, 4 simultaneous active calls, router/bridge, T.38 fax, TR-069, multi-handset registration, IPv6 ready	TFTP, HTTP, HTTPS, provisioning	Provisioned by SPA232D. DECT	TFTP, HTTP, HTTPS, provisioning	Provides call pickup (CP), speed dial (SD), and busy lamp field (BLF) support via XML configuration
Handsfree	N/A	No	Yes: Speakerphone	Yes: Speakerphone	N/A
Message Waiting Indication	N/A	Yes	Yes	Yes	N/A
Third-Party XML Support	N/A	N/A	No	Yes	N/A
Headset Port	N/A	No	Yes: 2.5mm	Yes: 2.5mm	N/A
Signaling Protocol	SIP	SIP/SPCP	SIP	SIP/SPCP	N/A
Other Protocols Supported	LLDP-MED, CDP, Bonjour	SIP, TCP/IP, UDP, RTP, HTTP/HTTPS, ARP/RARP, ICMP, DNS (A record, SRV, NAPTR), DHCP, TFTP, NTP	N/A	SIP, TCP/IP, UDP, RTP, HTTP/HTTPS, ARP/RARP, ICMP, DNS (A record, SRV, NAPTR), DHCP, TFTP, NTP	N/A
Comparable with Cisco's	N/A	N/A	N/A	N/A	N/A
802.3AF	N/A	No	N/A	No	N/A powered by phone
Cisco Power	N/A	No	N/A	No	No
PoE Classification	N/A	N/A	N/A	N/A	N/A
DHCP	Yes	Yes: 66, 150, 159, 160	Yes	Yes: 66, 150, 159, 160	N/A
802.1p/q	Yes	Yes	No	Yes	N/A
CODECS	N/A	G.711u/a, G.722, G.726-16, 24, 32, 40, G.729a	G.711u/a, G.722, G.726-16, 24, 32, 40	G.711u/a, G.722, G.726-16, 24, 32, 40, G.729a	N/A
Note			Talk time 10 hours, standby 120 hours		Add up to two per SPA5xx IP phone

	SPA500DS	SPA501G	SPA502G	SPA504G	SPA508G
					
License (RTU)	N/A	N/A	N/A	N/A	N/A
Integral Switch	N/A	Yes: 10/100	Yes: 10/100	Yes: 10/100	Yes: 10/100
Number of Line Keys	0 (coming in future release)	8	N/A	4	8
Display	128 x 320 pixel (backlit)	N/A	128 x 64 pixel (backlit)	128 x 64 pixel (backlit)	128 x 64 pixel (backlit)
Programmable (Soft) Keys	15 (second page to make 30 keys)	0	4	4	4
Fixed Feature Keys	0	11	7	7	7
Advanced Features	Provides call pickup (CP), speed dial (SD), and busy lamp field (BLF) support via XML configuration	TFTP, HTTP, HTTPS, provisioning	TFTP, HTTP, HTTPS, provisioning	TFTP, HTTP, HTTPS, provisioning	TFTP, HTTP, HTTPS, provisioning
Handsfree	N/A	Yes: Speakerphone	Yes: Speakerphone	Yes: Speakerphone	Yes: Speakerphone
Message Waiting Indication	N/A	Yes	Yes	Yes	Yes
Third-Party XML Support	Yes	N/A	Yes	Yes	Yes
Headset Port	N/A	Yes: 2.5mm	Yes: 2.5mm	Yes: 2.5mm	Yes: 2.5mm
Signaling Protocol	N/A	SIP/SPCP	SIP/SPCP	SIP/SPCP	SIP/SPCP
Other Protocols Supported	N/A	SIP, TCPIP, UDP, RTP, HTTP/HTTPS, ARP/RARP, ICMP, DNS (A record, SRV, NAPTR), DHCP, TFTP, NTP	SIP, TCPIP, UDP, RTP, HTTP/HTTPS, ARP/RARP, ICMP, DNS (A record, SRV, NAPTR), DHCP, TFTP, NTP	SIP, TCPIP, UDP, RTP, HTTP/HTTPS, ARP/RARP, ICMP, DNS (A record, SRV, NAPTR), DHCP, TFTP, NTP	SIP, TCPIP, UDP, RTP, HTTP/HTTPS, ARP/RARP, ICMP, DNS (A record, SRV, NAPTR), DHCP, TFTP, NTP
Comparable with Cisco's	N/A	N/A	N/A	N/A	N/A
802.3AF	N/A powered by phone	Yes	Yes	Yes	Yes
Cisco Power	No	No	No	No	No
PoE Classification	N/A	Class 2	Class 2	Class 2	Class 2
DHCP	N/A	Yes: 66, 150, 159, 160	Yes: 66, 150, 159, 160	Yes: 66, 150, 159, 160	Yes: 66, 150, 159, 160
802.1p/q	N/A	Yes	Yes	Yes	Yes
CODECS	N/A	G.711u/a, G.722, G.726-16, 24, 32, 40, G.729a	G.711u/a, G.722, G.726-16, 24, 32, 40, G.729a	G.711u/a, G.722, G.726-16, 24, 32, 40, G.729a	G.711u/a, G.722, G.726-16, 24, 32, 40, G.729a
Note	Add up to two per SPA5xx IP phone				

