



Avaya 9600 Series and J100 Series H.323 IP Deskphones Overview and Specifications

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Note

Using a cell, mobile, or GSM phone, or a two-way radio in close proximity to an Avaya IP telephone might cause interference.

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Australia Statements

Handset Magnets Statement:



Danger:

The handset receiver contains magnetic devices that can attract small metallic objects. Care should be taken to avoid personal injury.

Australia Statements

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 **Danger:**

The handset receiver contains magnetic devices that can attract small metallic objects. Care should be taken to avoid personal injury.

Industry Canada (IC) Statements

RSS Standards Statement

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause interference, and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

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1. L'appareil ne doit pas produire de brouillage, et
2. L'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (EIRP) is not more than that necessary for successful communication.

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This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Radiation Exposure Statement

This equipment complies with FCC & IC RSS102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Cet équipement est conforme aux limites d'exposition aux rayonnements ISEDétablies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications.

Japan Statements

Class B Statement

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取扱説明書に従って正しい取り扱いをして下さい。 VCCI-B

Denan Power Cord Statement

 **Danger:**

Please be careful of the following while installing the equipment:

- Please only use the connecting cables, power cord, and AC adapters shipped with the equipment or specified by Avaya to be used with the equipment. If you use any other equipment, it may cause failures, malfunctioning, or fire.
- Power cords shipped with this equipment must not be used with any other equipment. In case the above guidelines are not followed, it may lead to death or severe injury.



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México Statement

The operation of this equipment is subject to the following two conditions:

1. It is possible that this equipment or device may not cause harmful interference, and
2. This equipment or device must accept any interference, including interference that may cause undesired operation.

La operación de este equipo está sujeta a las siguientes dos condiciones:

1. Es posible que este equipo o dispositivo no cause interferencia perjudicial y
2. Este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

Brazil Statement

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados

Power over Ethernet (PoE) Statement

This equipment must be connected to PoE networks without routing to the outside plant.

Taiwan Low Power Radio Waves Radiated Devices Statement

802.11b/802.11g/BT:

Article 12 — Without permission granted by the NCC, any company, enterprise, or user is not allowed to change frequency, enhance transmitting power or alter original characteristic as well as performance to an approved low power radio-frequency devices.

Article 14 — The low power radio-frequency devices shall not influence aircraft security and interfere legal communications; If found, the user shall cease operating immediately until no interference is achieved. The said legal communications means radio communications is operated in compliance with the Telecommunications Act. The low power radio-frequency devices must be susceptible with the interference from legal communications or ISM radio wave radiated devices.

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U.S. Federal Communications Commission (FCC) Statements

Compliance Statement

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

To comply with the FCC RF exposure compliance requirements, this device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interferences that may cause undesired operation.

When using IEEE 802.11a wireless LAN, this product is restricted to indoor use, due to its operation in the 5.15 to 5.25GHz frequency range. The FCC requires this product to be used indoors for the frequency range of 5.15 to 5.25GHz to reduce the potential for harmful interference to co channel mobile satellite systems. High-power radar is allocated as the primary user of the 5.25 to 5.35GHz and 5.65 to 5.85GHz bands. These radar stations can cause interference with and/or damage to this device.

Class B Part 15 Statement

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designated to provide reasonable protection against harmful interferences in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interferences to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 8 in or 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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This device when installed complies with the essential requirements and other relevant provisions of the EMC Directive 2014/30/EU, Safety LV Directive 2014/35/EU, and Radio Equipment Directive 2014/53/EU. A copy of the Declaration may be obtained from <https://support.avaya.com> or Avaya Inc., 2605 Meridian Parkway Suite 200, Durham, NC 27713 USA.

Avaya J159 IP Phone, Avaya J179 IP Phone, and Avaya J189 IP Phone complies with the EMC Directives.

WiFi transmitter

For Avaya J159 IP Phone, Avaya J179 IP Phone, and Avaya J189 IP Phone

- Frequencies for 2412-2472 MHz, transmit power: < 20 dBm
- Frequencies for 5180-5240 MHz, transmit power: < 20 dBm

BT transmitter

For Avaya J179 IP Phone and Avaya J189 IP Phone:

- Frequencies for 2402-2480 MHz, transmit power: < 6.0 dBm

BT transmitter

For Avaya 9641G IP Deskphone

- Frequencies for 2402-2480 MHz, transmit power: 6 dBm

General Safety Warning

- Use only the Avaya approved Limited Power Source power supplies specified for this product.
- Ensure that you:
 - Do not operate the device near water.
 - Do not use the device during a lightning storm.
 - Do not report a gas leak while in the vicinity of the leak.
 - For Accessory Power Supply in Avaya J100 Series IP Phones– Use Only Limited Power Supply Pihong Technology Co. Ltd. Model: PSAC12R-050, Output: 5VDC, 2.4A.

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Chapter 1: Introduction

Purpose

This document describes tested product characteristics and capabilities, including feature descriptions, interoperability, performance specifications, security, and licensing requirements.

Intended audience

This document is intended for people who want to gain a high-level understanding of the product features, functions, capacities, and limitations.

Chapter 2: Avaya 9600 Series and J100 Series IP Phones overview

Overview

You can use Avaya 9600 and Avaya J100 H.323 Series IP phones in your enterprise IP networks and eliminate the need for a separate voice network in your environment.

The high audio quality, comparative cost, and high performance delivered by the 9600 Series and J100 Series IP phones helps reduce the energy cost and the carbon footprint.

In a call center environment, the 9600 Series and J100 Series IP phones have features that you can use for enhancing agent productivity, handling greetings, monitoring calls in the queue, updating status, and quickly completing day to day tasks.

Avaya 9600 and J100 Series H.323 Series IP phones are compatible with the entire range of Avaya products such as Avaya Aura® Communication Manager, Avaya Aura® Session Manager, Avaya Call Assistant, Avaya Conferencing Standard Edition, and Avaya Aura® Messaging. You can use the phones to communicate seamlessly across applications, soft phones, and mobility solutions.

Avaya 9600 IP Deskphone Models

Table 1: Available 9600 IP deskphone models

Deskphone model	Features
9608	You can use up to eight lines and administer graphical labels centrally for the deskphone. The deskphone supports a traditional user interface and a graphical monochrome display. The deskphone includes graphical labels that you can administer centrally and thereby avoid use of paper labels.

Table continues...

