

# **Avaya J100 Series IP Phone Overview and Specifications**

© 2018, Avaya Inc. All Rights Reserved.

#### Note

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

#### **Documentation disclaimer**

"Documentation" means information published in varying mediums which may include product information, operating instructions and performance specifications that are generally made available to users of products. Documentation does not include marketing materials. Avaya shall not be responsible for any modifications, additions, or deletions to the original published version of Documentation unless such modifications, additions, or deletions were performed by or on the express behalf of Avaya. End User agrees to indemnify and hold harmless Avaya, Avaya's agents, servants and employees against all claims, lawsuits, demands and judgments arising out of, or in connection with, subsequent modifications, additions or deletions to this documentation, to the extent made by End User.

#### Link disclaimer

Avaya is not responsible for the contents or reliability of any linked websites referenced within this site or Documentation provided by Avaya. Avaya is not responsible for the accuracy of any information, statement or content provided on these sites and does not necessarily endorse the products, services, or information described or offered within them. Avaya does not guarantee that these links will work all the time and has no control over the availability of the linked pages.

### Warranty

Avaya provides a limited warranty on Avaya hardware and software. Refer to your sales agreement to establish the terms of the limited warranty. In addition, Avaya's standard warranty language, as well as information regarding support for this product while under warranty is available to Avaya customers and other parties through the Avaya Support website: <a href="https://support.avaya.com/helpcenter/getGenericDetails?detailld=C20091120112456651010">https://support.avaya.com/helpcenter/getGenericDetails?detailld=C20091120112456651010</a> under the link "Warranty & Product Lifecycle" or such successor site as designated by Avaya. Please note that if You acquired the product(s) from an authorized Avaya Channel Partner outside of the United States and Canada, the warranty is provided to You by said Avaya Channel Partner and not by Avaya.

"Hosted Service" means an Avaya hosted service subscription that You acquire from either Avaya or an authorized Avaya Channel Partner (as applicable) and which is described further in Hosted SAS or other service description documentation regarding the applicable hosted service. If You purchase a Hosted Service subscription, the foregoing limited warranty may not apply but You may be entitled to support services in connection with the Hosted Service as described further in your service description documents for the applicable Hosted Service. Contact Avaya or Avaya Channel Partner (as applicable) for more information.

### **Hosted Service**

THE FOLLOWING APPLIES ONLY IF YOU PURCHASE AN AVAYA HOSTED SERVICE SUBSCRIPTION FROM AVAYA OR AN AVAYA CHANNEL PARTNER (AS APPLICABLE), THE TERMS OF USE FOR HOSTED SERVICES ARE AVAILABLE ON THE AVAYA WEBSITE, <u>HTTPS://SUPPORT.AVAYA.COM/LICENSEINFO</u> UNDER THE LINK "Avaya Terms of Use for Hosted Services" OR SUCH SUCCESSOR SITE AS DESIGNATED BY AVAYA, AND ARE APPLICABLE TO ANYONE WHO ACCESSES OR USES THE HOSTED SERVICE. BY ACCESSING OR USING THE HOSTED SERVICE, OR AUTHORIZING OTHERS TO DO SO, YOU, ON BEHALF OF YOURSELF AND THE ENTITY FOR WHOM YOU ARE DOING SO (HEREINAFTER REFERRED TO INTERCHANGEABLY AS "YOU" AND "END USER"), AGREE TO THE TERMS OF USE. IF YOU ARE ACCEPTING THE TERMS OF USE ON BEHALF A COMPANY OR OTHER LEGAL ENTITY, YOU REPRESENT THAT YOU HAVE THE AUTHORITY TO BIND SUCH ENTITY TO THESE TERMS OF USE. IF YOU DO NOT HAVE SUCH AUTHORITY, OR IF YOU DO NOT WISH TO ACCEPT THESE TERMS OF USE, YOU MUST NOT ACCESS OR USE THE HOSTED SERVICE OR AUTHORIZE ANYONE TO ACCESS OR USE THE HOSTED SERVICE.