	SPA509G	SPA512	SPA514	SPA525G2	WBPB
					
License (RTU)	N/A	N/A	N/A	N/A	N/A
Integral Switch	Yes: 10/100	Yes: 10/100/1000	Yes: 10/100/1000	Yes: 10/100	N/A
Number of Line Keys	12	N/A	4	5	N/A
Display	128 x 64 pixel (backlit)	128 x 64 pixel (backlit)	128 x 64 pixel (backlit)	320 x 240 pixel (backlit color)	N/A
Programmable (Soft) Keys	4	4	4	4	N/A
Fixed Feature Keys	7	7	7	7	N/A
Advanced Features	TFTP, HTTP, HTTPS, provisioning	TFTP, HTTP, HTTPS, TR-069/TR-104/TR-111 provisioning, port mirroring for easy network tracing	TFTP, HTTP, HTTPS, TR-069, TR-104, TR-111 provisioning, port mirroring for easy network tracing	TFTP, HTTP, HTTPS, TR-069, TR-104, TR-111 provisioning, 802.11G client, MP3 player, picture frame, USB port for charging of mobile phone or USB stick, call recording direct to USB stick	Small enough to fit in SPA phone's plastic stand. Supports any SPA phone or SPA ATA. Can use device's 5/12V power supply in master/slave fashion. Supports WPA/WPA2. WPS, PIN, or Web-GUI configuration
Handsfree	Yes: Speakerphone	Yes: Speakerphone	Yes: Speakerphone	Yes: Speakerphone, Bluetooth headset	N/A
Message Waiting Indication	Yes	Yes	Yes	Yes	N/A
Third-Party XML Support	Yes	Yes	Yes	Yes	N/A
Headset Port	Yes: 2.5mm	Yes: 2.5mm	Yes: 2.5mm	Yes: 2.5mm	N/A
Signaling Protocol	SIP/SPCP	SIP/SPCP	SIP/SPCP	SIP/SPCP	N/A
Other Protocols Supported	SIP, TCP/IP, UDP, RTP, HTTP/HTTPS, ARP/RARP, ICMP, DNS (A record, SRV, NAPTR), DHCP, TFTP, NTP	SIP, TCP/IP, UDP, RTP, HTTP/HTTPS, ARP/RARP, ICMP, DNS (A record, SRV, NAPTR), DHCP, TFTP, NTP, TR-069, TR-104, TR-111	SIP, TCP/IP, UDP, RTP, HTTP/HTTPS, ARP/RARP, ICMP, DNS (A record, SRV, NAPTR), DHCP, TFTP, NTP, TR-069, TR-104, TR-111	SIP, TCP/IP, UDP, RTP, HTTP/HTTPS, ARP/RARP, ICMP, DNS (A record, SRV, NAPTR), DHCP, TFTP, NTP, TR-069, TR-104, TR-111	N/A
Comparable with Cisco's	N/A	N/A	N/A	N/A	N/A
802.3AF	Yes	Yes	Yes	Yes	N/A wireless, powered by PA100 power supply and feeds power to phone
Cisco Power	No	No	No	No	No
PoE Classification	Class 2	Class 2	Class 2	Class 2	N/A
DHCP	Yes: 66, 150, 159, 160	Yes: 66, 150, 159, 160	Yes: 66, 150, 159, 160	Yes: 66, 150, 159, 160	N/A
802.1p/q	Yes	Yes	Yes	Yes	N/A
CODECS	G.711u/a, G.722, G.726-16, 24, 32, 40, G.729a	G.711u/a, G.722, G.726-16, 24, 32, 40, G.729a	G.711u/a, G.722, G.726-16, 24, 32, 40, G.729a	G.711u/a, G.722, G.726-16, 24, 32, 40, G.729a	N/A
Note		EHS	EHS	EHS	Converts any SPA phone, or any wired device into an 802.11n WiFi client




Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV Amsterdam,
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