Deskphone model	Features
9608G	You can use up to eight lines and administer graphical labels centrally for the deskphone. The deskphone supports a traditional user interface and a graphical monochrome display. The deskphone includes graphical labels that you can administer centrally and thereby avoid use of paper labels. 9608G deskphone supports Gigabit Ethernet connectivity.
9611G	The 9611G has a traditional user interface and a graphical color display. The deskphone includes graphical labels that you can administer centrally. You can use up to eight lines with the 9611 deskphone. The 9611 deskphone supports integrated Gigabit and a USB interface. The deskphone has a 3.5 inch graphical color display with a white backlight.
9621G	The 9621G IP deskphone delivers gigabit capability and touch screen functionality on a 4.3 inch color touch screen. Customers with a need for gigabit connectivity to the desktop prefer the 9621G deskphone.
9641G	The 9641G deskphone delivers advanced capabilities with 4.7 inch wide color touch screen, wideband speaker, USB interface, Bluetooth headset support, and gigabit connectivity to the desktop. Customers who require gigabit capability for the desktop and the option to add more advanced capabilities prefer the 9641 deskphone.
9641GS	The 9641GS deskphone has a 5.0 inch TFT capacitive touch screen that provides better touch sensitivity. This deskphone supports the Ethernet link and activity LED for the network port, in addition to providing USB interface, Bluetooth 3.0, and gigabit capability.

Avaya J100 IP Phone Models

The following table lists the available models for Avaya J100 Series IP Phones with their brief description.

Table 2: Available J100 IP phone models

Phone model	Description
J159 IP Phone	<p>J159 phone has two color display with Primary display supporting four call appearances in half-width mode. The Primary display is scrollable that supports up to 96 lines/features/applications.</p> <p>The secondary color display has 6 lines/features/applications buttons and is pagable supporting up to 24 lines/features/applications.</p> <p>The phone does not support button module.</p>
J169 IP Phone	<p>J169 phone has a grayscale display that supports eight call appearances with four lines of call display.</p> <p>The phone can also support up to three button modules each supporting 24 application lines.</p>
J179 IP Phone	<p>J179 phone has a color display that supports eight call appearances in half-width mode.</p> <p>The phone can also support up to three button modules each supporting 24 application lines.</p>
J189 IP Phone	<p>J189 has a two color display with primary display supporting ten call appearances in half-width mode.</p> <p>The secondary quick dial display which is an integrated expansion module supports 24 application lines.</p> <p>The phone also support upto two expansion modules supporting 24 application lines in each page.</p>

Feature description

Avaya 9600 and J100 H.323 Series IP phones have the following features:

- Monochrome and color high resolution screens that display context sensitive information, contextual menus, prompts, and instructions that are easy to read.
- Touch screens on select models that you can use to navigate through the applications for Weather, World Clock, My Pictures, WML Browser, and Favorites.
- Integrated LED buttons provide visual cues that enhance usability.
- Softkeys and scrolling menus on the display guide users through every process, simplifying applications such as call logs and company-wide corporate directories.
- Screen saver and background display images that you can customize.
- USB support with the J189, 9611G and the 9641G phones. These deskphones support one USB device on the USB interface if you enable the USB power parameter through the settings file.
- Extension to cellular (EC500) feature that you can configure to reach your colleagues anywhere by remembering a single number.

- User interface on the deskphones that is consistent with the entire Avaya portfolio of solutions including desktop and mobile endpoints.
- Easy to use interface
- Easy customization
- Support for Gigabit Ethernet
- Boost employee productivity

Chapter 3: Interoperability

Call servers

Communication Manager

Refer the [Compatibility Matrix](#) for more information on interoperability of the 9600 Series and J100 Series H.323 IP deskphones with versions of Communication Manager.

Product compatibility

For the latest and most accurate compatibility information go to <https://support.avaya.com/CompatibilityMatrix/Index.aspx>.

Headsets compatible with the 9600 and J100 Series deskphones

Go to [Avaya DevConnect Search](#) for more information on headset vendors and the related application notes.

Type the name of an individual headset vendor in the **Search** box , for example, Plantronics. Click **Go**. Expand the search results to view the relevant application note.

Chapter 4: Specifications

Hardware dimensions and specifications for Avaya 9600 Series phones

9600 Series IP Deskphone dimensions

Deskphone	Height	Width	Depth
9608	230 mm	204 mm	35 mm without stand
9611G	230 mm	204 mm	35 mm without stand
9621G	230 mm	232 mm	35 mm without stand
9641G	230 mm	232 mm	35 mm without stand
9641GS	230 mm	232 mm	35 mm without stand

Hardware specifications for 9600 series IP Deskphone

Avaya 9600 Series IP Deskphone supports following hardware and physical specification:

Parameter	9608	9611G	9621G	9641G	9641GS
Handset Tx frequency	7 Khz	7 Khz	7 Khz	7 Khz	7 Khz
Handset Rx frequency	7 Khz	7 Khz	7 Khz	7 Khz	7 Khz
Handset cord length and amp; type	9-foot 4-conductor coiled	9-foot 4-conductor coiled	9-foot 4-conductor coiled	9-foot 4-conductor coiled	9-foot 4-conductor coiled
Handset weight	141 gms	141 gms	141 gms	141 gms	141 gms

Table continues...

Specifications

Parameter	9608	9611G	9621G	9641G	9641GS	
Permanently labeled feature buttons	Speaker (w/red LED)	Speaker (w/red LED)	Speaker (w/red LED)	Speaker (w/red LED)	Speaker (w/red LED)	
	Headset (w/red LED)	Headset (w/red LED)	Headset (w/red LED)	Headset (w/red LED)	Headset (w/red LED)	
	Mute (w/red LED)	Mute (w/red LED)	Mute (w/red LED)	Mute (w/red LED)	Mute (w/red LED)	
	Volume (up/down)	Volume (up/down)	Volume (up/down)	Volume (up/down)	Volume (up/down)	
	Phone	Phone	Phone	Phone	Phone	
	History (w/red LED)	History (w/red LED)	History (w/red LED)	History (w/red LED)	History (w/red LED)	
	Contacts	Contacts	Contacts	Contacts	Contacts	
	“A” Home	“A” Home	“A” Home	“A” Home	“A” Home	
	Message	Message	Message (w/red LED)	Message (w/red LED)	Message (w/red LED)	
	Navigation: up, down left, right OK	Navigation: up, down left, right OK	Navigation: up, down left, right OK	Forwarding (w/red LED)	Forwarding (w/red LED)	Forwarding (w/red LED)
	Button Specs	Activation force = 100 to 160 grams, Travel distance = 1.1 to 1.3 millimeters, height = approximately 0.5 millimeter above the housing when fully depressed, A snap ratio of 0.35 +/- 0.1 or higher.	Activation force = 100 to 160 grams, Travel distance = 1.1 to 1.3 millimeters, height = approximately 0.5 millimeter above the housing when fully depressed, A snap ratio of 0.35 +/- 0.1 or higher.	Activation force = 100 to 160 grams, Travel distance = 1.1 to 1.3 millimeters, height = approximately 0.5 millimeter above the housing when fully depressed, A snap ratio of 0.35 +/- 0.1 or higher.	Activation force = 100 to 160 grams, Travel distance = 1.1 to 1.3 millimeters, height = approximately 0.5 millimeter above the housing when fully depressed, A snap ratio of 0.35 +/- 0.1 or higher.	Activation force = 100 to 160 grams, Travel distance = 1.1 to 1.3 millimeters, height = approximately 0.5 millimeter above the housing when fully depressed, A snap ratio of 0.35 +/- 0.1 or higher.
Main display	181 x 120 pixel monochrome no grey levels	3.5 inch 320 x 240 pixel TFT 18 bit color	4.3 inch 480 x 272 pixel TFT 24 bit color	4.7 inch 480 x 272 pixel TFT 24 bit color	5.0 inch 480 x 272 pixel TFT 24 bit color	
Display Backlight	White	Yes	Yes	Yes	Yes	

Table continues...