#### Licenses

THE SOFTWARE LICENSE TERMS AVAILABLE ON THE AVAYA WEBSITE, HTTPS://SUPPORT.AVAYA.COM/LICENSEINFO. UNDER THE LINK "AVAYA SOFTWARE LICENSE TERMS (Avaya Products)" OR SUCH SUCCESSOR SITE AS DESIGNATED BY AVAYA, ÁRE APPLICABLE TO ANYONE WHO DOWNLOADS, USES AND/OR INSTALLS AVAYA SOFTWARE, PURCHASED FROM AVAYA INC., ANY AVAYA AFFILIATE, OR AN AVAYA CHANNEL PARTNER (AS APPLICABLE) UNDER A COMMERCIAL AGREEMENT WITH AVAYA OR AN AVAYA CHANNEL PARTNER. UNLESS OTHERWISE AGREED TO BY AVAYA IN WRITING AVAYA DOES NOT EXTEND THIS LICENSE IF THE SOFTWARE WAS OBTAINED FROM ANYONE OTHER THAN AVAYA, AN AVAYA AFFILIATE OR AN AVAYA CHANNEL PARTNER; AVAYA RESERVES THE RIGHT TO TAKE LEGAL ACTION AGAINST YOU AND ANYONE ELSE USING OR SELLING THE SOFTWARE WITHOUT A LICENSE. BY INSTALLING, DOWNLOADING OR USING THE SOFTWARE, OR AUTHORIZING OTHERS TO DO SO, YOU, ON BEHALF OF YOURSELF AND THE ENTITY FOR WHOM YOU ARE INSTALLING, DOWNLOADING OR USING THE SOFTWARE (HEREINAFTER REFERRED TO INTERCHANGEABLY AS "YOU" AND "END USER"), AGREE TO THESE TERMS AND CONDITIONS AND CREATE A BINDING CONTRACT BETWEEN YOU AND AVAYA INC. OR THE APPLICABLE AVAYA AFFILIATE ("AVAYA").

Avaya grants You a license within the scope of the license types described below, with the exception of Heritage Nortel Software, for which the scope of the license is detailed below. Where the order documentation does not expressly identify a license type, the applicable license will be a Designated System License as set forth below in the Designated System(s) License (DS) section as applicable. The applicable number of licenses and units of capacity for which the license is granted will be one (1), unless a different number of licenses or units of capacity is specified in the documentation or other materials available to You. "Software" means computer programs in object code, provided by Avaya or an Avaya Channel Partner, whether as stand-alone products, pre-installed on hardware products, and any upgrades, updates, patches, bug fixes, or modified versions thereto. "Designated Processor" means a single stand-alone computing device. "Server" means a set of Designated Processors that hosts (physically or virtually) a software application to be accessed by multiple users. "Instance" means a single copy of the Software executing at a particular time: (i) on one physical machine; or (ii) on one deployed software virtual machine ("VM") or similar deployment.

### License types

Designated System(s) License (DS). End User may install and use each copy or an Instance of the Software only: 1) on a number of Designated Processors up to the number indicated in the order; or 2) up to the number of Instances of the Software as indicated in the order, Documentation, or as authorized by Avaya in writing. Avaya may require the Designated Processor(s) to be identified in the order by type, serial number, feature key, Instance, location or other specific designation, or to be provided by End User to Avaya through electronic means established by Avaya specifically for this purpose.

Shrinkwrap License (SR). You may install and use the Software in accordance with the terms and conditions of the applicable license agreements, such as "shrinkwrap" or "clickthrough" license accompanying or applicable to the Software ("Shrinkwrap License").

### **Heritage Nortel Software**

"Heritage Nortel Software" means the software that was acquired by Avaya as part of its purchase of the Nortel Enterprise Solutions Business in December 2009. The Heritage Nortel Software is the software contained within the list of Heritage Nortel Products located at <a href="https://support.avaya.com/LicenseInfo">https://support.avaya.com/LicenseInfo</a> under the link "Heritage Nortel Products" or such successor site as designated by Avaya. For Heritage Nortel Software, Avaya grants Customer a license to use Heritage Nortel Software provided hereunder solely to the extent of the authorized activation or authorized usage level, solely for the purpose specified in the Documentation, and solely as embedded in, for execution on, or for communication with Avaya equipment. Charges for Heritage Nortel Software may be based on extent of activation or use authorized as specified in an order or invoice.

### Copyright

Except where expressly stated otherwise, no use should be made of materials on this site, the Documentation, Software, Hosted Service, or hardware provided by Avaya. All content on this site, the documentation, Hosted Service, and the product provided by Avaya including the selection, arrangement and design of the content is owned either by Avaya or its licensors and is protected by copyright and other intellectual property laws including the sui generis rights relating to the protection of databases. You may not modify, copy, reproduce, republish, upload, post, transmit or distribute in any way any content, in whole or in part, including any code and software unless expressly authorized by Avaya. Unauthorized reproduction, transmission, dissemination, storage, and or use without the express written consent of Avaya can be a criminal, as well as a civil offense under the applicable law.