Parameter	9608	9611G	9621G	9641G	9641GS
Touch Screen	No	No	Resistive (4 wire)	Resistive (4 wire)	Capacitive
CA/Feature Buttons – main display (physical buttons)	8 with red and green LEDs each	8 with red and green LEDs each	No	No	No
Softkeys call control	4	4	No	No	No
Ethernet Signal range	100 meters (328 feet) on category 5e UTP (unshielded twisted pair) cable.	100 meters (328 feet) on category 5e UTP (unshielded twisted pair) cable.	100 meters (328 feet) on category 5e UTP (unshielded twisted pair) cable.	100 meters (328 feet) on category 5e UTP (unshielded twisted pair) cable.	100 meters (328 feet) on category 5e UTP (unshielded twisted pair) cable.
Ethernet activity LED	No	No	No	No	Yes
Bluetooth	No	No	No	Yes	Yes
Handset	Wideband	Wideband	Wideband	Wideband	Wideband
Hands-free	Narrowband	Narrowband	Wideband	Wideband	Wideband
Microphone and amp type	1 omni-directional	1 omni-directional	1 omni-directional	1 omni-directional	1 omni-directional
PCB Chip	11170	11109	11109	11109	11109
Reliability Rate in Technician Usage rate (the number of units used from repair stock per month per 100 units in the installed base)	Less than or equal to 0.1.	Less than or equal to 0.1.	Less than or equal to 0.1.	Less than or equal to 0.1.	Less than or equal to 0.1.

Hardware dimensions and specifications for Avaya J100 Series phones

Hardware specifications for J100 Series IP Phones

Avaya J100 Series IP Phones support the following hardware specifications:

Specifications

Standard	J159	J169	J179	J189	JBM24	JEM24
Phone dimensions with the stand in high position	185 mm (7.3 in) Wide x 170 mm (6.7 in) Deep x 224.3mm (8.8 in) Tall	187 mm (7.4 in) Wide x 175 mm (6.9 in) Deep x 183 mm (7.2 in) Tall	187 mm (7.4 in) Wide x 175 mm (6.9 in) Deep x 183 mm (7.2 in) Tall	227 mm (8.9 in) Wide x 179 mm (7.0 in) Deep x 199 mm (7.8 in) Tall	88.2 mm (3.4 in) Wide x 175 mm (6.9 in) Deep x 224.3 mm (8.8 in) Tall	115.5 mm (4.5 in) Wide x 175 mm (6.9 in) Deep x 173.64 mm (6.8 in) Tall
Phone dimensions with the wall mount	185 mm (7.3 in) Wide x 98.83 mm (3.9 in) Deep x 225.24 mm (8.9 in) Tall	187 mm (7.4 in) Wide x 100 mm (3.9 in) Deep x 225 mm (8.9 in) Tall	187 mm (7.4 in) Wide x 100 mm (3.9 in) Deep x 225 mm (8.9 in) Tall	227 mm (8.9 in) Wide x 100 mm (3.9 in) Deep x 244 mm (9.6 in) Tall	88.2 mm (3.4 in) Wide x 100 mm (3.9 in) Deep x 224.3 mm (8.8 in) Tall	115.5 mm (4.5 in) Wide x 100 mm (3.9 in) Deep x 173.64 mm (6.8 in) Tall
Wall mountable	Yes	Yes	Yes	Yes	Yes	Yes
Stand	Dual-position	Dual-position	Dual-position	Dual-position	Dual-position	Dual-position
Call appearances	4 on primary display and 24 on secondary display	8	8	10 on primary display and 24 on secondary display.	N/A	N/A
Display type	Color	Grayscale	Color	Color	Grayscale	Grayscale and color
Display	<ul style="list-style-type: none"> Main display: 2.8", 320 x 240 pixels Secondary display: 2.4", 240 x 320 pixels 	3.5", 320 x 240 pixels	3.5", 320 x 240 pixels	Main display: 5", 800 x 480 pixels Secondary display: 2.4", 240 x 320 pixels	3.3", 160 x 320 pixels	4.3", 272 x 480 pixels
Dual color call indicator	4	8	8	10	0	24
Ethernet switch	Dual 10/100/1000	Dual 10/100/1000	Dual 10/100/1000	Dual 10/100/1000	N/A	N/A
Wi-Fi support	No	No	No	No	N/A	N/A
Soft keys call control	4	4	4	4	N/A	two keys to switch between active pages

Table continues...

Standard	J159	J169	J179	J189	JBM24	JEM24
Wired handset	Yes	Yes	Yes	Yes	N/A	N/A
Amplified handset mode	Yes, with 20dB of gain	Yes, with 20dB of gain	Yes, with 20dB of gain	Yes, with 20dB of gain	N/A	N/A
Wired headset	Yes	Yes	Yes	Yes	N/A	N/A
Bluetooth support	No	No	No	No	N/A	N/A
Expansion module capable	No	Yes (3)	Yes (3)	Yes (2)	N/A	N/A
Optional DC power	Yes	Yes	Yes	Yes	N/A	N/A
PoE ¹	Yes	Yes	Yes	Yes	N/A	N/A
USB port	No	No	No	Yes	No	No

Power supply specifications for 9600 Series IP Phones

Power specifications

Avaya 9600 Series H.323 IP deskphones work on the standard Power over Ethernet (PoE) specification of 802.3af. The specification provides for up to 15.4 W of DC power that has a voltage of minimum 44 V DC and a current specification of 350 mA for each device.

Table 3: Power Consumption

Phone model	IEEE power classification	Typical power usage, conservation mode disabled (in W)	Typical power usage, conservation mode enabled, backlight if any turned off (in W)	Maximum power usage (in W)
9608	1	2.08	1.93	2.55
9611G	1	3.12	2.64	3.78
9621G	2	3.49	3.18	4.27

Table continues...

¹ PoE can be supplied from one of the following:

- Direct
- Data switch

Phone model	IEEE power classification	Typical power usage, conservation mode disabled (in W)	Typical power usage, conservation mode enabled, backlight if any turned off (in W)	Maximum power usage (in W)
9641G	2	3.44	3.28	4.12
9641GS	1: When the switch is in the low position. 3: When the switch is in the high position.	2.40	3.55	4.50

Table 4: Power specifications with button module attachments

Deskphone	9608/9608G	9611G	9621G	9641G/9641GS
PoE Power support	The 9608 deskphone natively supports Power over Ethernet (802.3af) and has a PoE rating of Class 1 when you do not connect a SMB24 or 12 button x1 module to the deskphone.	The 9611 deskphone natively supports Power over Ethernet (802.3af) and a PoE rating of Class 1 when you do not connect a SMB24 or 12 button x1 module to the deskphone. With the addition of a button module, you can increase the PoE class by one power level i.e. PoE class II. With the addition of three button modules the PoE class does not exceed PoE Class II.	The 9621 deskphone natively supports Power over Ethernet (802.3af) and has a maximum PoE rating of Class II. The deskphone does not support the use of button modules.	The 9641 deskphones natively supports Power over Ethernet (802.3af), and has a maximum PoE rating of Class II when you connect a single button module, either the SBM24 or 12 button x1 module. With the addition of button modules or the USB stick, you can increase the PoE class by one power level i.e. PoE class III.
Power Interface	PoE: IEEE	PoE: IEEE	PoE: IEEE	PoE: IEEE
Power class target	1,2	1,3	2	2,3
Power class switch	Yes	Yes	No	Yes

Power specifications for J100 Series IP Phones

Avaya J100 Series IP Phones can be powered using Power over Ethernet (PoE) or a 5V DC adapter. You must purchase the power adapter separately.

Avaya J100 Series IP Phones are ENERGY STAR[®] compliant.

! Important:

- Avaya J159 IP Phone is a class 1 device and does not support peripherals.
- Avaya J169 IP Phone and Avaya J179 IP Phone supports three JBM24 Button Modules or two Avaya J100 Expansion Modules on PoE. For additional button modules, use 5V DC power adapter.

* Note:

The simultaneous connection of JBM24 Button Module and Avaya J100 Expansion Module is not supported.

- Avaya J189 IP Phone supports two Avaya J100 Expansion Module, with one expansion module supported on PoE. For additional button modules, use 5V DC power adapter.

* Note:

The connection of JBM24 Button Module is not supported by Avaya J189 IP Phone.

- If you are using a power adapter, disable PoE on the Ethernet connection.

The following table provides the power measurement of the phones, adjuncts, and peripherals.

Phone model	Avaya standard power measurements (in Watts)			Energy Star (in Watts)
	Conservation	Typical	Maximum	Standby
J159	1.75	2.33	3.84	2.04
J169	1.72	1.84	2.34	1.85
J179	1.74	2.10	2.71	1.85
J189	2.32	2.91	3.93	1.92
JBM24	0.19	0.69	1.35	NA
JEM24	1.70	1.90	2.00	NA
USB device (USB Port-A)	NA	NA	2.5	NA

The power requirements of the phone vary depending on the connected peripherals. The following table provides the correlation between the connected peripherals and power requirements.

Phone model	PoE Class
J159	IEEE 802.3af PoE, Class 1 device.

Table continues...

J169	<ul style="list-style-type: none"> • IEEE 802.3af PoE Class 1 without a button module. • IEEE 802.3af PoE Class 2 for one or more button modules.
J179	<ul style="list-style-type: none"> • IEEE 802.3af PoE Class 1 without a button module. • IEEE 802.3af PoE Class 2 for one or more button modules.
J189	<ul style="list-style-type: none"> • IEEE 802.3af PoE Class 2 without a expansion module. • IEEE 802.3af PoE Class 3 together with one or more expansion modules.

Port and switch connections

Connection specifications for 9600 Series IP Phones

Parameter	9608	9611G	9621G	9641G	9641GS
USB 2.0 interface	No	Yes	No	Yes	Yes
Gigabit Ethernet switch	No	Yes	Yes	Yes	Yes
PC port	Yes	Yes	Yes	Yes	Yes
Button module	Yes	Yes	No	Yes	Yes
IEEE power switch	No	Yes	no	Yes	Yes
Headset jack	Yes	Yes	Yes	Yes	Yes
Ethernet interface	10/100 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
Secondary Ethernet interface	10/100 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps

Button modules

You can add up to three SBM24 button modules on the 9608, 9611G, 9641G, and 9641GS, IP deskphones. You can add up to three BM12 button modules to the 9608, 9611G, 9641G, and 9641GS.

Power specifications

Avaya 9600 Series H.323 IP deskphones work on the standard Power Over Ethernet (POE) specification of 802.3af. The specification provides for up to 15.4 W of DC power that has a voltage of minimum 44 V DC and a current specification of 350 mA for each device.

Table 5: Power Consumption for 9600 Series IP Phones

Phone model	IEEE power classification	Typical power usage, conservation mode disabled (in W)	Typical power usage, conservation mode enabled, backlight if any turned off (in W)	Maximum power usage (in W)
9608	1	2.08	1.93	2.55
9611G	1	3.12	2.64	3.78
9621G	2	3.49	3.18	4.27
9641G	2	3.44	3.28	4.12
9641GS	1: When the switch is in the low position. 3: When the switch is in the high position.	2.40	3.55	4.50

Power specifications with button module attachments for 9600 Series IP Phones

Deskphone	9608	9611G	9621G	9641G/9641GS
PPOE Power support	The 9608 deskphone natively supports Power over Ethernet (802.3af) and has a PoE rating of Class 1 when you do not connect a SMB24 or 12 button x1 module to the deskphone.	The 9611 deskphone natively supports Power over Ethernet (802.3af) and a PoE rating of Class 1 when you do not connect a SMB24 or 12 button x1 module to the deskphone. With the addition of a button module, you can increase the PoE class by one power level i.e. PoE class II. With the addition of three button modules the PoE class does not exceed PoE Class II.	The 9621 deskphone natively supports Power over Ethernet (802.3af) and has a maximum PoE rating of Class II. The deskphone does not support the use of button modules.	The 9641 deskphone natively supports Power over Ethernet (802.3af), and has a maximum PoE rating of Class II when you connect a single button module, either the SBM24 or 12 button x1 module. With the addition of button modules or the USB stick, you can increase the PoE class by one power level i.e. PoE class III.
Power Interface	PoE: IEEE	PoE: IEEE	PoE: IEEE	PoE: IEEE

Table continues...