#### Virtualization

The following applies if the product is deployed on a virtual machine. Each product has its own ordering code and license types. Note, unless otherwise stated, that each Instance of a product must be separately licensed and ordered. For example, if the end user customer or Avaya Channel Partner would like to install two Instances of the same type of products, then two products of that type must be ordered.

### **Third Party Components**

"Third Party Components" mean certain software programs or portions thereof included in the Software or Hosted Service may contain software (including open source software) distributed under third party agreements ("Third Party Components"), which contain terms regarding the rights to use certain portions of the Software ("Third Party Terms"). As required, information regarding distributed Linux OS source code (for those products that have distributed Linux OS source code) and identifying the copyright holders of the Third Party Components and the Third Party Terms that apply is available in the products, Documentation or on Avaya's website at: https:// support.avaya.com/Copyright or such successor site as designated by Avaya. The open source software license terms provided as Third Party Terms are consistent with the license rights granted in these Software License Terms, and may contain additional rights benefiting You, such as modification and distribution of the open source software. The Third Party Terms shall take precedence over these Software License Terms, solely with respect to the applicable Third Party Components to the extent that these Software License Terms impose greater restrictions on You than the applicable Third Party

The following applies only if the H.264 (AVC) codec is distributed with the product. THIS PRODUCT IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL USE OF A CONSUMER OR OTHER USES IN WHICH IT DOES NOT RECEIVE REMUNERATION TO (i) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("AVC VIDEO") AND/OR (ii) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE HTTP://WWW.MPEGLA.COM.

### Service Provider

THE FOLLOWING APPLIES TO AVAYA CHANNEL PARTNER'S HOSTING OF AVAYA PRODUCTS OR SERVICES. THE PRODUCT OR HOSTED SERVICE MAY USE THIRD PARTY COMPONENTS SUBJECT TO THIRD PARTY TERMS AND REQUIRE A SERVICE PROVIDER TO BE INDEPENDENTLY LICENSED DIRECTLY FROM THE THIRD PARTY SUPPLIER. AN AVAYA CHANNEL PARTNER'S HOSTING OF AVAYA PRODUCTS MUST BE AUTHORIZED IN WRITING BY AVAYA AND IF THOSE HOSTED PRODUCTS USE OR EMBED CERTAIN THIRD PARTY SOFTWARE, INCLUDING BUT NOT LIMITED TO MICROSOFT SOFTWARE OR CODECS, THE AVAYA CHANNEL PARTNER IS REQUIRED TO INDEPENDENTLY OBTAIN ANY APPLICABLE LICENSE AGREEMENTS, AT THE AVAYA CHANNEL PARTNER'S EXPENSE, DIRECTLY FROM THE APPLICABLE THIRD PARTY SUPPLIER.

WITH RESPECT TO CODECS, IF THE AVAYA CHANNEL PARTNER IS HOSTING ANY PRODUCTS THAT USE OR EMBED THE G.729 CODEC, H.264 CODEC, OR H.265 CODEC, THE

AVAYA CHANNEL PARTNER ACKNOWLEDGES AND AGREES THE AVAYA CHANNEL PARTNER IS RESPONSIBLE FOR ANY AND ALL RELATED FEES AND/OR ROYALTIES. THE G.729 CODEC IS LICENSED BY SIPRO LAB TELECOM INC. SEE WWW.SIPRO.COM/CONTACT.HTML. THE H.264 (AVC) CODEC IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL USE OF A CONSUMER OR OTHER USES IN WHICH IT DOES NOT RECEIVE REMUNERATION TO: (I) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("ÀVC VIDEO") AND/OR (II) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION FOR H.264 (AVC) AND H.265 (HEVC) CODECS MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE HTTP:// WWW.MPEGLA.COM.

#### Compliance with Laws

You acknowledge and agree that it is Your responsibility for complying with any applicable laws and regulations, including, but not limited to laws and regulations related to call recording, data privacy, intellectual property, trade secret, fraud, and music performance rights, in the country or territory where the Avaya product is used.