Deskphone	9608	9611G	9621G	9641G/9641GS
Power class target	1,2	1,3	2	2,3
Power class switch	Yes	Yes	No	Yes

Avaya J100 Series IP Phones supports the following ports and switches:

Table 6: Power Consumption for J100 Series IP Phones

Port and switch	J159	J169	J179	J189
USB 2.0	No	No	No	Yes
PC port	Yes	Yes	Yes	Yes
Headset jack	Yes	Yes	Yes	Yes
Button module interface	No	Yes	Yes	Yes
Adapter interface	Yes	Yes	Yes	Yes
Wired Ethernet interface	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
Secondary wired Ethernet interface	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
Wireless Ethernet interface	No	No	No	No
PoE ²	Yes	Yes	Yes	Yes

Supported codecs

Avaya J100 Series IP Phones supports the following codecs:

Models	J159	J169	J179	J189
Codecs	<ul style="list-style-type: none"> • G.711a • G.711μ • G.729 • G.729a • G.729ab • G.726 • G722 	<ul style="list-style-type: none"> • G.711a • G.711μ • G.729 • G.729a • G.729ab • G.726 • G722 	<ul style="list-style-type: none"> • G.711a • G.711μ • G.729 • G.729a • G.729ab • G.726 • G722 	<ul style="list-style-type: none"> • G.711a • G.711μ • G.729 • G.729a • G.729ab • G.726 • G722

² PoE can be supplied from one of the following:

- Direct
- Data switch

Traffic specifications

This topic lists the IP traffic capabilities of the 9600 Series H.323 IP deskphones and the types of operations that are supported.

IP line interface and supported traffic

The 9608 IP deskphone supports 10BASE-T and 100BASE-TX operation as specified by IEEE Std 802.3 [8.4-1, 1a]. The 9608 IP deskphone supports Auto-negotiation of 10BASE-T / 100BASE-TX operation as specified in IEEE Std 802.3, clause 28 and Annex 28B.

The 9611G, 9621G, 9641G and 9641GS IP deskphones support 10BASE-T, 100BASE-TX and 1000BASE-T operation as specified by IEEE Std 802.3 and auto-negotiation of 10BASE-T/100BASE-TX/1000BASE-T operation as specified in IEEE Std 802.3, clause 28 and Annex 28B.

All 9600 Series IP deskphones that have an internal Ethernet switch support half-duplex or full-duplex operation and any speed that is 10/100 for non-gigabit phones, and 10/100/1000 on the gigabit phones on either interface.

All 9600 Series IP deskphones that have an internal Ethernet switch support the ability to independently disable auto-negotiation on the Ethernet line interface and on the secondary Ethernet interface. The deskphones support the ability to set either interface to operate at 10 Mbps, 100 Mbps, or 1000 Mbps for the gigabit phones in half-duplex or full-duplex mode.

All 9600 Series IP deskphones support the MAC frame structure as specified in IEEE Std 802.3, clause 3. Media access control is as specified in IEEE Std 802.3, clause 4.

All 9600 Series IP deskphones support collision backoff delay as specified in IEEE Std 802.3, clause 4.2.3.2.5.

All 9600 Series IP deskphones support auto MDI/MDI-X.

Chapter 5: Environmental specifications

Environmental specifications

Altitude and air pressure specifications

All Avaya 9600 Series and J100 Series IP deskphones function normally at altitudes from sea level to 10,000 feet. The deskphones can withstand a pressure of 15.2 to 9.4 psia.

Operating temperature specifications

All Avaya IP 9600 Series and J100 Series IP deskphones work in a temperature range from 40 degrees Fahrenheit to 120 degrees Fahrenheit. (4 to 49 degrees Celsius).

Storage environment specifications

Extreme temperature specifications: All Avaya IP 9600 Series and J100 Series IP deskphones work normally after being soaked for at least 6 hours each in a non-operational state at -40 degree Fahrenheit and any relative humidity, at 90 degree Fahrenheit and 90% relative humidity, and at 150 degrees Fahrenheit and 15% relative humidity. The deskphones can function normally after up to three hours of recovery time at ambient conditions following each stress.

Temperature and humidity specifications: All Avaya IP 9600 Series and J100 Series IP deskphones function normally after a recovery time of up to three hours at ambient conditions when cycled through the following temperature and non-condensing humidity conditions three times: 30 minutes at 150 degree Fahrenheit and 15 percent relative humidity, followed by 30 minutes at 90 degrees Fahrenheit and 90 percent relative humidity, followed by 30 minutes at -40 degrees F and any convenient humidity.

Normal operating specification: All Avaya IP 9600 Series and J100 Series IP deskphones function normally in the environment where temperatures are between 40 degrees Fahrenheit and relative humidities are between 5 percent and 95 percent, except that above 84 degree Fahrenheit, the maximum relative humidity is limited to that corresponding to a specific (absolute) humidity of 168 grains of water vapor per pound (lbm) of dry air. For example, 34 percent relative humidity at 120 degrees Fahrenheit, assuming an atmospheric pressure of 14.7 psia. The deskphones are allowed up to 30 minutes to stabilize at each temperature tested.

Design for Environment Guidelines and specifications

All 9600 Series and J100 Series IP deskphones conform to the Design for Environment Guidelines and Requirements [8.1-5] as clarified below.

DFE Guidelines for Energy Efficient Products (Section 2): All 9600 Series and J100 Series IP deskphones do not require a cooling fan.

DFE Guidelines for Products Containing Batteries (Section 3): All 9600 Series and J100 Series IP deskphones do not contain batteries.

DFE Guidelines for Designing Plastic Parts (Section 4): All 9600 Series and J100 Series IP deskphone plastic parts are not coated (Section 4.4). Note: Section 4.4 of the Design for Environment Guidelines and Requirements specifies that plastic parts are not to be painted. However some deskphones might have been painted.

All 9600 Series and J100 Series IP deskphones housing and handset surfaces are textured (Section 4.5).

All 9600 Series and J100 Series IP deskphone plastic parts do not use resins containing:

- PVC (Section 4.7.1.2)
- Brominated flame retardants: polybrominated biphenyl, polybrominated biphenyl oxide (PBBO, also called polybrominated biphenyl ether (PBBE), polybrominated diphenyl oxide (PBDO) and polybrominated diphenyl ether (PBDE)), bromomethane and halothane (Sections 4.7.1.3, 4.9.1 and Appendix A)
- Halogenated flame retardants (Section 4.9.2)
- Heavy metal additives: lead, cadmium, chromium and mercury (Sections 4.7.1.4 and 4.9.3).
- All 9600 Series and J100 Series IP deskphone plastic parts weighing more than 25 grams are marked with ISO-compliant resin codes (Section 4.8). DFE Guidelines for Designing Printed Wiring Boards (Section 5):
- All 9600 Series and J100 Series IP deskphones do not contain lead (Section 5.3). All IP telephones do not use components containing mercury (Section 5.7.2).
- DFE Guideline for Waste Electrical and Electronic Equipment (WEEE) (Section 6.5.1). See also section [8.4-6].

Physical system protection specifications

External voltages, surges, and transient specifications

All Avaya 9600 Series and J100 Series IP deskphones function normally after being subjected to surges marked normal in the table below. All Avaya 9600 Series and J100 Series IP deskphones comply with appropriate safety requirements after being subjected to all surges in the following table. Surges are specified below as either normal or FCC (Part 68 Rules). The peak voltage and peak current define a constant source resistance of the surge generator.

Table 7: High voltage surge table

TYPE	PEAK VOLTAGE (Volts)	PEAK CURRENT (Amps)	MAXIMUM RISE TIME (μ sec)	MAXIMUM DECAY TIME (μ sec)	NUMBER OF SURGES OF POLARITY EACH
P-2 FCC	2500	1000	2	10	10
P-4A Normal	6000	200	0.5	See Note A	12
T-1A Normal	6000	200	0.5	See Note A	12

Table continues...

TYPE	PEAK VOLTAGE (Volts)	PEAK CURRENT (Amps)	MAXIMUM RISE TIME (μ sec)	MAXIMUM DECAY TIME (μ sec)	NUMBER OF SURGES OF POLARITY EACH
NOTE A: 0.5 μ sec - 100 kHz ringing wave shape; refer to IEEE-587 IEEE, Inc., IEEE Guide for Surge Voltages in Low-Voltage AC Power Circuits, IEEE Std 587-1980, January 30, 1981.					

Peak voltage applies with the source terminated in at least 10,000 Ohms. Peak current applies with the source terminated in a short circuit. Rise and decay times apply to both voltage and current waveforms terminated as indicated above, and are defined as follows: Rise Time is the interval between the 10 percent and 90 percent of peak points on the leading edge multiplied by 1.25.

Decay Time is the time interval between the 10 percent of peak point on the leading edge and the 50 percent of peak point on the trailing edge.

Electromagnetic compatibility specifications

Radiated Emissions: All 9600 Series and J100 Series IP deskphones meet the applicable FCC Rules Part 15 regulations for Class B devices. Radiated emissions from 9600 Series and J100 Series IP deskphones do not exceed the level of field strength specified in the following table for Class B devices.

Table 8: Maximum allowed radiated field strength

Freq	Class A		Class B
	Field strength in dB μ V/m	Field strength in dB μ V/m	
	At 10 metres	At 3 metres	At 3 metres
30 to 88	39	49	40
88 to 216	44	54	43
216 to 960	46	56	46
above 960	50	60	54

Radiated RF emission specification

All 9600 Series and J100 Series IP deskphones meet Class B radiated emissions limits EN55022:2006 as specified in the following table:

Table 9: Radiated Emission Limits for International Applications

Frequency	Class A Quasi-Peak Field Strength Limit (dB μ V/m at 10 m)	Class B Quasi-Peak Field Strength Limit (dB μ V/m at 10 m)
30 - 230	40	30
230 - 1000	47	37

Conducted RF emissions specifications (FCC)

All 9600 Series and J100 Series IP deskphones meet the applicable FCC Rules Part 15 regulations ² for Class B devices. 9600 Series and J100 Series IP deskphones limit radio frequency voltage conducted back into the ac power lines to values below FCC Part 15 Class B levels.

Conducted RF emissions specifications (CE Mark)

All 9600 Series and J100 Series IP deskphones meet the following Class B conducted emissions limits for ac Mains and for telecommunication ports (EN55022:2006).

Table 10: Conducted Emissions Limits for International Applications on AC Mains

Freq (MHz)	Class A Emission Limits (db μ V)		Class B Emission Limits (db μ V)	
	Quasi-Peak	Average	Quasi-Peak	Average
0.15 – 0.5	79	66	66 - 56	56 - 46
0.5 - 5	73	60	56	46
5 - 30	73	60	60	50

Table 11: Conducted Common Mode Emissions Limits for International Applications on Telecommunication Ports for Class B Equipment

Freq (MHz)	Voltage limits (db μ V)		Voltage limits (db μ A)	
	Quasi-Peak	Average	Quasi-Peak	Average
0.15 – 0.5	84 - 74	74 - 64	40 - 30	30 - 20
0.5 - 30	74	64	30	20

Where a range of limits is specified, the limits decrease linearly with the logarithm of the frequency. The above limits are given in terms of the current measured into a terminating impedance stabilization network (ISN) under the assumption that the 150-Ohm impedance will be realized throughout the test range. The tighter (lower) limit applies at the transition frequency.

Electrostatic Discharge (ESD) Immunity – ESD Performance under Normal Operation for CE Mark:

All 9600 Series and J100 Series IP deskphones comply with the ESD immunity requirements in EN 55024:1998, and Amendment A1:2001 to EN 55024:1998 and Amendment A2:2003 to EN 55024:1998

Radiated RF Electromagnetic Field Immunity

All 9600 Series and J100 Series IP deskphones comply with the conducted RF Field immunity requirements in EN 55024:1998, and Amendment A1:2001 to EN 55024:1998 and Amendment A2:2003 to EN 55024:1998, including the particular test conditions and particular performance criteria in Appendix A of that standard.

EFT Immunity for CE Mark

All 9600 Series IP deskphones comply with the EFT immunity requirements in EN 55024:1998, and Amendment A1:2001 to EN 55024:1998 and Amendment A2:2003 to EN 55024:1998.

Surge Immunity for CE Mark

All 9600 Series and J100 Series IP deskphones comply with the Surge immunity requirements in EN 55024:1998, and Amendment A1:2001 to EN 55024:1998 and Amendment A2:2003 to EN 55024:1998.

Power Frequency Magnetic Field Immunity for CE Mark

All 9600 Series and J100 Series IP deskphones comply with the Power Frequency Magnetic Field immunity requirements in EN 55024:1998, and Amendment A1:2001 to EN 55024:1998 and Amendment A2:2003 to EN 55024:1998, including the particular test conditions and particular performance criteria in Appendix B of that standard.

AC Voltage Dips and Interruptions Immunity for CE Mark

All 9600 Series and J100 Series IP deskphones comply with the ac Voltage Dips and Interruptions immunity requirements in EN 55024:1998, and Amendment A1:2001 to EN 55024:1998 and Amendment A2:2003 to EN 55024:1998.

Safety and Protection Platform specifications

All 9600 Series and J100 Series IP deskphones conform to the requirements of IEC-60950-1 [8.4-4a], EN60950-1 [8.4-4b] and UL-60950-1 [8.4-4c].

All 9600 Series and J100 Series IP deskphones are listed with c/UL to the requirements of UL 60950-1.

All 9600 Series and J100 Series IP deskphones are certified to the requirements of IEC 60950-1 according to the procedure of the IECEE CB Scheme.


Regulatory standards

All 9600 Series and J100 Series IP deskphones conform to the following regulatory requirements.

Table 12: Telecom specifications

US FCC (Part 15, including Class B EMC, and Part 68 (HAC) hearing-aid compatibility)
European Union CE (including Class B EMC and CB Scheme report with all National Differences) EC EN55022: 2006
ETSI hearing-aid compatibility
CSA / UL (Canadian and USA Safety)
VCCI (Japanese Voluntary Control Council for Interference by Information Technology Equipment)
CB Test for TUV
JATE (Japan Approvals Institute for Telecommunications Equipment)
NOM (Normas Oficiales Mexicanas –safety)
RoHS/lead free compliance
ANATEL (label with registration number and EAN number/bar code for Brazil)

Table continues...