### **Preventing Toll Fraud**

"Toll Fraud" is the unauthorized use of your telecommunications system by an unauthorized party (for example, a person who is not a corporate employee, agent, subcontractor, or is not working on your company's behalf). Be aware that there can be a risk of Toll Fraud associated with your system and that, if Toll Fraud occurs, it can result in substantial additional charges for your telecommunications

#### **Avaya Toll Fraud intervention**

If You suspect that You are being victimized by Toll Fraud and You need technical assistance or support, call Technical Service Center Toll Fraud Intervention Hotline at +1-800-643-2353 for the United States and Canada. For additional support telephone numbers, see the Avaya Support website: <a href="https://support.avaya.com">https://support.avaya.com</a> or such successor site as designated by Avaya.

### Security Vulnerabilities

Information about Avaya's security support policies can be found in the Security Policies and Support section of <a href="https://support.avaya.com/security">https://support.avaya.com/security</a>.

Suspected Avaya product security vulnerabilities are handled per the Avaya Product Security Support Flow (<a href="https://support.avaya.com/css/P8/documents/100161515">https://support.avaya.com/css/P8/documents/100161515</a>).

### **Downloading Documentation**

For the most current versions of Documentation, see the Avaya Support website: <a href="https://support.avaya.com">https://support.avaya.com</a>, or such successor site as designated by Avaya.

### **Contact Avaya Support**

See the Avaya Support website: <a href="https://support.avaya.com">https://support.avaya.com</a> for product or Hosted Service notices and articles, or to report a problem with your Avaya product or Hosted Service. For a list of support telephone numbers and contact addresses, go to the Avaya Support website: <a href="https://support.avaya.com">https://support.avaya.com</a> (or such successor site as designated by Avaya), scroll to the bottom of the page, and select Contact Avaya Support.

### **Regulatory Statements**

### **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.

### 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
- This device must accept any interference, including interference that may cause undesired operation of the device

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

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

### Radio Transmitter Statement

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.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

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 colocated 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.

### Industry Canada (IC) Statements

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

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

### **Japan Statements**

### Class B Statement

This is a Class B product based on the standard of the VCCI Council. If this is used near a radio or television receiver in a domestic environment, it may cause radio interference. Install and use the equipment according to the instruction manual.

この装置は、クラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

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.



### 警告

本製品を安全にご使用頂くため、以下のことにご注意ください。

- 接続ケーブル、電源コード、AC アダプタなどの部品は、必ず 製品に同梱されております添付品または指定品をご使用くだ さい。添付品指定品以外の部品をご使用になると故障や動作 不良、火災の原因となることがあります。
- 同梱されております付属の電源コードを他の機器には使用しないでください。上記注意事項を守らないと、死亡や大怪我など人身事故の原因となることがあります。

### México Statement

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

- 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:

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

### Power over Ethernet (PoE) Statement

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

### 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 to 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
- 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. Highpower 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  $1\sim11$  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.

### **EU Countries**

This device when installed complies with the essential requirements and other relevant provisions of EMC Directive 2014/30/EU and LVD Directive 2014/35/EU. A copy of the Declaration may be obtained from <a href="http://support.avaya.com">http://support.avaya.com</a> or Avaya Inc., 4655 Great America Parkway, Santa Clara, CA 95054–1233 USA.

#### WiFi transmitter

- · Frequencies for 2412-2472 MHz, transmit power: 17.8 dBm
- Frequencies for 5180-5240 MHz, transmit power: 19.14 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 Use Only Limited Power Supply Phihong Technology Co. Ltd. Model: PSAC12R-050, Output: 5VDC, 2.4A.

### **Trademarks**

The trademarks, logos and service marks ("Marks") displayed in this site, the Documentation, Hosted Service(s), and product(s) provided by Avaya are the registered or unregistered Marks of Avaya, its affiliates, its licensors, its suppliers, or other third parties. Users are not permitted to use such Marks without prior written consent from Avaya or such third party which may own the Mark. Nothing contained in this site, the Documentation, Hosted Service(s) and product(s) should be construed as granting, by implication, estoppel, or otherwise, any license or right in and to the Marks without the express written permission of Avaya or the applicable third party.

Avaya is a registered trademark of Avaya Inc.

All non-Avaya trademarks are the property of their respective owners. Linux® is the registered trademark of Linus Torvalds in the U.S. and other countries.