China RoHS
Korea (Only MIC Information device test certificate, the Telecommunication will be done by Avaya)
AUS C-Tick
Russian PCT Type Approval
WEEE compliance with associated icon: 
FCC Part 15 Class B and EU Class B EMC requirements
ACP systems (of which the IP telephones are a part) are registered for FCC Part 68 compliance.
Dialpad layout- ITU-T Recommendation E.161 [8.6-1]
HAC on handset "HAC" is included on the phone per FCC Part 68.300 (c) to indicate hearing-aid compatibility

Country	Regulatory compliance
USA	<ul style="list-style-type: none"> • EMC: FCC Part 15 Class B EMC Report • Telecom: FCC Part 68 (HAC) hearing-aid compatibility) and Volume Control Report • RF: FCC Part 15C and SAR • Safety: UL (UL 60950-1 current edition)
European Union (EU)	<ul style="list-style-type: none"> • EMC: EN 55032: 2012 Emissions Class B • EMC: EN 55024: 2010 Immunity • EN 61000-3-2: 2014 Harmonics • EN 61000-3-3: 2013 Voltage Fluctuations • Safety: IEC / EN 60950-1: 2006+A2 CB Scheme • RF EN 300 328 EN 301 893. EN 301 489-17, EN 5066 Human Exposure (SAR) • Environmental: WEEE and RoHS / lead free compliance • CE marking
Canada	<ul style="list-style-type: none"> • EMC: ICES-003 Class B • RF: RS-247, SAR • Telecom: CS-03 • Safety: UL (CSA-C22.2 No. 60950-1-07)
Japan	<ul style="list-style-type: none"> • EMC: VCCI Class B • Telecom: JATE • RF: TELEC • Safety: IEC / EN 60950-1: 2006+A1 CB Scheme • Label: with VCCI and JATE mark

Table continues...

Environmental specifications

Country	Regulatory compliance
Brazil	<ul style="list-style-type: none"> • Safety: RES. 238 • EMC: RES. 237 and RES. 442 Reports Class B • RF: applicable RES • Telecom: RES 529 • ANATEL Listing
Korea	<ul style="list-style-type: none"> • EMC KN22 Emissions Class B • EMC KN24 Immunity • RF: KC • Safety: MIC • Telecom: MIC • KCC Listed
Australia	<ul style="list-style-type: none"> • EMC: EN 55022: 2010 Emissions Class B • Safety: IEC / EN 60950-1: 2006+A12 CB Scheme • Telecom AS/ACIF S004 • RCM
New Zealand	<ul style="list-style-type: none"> • EMC: EN 55022: 2010 Emissions Class B • Safety: IEC / EN 60950-1: 2006+A1 CB Scheme • Telecom PTC 220 Report • PTC Listing
China	<ul style="list-style-type: none"> • China Safety GB4943.1-2011 • China EMC GB 9254-2008 • China RoHS and China RoHS labeling– Electronics Industry Standard of the People’s Republic of China specification SJ/T11364-2006.
Mexico	<ul style="list-style-type: none"> • RF: NOM / IEFTEL • Safety NOM
Russia	<ul style="list-style-type: none"> • EAC

Chapter 6: Dial plan

Dial plan

You can create a dial plan for 9600 Series IP Deskphones and Avaya J100 Series IP Phones using the following characters.

Character	Description
Digits 0 through 9	Specific dialpad digits.
Asterisk (*)	The dialpad character asterisk (*).
Pound (#)	The dialpad character #, but only if it is the first character in the dialed string.
x	Any dialpad digit from 0 to 9.
Z or z	Present dial tone to the user. For example, for Feature Access Code (FAC) entry.
Brackets ([])	Any one character within the brackets is a valid match for a dial plan string.
Minus (-)	Any one digit between the bounds within the brackets, inclusive, is a match.
Plus (+)	The character before plus (+) may be repeated 0 or more additional times, for a valid match.
Pipe ()	If there are multiple valid dial plan elements, each one is separated from the next by an OR symbol.
(" ")	If the dial plan text string begins or ends with an OR symbol, that symbol is ignored.

Dialable characters

Characters that a user would put in a dial string. These are different from the dial plan elements.

Character	Description
Comma (,)	A comma (,) creates a 1.5-second pause between the digits that are sent. Do not use a comma (,) as the first character in the string.
Pound (#)	Can either be the first dialed element used in a FAC or TAC or the last character which is an end of dial string indication.
Asterisk (*)	Can either be the 1st dialed element used in a FAC or TAC.

Chapter 7: Security

Security specifications

HTTP Authentication

All 9600 Series and J100 Series IP deskphones support HTTP authentication for backup and restore operations.

TLS

All 9600 Series and J100 Series IP deskphones support TLS for the following applications:

- H.323 signaling over TLS.
- Configuration files download using HTTPS.
- Backup/Restore to/from HTTPS file server.
- Single Sign On (SSO).
- SLA monitor agent.
- WML browser.

Certificates based authentication can be used with:

- 802.1x EAP-TLS.
- IPsec VPN with certificate based authentication.

VPN

You can use the 9600 Series and J100 Series IP deskphones on a VPN if your administrator has configured the VPN option for your deskphones. A VPN uses a high-speed connection to the Internet and then to the VPN-administered solution in the enterprise network. VPNs provide a significant improvement of the communications capabilities of SOHO users. 9600 Series and J100 Series IP Telephone Release 3.1 and later provide the capability to implement a VPN in Enterprise networks with third-party devices.

EAP-TLS

9600 Series and J100 Series IP Deskphones use 802.1x EAP-TLS to authenticate the phone using identity certificate installed on the phone. After the authentication is complete, the deskphone can access the external switch.

Simple Certificate Enrollment Protocol (SCEP) or PKCS12 file download

All 9600 Series and J100 Series deskphones support the use of Simple Certificate Enrollment Protocol (SCEP) or download of PKCS12 file for the following applications:

- EAP-TLS for authentication of the phone identity to the Radius server in order to get access to layer 2 switch network.
- IPsec VPN using certificates based authentication.
- Mutual authentication for H.323 over TLS signaling for cases where administrator enable mutual authentication flag for specific extension in the station form.
- Mutual HTTPS authentication for configuration file downloads.
- Mutual HTTPS authentication for backup/restore to/from file server (including agent greetings files).
- Single Sign On Application - Present the phone certificate to the SSO application on the PC.

At any case, media encryption is not related to SCEP. You can mention in separate item that SRTP (media encryption) is supported using "1-sertp-aescm128-hmac80" cipher suite, but it is not related to SCEP.

802.1X Supplicant operation

All the 9600 and J100 Series IP deskphones support 802.1x supplicant operation with EAP-MD5 (for challenge authentication) and EAP-TLS (certificate based authentication) authentication methods.

Denial of Service attacks

All 9600 Series and J100 Series IP deskphones are resilient to denial of service events. Software for all IP deskphones does not reset in response to, and will automatically resume normal operation without user intervention after, the denial-of-service attacks. Threshold value of this attack is 1.5 Mbps.