### **Contents**

Ch	apter 1: Introduction	7
	Purpose	
	Intended audience	7
Ch	apter 2: J100 Series IP Phone overview	8
	J100 Series IP Phone overview	8
	J100 Series IP Phone models	
	Hardware	9
Ch	apter 3: Feature description	10
	Feature description	
Ch	apter 4: Performance specifications	11
	Power	11
	Port and switch	
	Supported codecs	. 11
Ch	apter 5: Environmental specification	13
	Altitude and air pressure	
	Temperature and humidity	
	Regulatory compliance	14
Ch	apter 6: Dial plan	17
	Dial plan	
	Dialable characters	17
Ch	apter 7: Security	18
	Security overview	18
	SSH	
	TLS	
	Avaya SBCE	
	EAP-TLS	
	SCEP	
	802.1X Supplicant operation	
	Virus malware related attacks	
	JITC certification	
	Port utilization	
Ch	apter 8: Related resources	
	Documentation	
	Finding documents on the Avaya Support website	23
	SHIDDE	

# **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: J100 Series IP Phone overview**

# J100 Series IP Phone overview

The J100 Series IP Phone is a series of phones that you can use for unified communication. The series leverages the enterprise IP network and eliminates the need of a separate voice network. It offers superior audio quality and customizability with low power requirements in a Session Initiation Protocol (SIP) environment.

With this phone, you can:

- Make conference calls more efficiently and enhance customer interactions with high-quality audio.
- Gain access to information quickly through easy-to-read and high-resolution displays.
- Create a survivable, scalable infrastructure that delivers reliable performance and flexible growth as business needs change.
- Increase performance by deploying Gigabit Ethernet within your infrastructure.
- Reduce energy costs by using efficient Power-over-Ethernet (PoE) including sleep mode, which lowers energy consumption significantly.

### J100 Series IP Phone models

Phone model	Description
J129 IP Phone	A SIP-based phone with a monochrome display that supports two call appearances on a dual line display.
J169 IP Phone	A SIP-based phone with a grayscale display that supports eight call appearances with four lines of call display.
	The phone can also support up to 3 button modules each supporting 24 call appearances.
J179 IP Phone	A SIP-based phone with a color display that supports eight call appearances with four lines of call display.
	The phone can also support up to 3 button modules each supporting 24 call appearances.

# **Hardware**

Avaya J100 Series IP Phones supports the following specifications:

Standard	J129	J169	J179	JBM24
Stand	Dual position	Dual position	Dual position	Dual position
Phone dimensions with the stand, set in high	Width: 156 mm (6.1 in)	Width: 187 mm (7.4 in)	Width: 187 mm (7.4 in)	Width: 89 mm (3.5 in)
position	Depth: 170 mm (6.7 in)	Depth: 175 mm (6.9 in)	Depth: 175 mm (6.9 in)	Depth: 175 mm (6.9 in)
	Height: 175mm (6.9 in)	Height: 183 mm (7.2 in)	Height: 183 mm (7.2 in)	Height: 183 mm (7.2 in)
Wall mountable	Yes	Yes	Yes	Yes
Phone dimensions with the wall mount	Width: 156 mm (6.1 in) Wide x	Width: 187 mm (7.4 in)	Width: 187 mm (7.4 in)	Width: 89 mm (3.5 in)
	Deep x Tall Depth: 100 mm	Depth: 100 mm (3.9 in)	Depth: 100 mm (3.9 in)	Depth: 100 mm (3.9 in)
	(3.9 in) Height: 198 mm (7.8 in)	Height: 225 mm (8.9 in)	Height: 225 mm (8.9 in)	Height: 225 mm (8.9 in)
Call appearances	1	8	8	N/A
Touch screen	N/A	N/A	N/A	N/A
Display type	Monochrome	Grayscale	Colored	Grayscale
Display	2.3", 128 x 32 pixel	3.5", 320 x 240 pixel	3.5", 320 x 240 pixel	
Dual color call indicator	0	8	8	24
Ethernet switch	Dual 10/100	Dual 10/100/1000	Dual 10/100/1000	N/A
WLAN support	No	No	Optional	N/A
Softkeys call control	3	4	4	N/A
BT support	No	No	Optional	N/A
Wired Handset	Yes	Yes	Yes	N/A
Wired Headset	No	Yes	Yes	N/A
Expansion module capability	No	Yes, up to three expansion modules	Yes, up to three expansion modules	N/A
Optional DC Power	No	Yes	Yes	N/A
GSPPOE power adapter	Yes	Yes	Yes	N/A

# **Chapter 3: Feature description**

# **Feature description**

Avaya J100 Series IP Phones offers the following features:

- Easy to use interface
- · Easy customization
- Support for Gigabit Ethernet
- Boost employee productivity
- Support for button module

# **Chapter 4: Performance specifications**

### **Power**

All Avaya J100 Series IP Phones are complied with Energy star. They support the following power sources:

- Avaya DC 5 volt adapter with barrel jack
- Power over Ethernet (PoE) or LAN-based powering as per IEEE 802.3af specification.