Virus malware related attacks

Deskphones are delivered free from known viruses, worms, and other malware. Products are built in an environment that is free from known viruses, worms, and other malware. The "gold" version of a product is built on a machine that is known to be clean. For example, built from a known source or the operating system version is taken from the manufacturer's source.

JITC specification

All 9600 and J100 Series IP deskphones pass Joint Interoperability Test Command (JITC) certifications according to US Department of Defense requirements summarized in Unified Capabilities Requirements (UCR) document.

<http://iase.disa.mil/stigs/checklist/index.html>

Verification of JITC functionality includes execution of the scripts specified on the following URL for the respective operating system on the product.

<http://iase.disa.mil/stigs/SRR/index.html>

* Note:

JITC is a U.S government mandatory requirement.

Secure Shell support

Secure Shell (SSH) protocol is a tool that the Avaya Services organization use to remotely connect to IP deskphones to monitor, diagnose, or debug deskphone performance. The 9600 Series and J100 Series IP Deskphones support SSHv2 only. SSHv1 is disabled.

Port Utilization

You can view the latest Port utilization matrix for the Avaya 9600 Series and J100 Series H.323 IP deskphones at the [Port matrix](#) link.

Chapter 8: Licensing information

The Right to Use the software that runs on an Avaya 9600 Series and Avaya J100 Series H.323 IP deskphone is included with the purchase of the deskphone.

The Right to Connect a 9600 Series and J100 Series IP deskphone to Communication Manager, Session Manager or IP Office is controlled by simultaneous user licenses enforced by the server.

Licenses can be purchased in bulk or as required.

For more information on the software license terms, refer the link [Policies & Legal](#).

Chapter 9: Related resources

Documentation

See the following related documents.

Title	Use this document to:	Audience
Implementing		
Installing and Administering Avaya 9600 Series and J100 Series IP Phones H.323	Install, implement, and Administer the user options for the Avaya H.323, J159, J169/179, J189, 9608,9611G,9621G,and 9641G IP deskphones.	Administrators and network engineers
Using		
Using Avaya IP Deskphone H.323 9608 and 9611G	Refer to tasks that you can perform using the Avaya IP Deskphone H.323 9608 and 9611G deskphone	End users, and Administrators
Using Avaya IP Deskphone H.323 9621G and 9641G	Refer to tasks that you can perform using the Avaya IP Deskphone H.323 9621G and 9641G deskphone	End users and Administrators
Using Avaya IP Deskphone H.323 9608, 9611G,9621G and 9641G in the Call Center	Refer to tasks that you can perform in a call center using the Avaya IP Deskphone H.323 9608, 9611G, 9621G, and 9641G deskphone	End users and Administrators
Using Avaya J159 IP Phone H.323	Refer to tasks that you can perform using the Avaya J159 IP phone H.323.	End users, and Administrator
Using Avaya J169/179 IP Phone H.323	Refer to tasks that you can perform using the Avaya J169/179 IP phone H.323.	End users, and Administrator
Using Avaya J189 IP Phone H.323	Refer to tasks that you can perform using the Avaya J189 IP phone H.323.	End users, and Administrator

Training

The following courses are available on the Avaya Learning website at www.avaya-learning.com. After logging in to the website, enter the course code or the course title in the **Search** field and click **Go** to search for the course.

Course code	Course title
ACIS-6006	ACIS - Avaya Communication Manager (5.2.1)
APSS-1300	APSS - Avaya Networking

Support

Go to the Avaya Support website at <https://support.avaya.com> for the most up-to-date documentation, product notices, and knowledge articles. You can also search for release notes, downloads, and resolutions to issues. Use the online service request system to create a service request. Chat with live agents to get answers to questions, or request an agent to connect you to a support team if an issue requires additional expertise.

Warranty

Avaya provides a one-year limited warranty on the 9600 Series IP Deskphones and Avaya J100 Series IP Phones. For more information on standard warranty terms and details regarding support, while under warranty, refer the support site at <http://support.avaya.com/>.

802.1X

An authentication method for a protocol requiring a network device to authenticate with a back-end Authentication Server before gaining network access.

Communication Manager

A key component of Avaya Aura[®]. It delivers rich voice and video capabilities and provides a resilient, distributed network for media gateways and analog, digital, and IP-based communication devices. It includes advanced mobility features, built-in conference calling, contact center applications and E911 capabilities.

Duplex

The transmission of voice and/or data signals for simultaneous two-way communication.

EAP-TLS

Extensible Authentication Protocol, or EAP, is an authentication framework frequently used in wireless networks and Point-to-Point connections. EAP is defined in RFC 3748. EAP-Transport Layer Security (EAP-TLS), defined in RFC 5216, is an IETF open standard protocol, with strong security used by wireless vendors. EAP-TLS uses PKI to secure communication to a RADIUS authentication server or another type of authentication server.

EC500

A feature that bridges calls received by the Avaya Aura® Communication Manager server to any mobile phone, regardless of location or wireless service provider.

H.323

H.323 is a TCP/IP-based protocol for VoIP signaling. The H.323 standard provides a foundation for audio, video, and data communications across IP-based networks, including the Internet. H.323 is an umbrella recommendation from the International Telecommunications Union (ITU) that sets standards for multimedia communications over Local Area Networks (LANs) that do not provide a guaranteed Quality of Service (QoS).

IEEE

The Institute of Electrical and Electronics Engineers (IEEE, read I-Triple-E) is a professional association headquartered in New York City that is dedicated to advancing technological innovation and excellence. IEEE provides learning opportunities within the engineering sciences, research, and technology.

HAC

Hearing Aid Compatibility, an Federal Communications Commission (FCC), part of the United States government Part 68 standard for handset equalization for interoperability with t-coil enabled hearing aid devices.

Hardware

An Avaya machine or component, including object code in the form of firmware, that is applied to components only in a manufacturing facility or repair depot.

PoE Power over Ethernet

Power over Ethernet or PoE describes any of several standardized or ad-hoc systems which pass electrical power along with data on Ethernet cabling. This allows a single cable to provide both data connection and electrical power to devices such as wireless access points or IP cameras.

SCEP

Simple Certificate Enrollment Protocol, used to obtain a unique digital certificate.

Secure Shell

Secure Shell (SSH) is a network protocol for secure data communication, remote shell services or command execution and other secure network services between two networked computers that it connects through a secure channel over an insecure network. For example, a server running an SSH server program and a client running an SSH client program.

TLS

Transport Layer Security, an enhancement of Secure Sockets Layer (SSL). TLS is compatible with SSL 3.0 and allows for privacy and data integrity between two communicating applications.

VPN

Virtual Private Network, a private network constructed across a public network such as the Internet. A VPN can be made secure, even though the network uses existing Internet connections to carry data communication. Security measures involve encrypting data before sending data across the Internet and decrypting the data at the other end. To add an additional level of security, you can encrypt the originating and receiving network address.

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