Power Sources	J129	J169	J179
PoE	Class 1	Class 1 or 2	Class 1 or 2
Avaya power adapter	No	DC 5 volt	DC 5 volt

### Port and switch

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

Port and switch	J129	J169	J179
USB 2.0	No	No	No
PC port	Yes	Yes	Yes
Headset jack	No	yes	Yes
Button module interface	No	Yes	Yes
Adapter interface	No	Yes	Yes
Wired Ethernet interface	10/100 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
Secondary wired Ethernet interface	10/100 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
Wireless Ethernet interface	Optional module	No	Optional module
IEEE power switch	No	No	No

# **Supported codecs**

Avaya J100 Series IP Phones supports the following codecs and call control protocol:

### Performance specifications

Codecs	J129	J169	J179
Call control protocol	SIP	SIP	SIP
Codecs	• G.711a	• G.711a	• G.711a
	• G.711µ	• G.711µ	• G.711µ
	• G.729	• G.729	• G.729
	• G.729a	• G.729a	• G.729a
	• G.729ab	• G.729ab	• G.729ab
	• G.726	• G.726	• G.726
	• Opus	• Opus	• Opus
	• G722	• G722	• G722

# **Chapter 5: Environmental specification**

# Altitude and air pressure

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

# Temperature and humidity

All Avaya J100 Series IP Phoneswork in a temperature range from 40 to 120 degrees Fahrenheit or 4 to 49 degrees Celsius.

### Storage environment specifications

**Extreme temperature specifications**: All Avaya J100 Series IP Phones 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 J100 Series IP Phones function normally after a recovery time of up a 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 J100 Series IP Phones 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 Avaya J100 Series IP Phones conform to the Design for Environment Guidelines and Requirements [8.1-5] as clarified below.

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

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

DFE Guidelines for Designing Plastic Parts (Section 4): All Avaya J100 Series IP Phones 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 Avaya J100 Series IP Phones housing and handset surfaces are textured (Section 4.5).

All Avaya J100 Series IP Phones 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 Avaya J100 Series IP Phones 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 Avaya J100 Series IP Phones 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].

# Regulatory compliance

Country	Regulatory compliance
USA	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)	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)

Table continues...

Country	Regulatory compliance
	Environmental: WEEE and RoHS / lead free compliance
	CE marking
Canada	EMC: ICES-003 Class B
	• RF: RS-247, SAR
	Telecom: CS-03
	• Safety: UL (CSA-C22.2 No. 60950-1-07)
Japan	EMC: VCCI Class B
	Telecom: JATE
	• RF: TELEC
	• Safety: IEC / EN 60950-1: 2006+A1 CB Scheme
	Label: with VCCI and JATE mark
Brazil	Safety: RES. 238
	EMC: RES. 237 and RES. 442 Reports Class B
	RF: applicable RES
	Telecom: RES 529
	ANATEL Listing
Korea	EMC KN22 Emissions Class B
	EMC KN24 Immunity
	• RF: KC
	Safety: MIC
	Telecom: MIC
	KCC Listed
Australia	EMC: EN 55022: 2010 Emissions Class B
	• Safety: IEC / EN 60950-1: 2006+A12 CB Scheme
	Telecom AS/ACIF S004
	• RCM
New Zealand	EMC: EN 55022: 2010 Emissions Class B
	• Safety: IEC / EN 60950-1: 2006+A1 CB Scheme
	Telecom PTC 220 Report
	PTC Listing
China	China Safety GB4943.1-2011
	China EMC GB 9254-2008

Table continues...

### Environmental specification

Country	Regulatory compliance
	China RoHS and China RoHS labeling     Electronics Industry Standard of the People's Republic of China specification SJ/T11364-2006.
Mexico	• RF: NOM / IEFTEL
	Safety NOM
Russia	• EAC

# **Chapter 6: Dial plan**

# Dial plan

You can create a dial plan for 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.
х	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 overview**

Avaya J100 Series IP Phones supports the following security features:

- HTTP authentication for backup and restore operations.
- 256-bit Advanced Encryption Standard (AES-256) media encryption.
- Supports FIPS 140-2 cryptographic algorithms for application, processes, and users.
- Supports control to switch between FIPS and non-FIPS mode.
- Supports Public Key Infrastructure (PKI) for users that use third-party certificates for all Avaya services including database.
- Supports Certificate Revocation List (CRL) and On Line Certificate Status Protocol (OCSP) for public key management.
- Supports SRTP/SRTCP and TLS v1.2.
- Secure call indicator provided by Avaya Aura® Platform 7.0.
- Compliance with IETF RFC 1948 Defending Against Sequence Number Attacks, May 1996, 14 by S. Bellovin .
- Support Transport Layer Security (TLS) to establish a secure connection to an HTTP server on which the upgrade and settings files reside.

### SSH

Avaya Services uses Secure Shell (SSH) protocol to remotely connect to Avaya J100 Series IP Phones to monitor, diagnose, or debug phone performance. The Avaya J100 Series IP Phones support SSHv2 only. SSHv1 is disabled.

### **TLS**

Avaya J100 Series IP Phones supports Transport Layer Security (TLS) to enhance the security of your HTTP environment. The deskphones support HTTP and HTTPS authentication for backup and restore operations.

# **Avaya SBCE**

You can use Avaya J100 Series IP Phones SIP with Avaya Session Border Controller for Enterprise (SBCE) to provide support for remote workers. The SBCE gives remotely located SIP users access to the internal enterprise Unified Communications (UC) network by implementing comprehensive UC security features. These features include sophisticated firewall/NAT traversal, encryption, user authentication, and session and endpoint call policy enforcement.

### **EAP-TLS**

Avaya J100 Series IP Phones supports Extensible Authentication Protocol-Transport Layer Security (EAP-TLS) mode of authentication. The call server supports EAP-TLS as specified in RFC 2716 if an identity certificate is present in the deskphone.

### **SCEP**

Avaya J100 Series IP Phones supports Simple Certificate Enrollment Protocol (SCEP) to provide an identity certificate for use with certificate-based VPN authentication methods. The 802.1x EAP-TLS method also uses the identity certificate for authentication. When you use TLS with HTTPS, you can use the identity certificate to:

- Authenticate the deskphone
- Save the agent greetings
- Perform a backup or restore

Avaya J100 Series IP Phones supports Media Encryption (SRTP) and uses built-in Avaya certificates for trust management. You can apply SCEP to your VPN operations or to standard enterprise network operations.

# 802.1X Supplicant operation

Avaya J100 Series IP Phones supports Supplicant operation and Extensible Authentication Protocol (EAP).

### 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 certification

For products sold into the U.S. and Canadian Government and sector, Joint Interoperability Test Command (JITC) certification is a mandatory requirement. Based on the operating system and the capabilities of the product, each product must adhere to the respective standard specified at http://iase.disa.mil/stigs/checklist/index.html.

Verification of JITC functionality includes execution of the scripts for the respective operating system on the product. The scripts are specified at http://iase.disa.mil/stigs/SRR/index.html.

# Port utilization

For the latest and most accurate information about ports and protocols that Avaya J100 Series IP Phones utilizes, see <u>Port Matrix</u>. On the Web page, select the required link under Avaya one-X<sup>®</sup> Deskphone.

# **Chapter 8: Related resources**

# **Documentation**

See the following related documents at <a href="http://support.avaya.com">http://support.avaya.com</a>.

Title	Use this document to:	Audience
Overview		
Avaya Aura® Session Manager Overview and Specification	See characteristics and capabilities, including feature descriptions, interoperability, performance specifications, security and licensing requirements of the Avaya Aura® Session Manager.	For people who want to gain a high-level understanding of the Avaya Aura® Session Manager features, functions, capacities, and limitations.
Avaya IP Office <sup>™</sup> Platform Feature Description	See information about the feature descriptions.	For people who perform system administration tasks.
Avaya IP Office <sup>™</sup> Platform Solution Description	See information about how the products and services that interoperate with this solution.	For people who want to gain a high-level understanding of the IP Office features, functions, capacities, and limitations.
Implementing		
Deploying Avaya Aura® Session Manager	See the installation procedures and initial administration information for Avaya Aura® Session Manager.	For people who install, configure, and verify Avaya Aura® Session Manager on Avaya Aura® System Platform.
Upgrading Avaya Aura® Session Manager	See upgrading checklists and procedures.	For people who perform upgrades of Avaya Aura® Session Manager.
Deploying Avaya Aura <sup>®</sup> System Manager on System Platform	See the installation procedures and initial administration information for Avaya Aura® System Manager.	For people who install, configure, and verify Avaya Aura®

Table continues...

Title	Use this document to:	Audience		
		System Manager on Avaya Aura® System Platform at a customer site.		
Avaya IP Office™ Platform SIP Telephone Installation Notes	See the installation procedures and initial administration information for IP Office SIP telephone devices.	For people who install, configure and verify SIP telephone devices on IP Office.		
Administering				
Administering Avaya Aura® Session Manager	See information about how to perform Avaya Aura® Session Manager administration tasks including how to use management tools, how to manage data and security, an how to perform periodic maintenance tasks.	For people who perform Avaya Aura® Session Manager system administration tasks.		
Administering Avaya Aura® System Manager	See information about how to perform Avaya Aura® System Manager administration tasks including how to use management tools, how to manage data and security, an how to perform periodic maintenance tasks.	For people who perform Avaya Aura® System Manager administration tasks.		
Administering Avaya IP Office™ Platform with Manager	See information about short code configurations for the feature list	For people who need to access IP Office features using short codes.		
Administering Avaya IP Office™ Platform with Web Manager	See information about IP Office Web Manager administration tasks including how to use the management tool, how to manage data and security, and how to perform maintenance tasks.	For people who perfrom IP Office Web Manager administration tasks.		
Maintaining				
Maintaining Avaya Aura® Session Manager	See information about the maintenance tasks for Avaya Aura® Session Manager.	For people who maintain Avaya Aura® Session Manager.		
Troubleshooting Avaya Aura® Session Manager	See information for troubleshooting Avaya Aura® Session Manager, resolving alarms, replacing hardware, and alarm codes and event ID descriptions.	For people who troubleshoot Avaya Aura® Session Manager.		
Using Avaya IP Office™ Platform System Status Application	See information about the maintenance tasks for System Status Application.	For people who maintain System Status Application.		
Using Avaya IP Office™ Platform System Monitor	See information about the maintenance tasks for SysMonitor.	For people who maintain SysMonitor.		

## Finding documents on the Avaya Support website

### **Procedure**

- 1. Navigate to http://support.avaya.com/.
- 2. At the top of the screen, type your username and password and click Login.
- 3. Click Support by Product > Documents.
- 4. In **Enter your Product Here**, type the product name and then select the product from the list.
- 5. In **Choose Release**, select an appropriate release number.
- 6. In the **Content Type** filter, click a document type, or click **Select All** to see a list of all available documents.
  - For example, for user guides, click **User Guides** in the **Content Type** filter. The list displays the documents only from the selected category.
- 7. Click Enter.

# Support

Go to the Avaya Support website at <a href="http://support.avaya.com">http://support.avaya.com</a> 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.

# Index

Numerics	security (continued)	
200 44 0 11 1 11	JITC certification	
802.1X Supplicant operation20	Simple Certificate Enrollment Protocol	
	SSH	
A	TLS	
	Virus malware related attacks	
Altitude and air pressure specification	securityEAP-TLS	
	security overviewSimple Certificate Enrollment Protocol	
D	software	
	specifications	<u>11</u>
dialable characters <u>17</u>	altitude and air pressure	13
dial plan specification <u>17</u>	dial plan	
	hardware	
E	temperature and humidity	
_	support	
EAP-TLS <u>19</u>		
Extensible Authentication Protocol-Transport Layer Security	<b>-</b>	
<u>19</u>	Т	
	temperature and humidity specification	13
J	TLS	
	Transport Layer Security	
J100 Series IP Phone models8	Transport Eagler Security	<u>10</u>
Joint Interoperability Test Command certification20	14	
	V	
1	Virus malware related attacks	20
-	virus maiware related attacks	<u>20</u>
legal notices		
$\circ$		
0		
overview		
J100 Series IP Phone8		
security		
•		
P		
r		
Port and switch11		
port utilization20		
Power		
<u> </u>		
В		
R		
Regulatory compliance		
related documentation 21		
e		
S		
Secure Shell		
security		
802.1X Supplicant operation		
Avaya SBCE19		