

SL8400 series FAQ



General

1. What is the SpectraLink 8400 Series?

The next generation of VoWLAN devices from Polycom, the SpectraLink 8400 Series is a family of Wi-Fi handsets and accessories designed specifically to meet requirements of enterprise mobile workers in targeted vertical markets including healthcare, retail, hospitality and manufacturing. Marquee features include: an integrated bar code imager, a WebKit browser and XML API, an open SIP platform, industrial-grade durability, 802.11n support, advanced noise cancellation, and HD Voice docking station, and instant messaging and presence with Microsoft OCS.

Features

1. Why is this handset design the best form factor for in-building wireless?

Due to the rugged environments and 24-hour usage model of single-mode wireless devices, the optimal design the industry has standardized on is the “candy bar” design. While the personal cell-phone market has evolved to include touch screens and personalization features, the enterprise market places premium value on other functionality such as manageability, durability, ease of use, and ease of training. The simple to use keypad, navigation button and dedicated soft-keys of the SpectraLink 8400 series make it an ideal device to mirror the PBX functionality required by enterprise users.

2. Do these handsets have Polycom HD Voice™ like the other Polycom phones?

The SpectraLink 8410 Speakerphone Dock offers full Polycom HD voice. The wireless handset supports the G.722 wideband codec and also offers all of the components of Polycom HD Voice that are applicable in a mobile handset. Handset voice quality features include: acoustic echo cancellation, background noise suppression, adaptive jitter buffers, packet loss concealment, full-duplex audio, voice activity detection (VAD) and comfort noise fill. In addition, the 8400 handsets have a second, on-board and integrated noise-cancellation microphone. The noise-cancelling microphone, with an active noise cancellation algorithm, is extremely effective in high-noise and industrial environments. Therefore, these handsets provide the best fidelity of any VoWLAN device today.

3. What is WebKit?

WebKit is a leading-edge XHTML browser engine which, along with a set of open web developer tools and technologies, form the foundation of the SpectraLink 8400 (and VVX 1500) application platforms. The WebKit-based browser enables exceptionally rich application integrations with tools such as JavaScript, AJAX, CSS and SVG graphics support.

4. **Can I access the internet with these handsets?**

Yes, the 8400 series handset browser is capable of accessing the internet or company intranet. However, this capability is controlled and enabled, or disabled, by the IT administrator.

5. **What design features have been incorporated to improve durability?**

The 8400 Series was engineered with extensive CAD modeling to ensure durability and manufacturability. The durability features include a shock mounted LCD, a magnesium frame, metal dome keypad technology, brass insert screw bosses, and advanced battery latching mechanisms.

6. **Are the 8400 series handsets intrinsically safe?**

No. Although they are not intrinsically safe, the 8440 and 8450 meet the IP-64 standard for dust and water ingress protection, and MIL-STD-810F durability ratings.

7. **Is the handset waterproof?**

Although it is not waterproof, the handset is IP64 certified for complete protection against dust ingress and spraying water from any direction.

8. **What is IP64?**

The IP Code (known as the International Protection Rating, or sometimes the Ingress Protection Rating) is an international standard that classifies the degrees of protection provided against the intrusion of solid objects dust, accidental contact, and water in electrical enclosures. The format consists of 'IP' followed by two digits.

The first digit indicates the level of protection against access to the ingress of solid foreign objects. In the case of the SpectraLink 8400, the 6 means that the handset has complete protection against the ingress of dust.

The second digit indicates the level of protection against harmful ingress of water. In the case of the SpectraLink 8400, the 4 means that water splashing from any direction will have no harmful effect on the handset.

9. **What can I clean the handsets with?**

Generally, wiping the phone's surface with a water-dampened cloth and/or paper towel will remove most films or residues. If additional cleaning is necessary, Polycom recommends wiping the handset with mild detergent, Lysol®, isopropyl alcohol or a diluted bleach solution.

10. **Do these handsets include dual mode support?**

There are no plans at this time to develop a dual mode (Wi-Fi + cellular) version of the SpectraLink 8400 series.

11. **Are the 8440 and 8450 handsets FIPS 140-2 compliant?**

No. The 8400 series will not be FIP 140-2 certified at release.

Barcode

1. How is our bar code reader different/better than the competition?

The integrated barcode reader on the SpectraLink 8450 is a high-performance industrial, 1D CMOS linear imager, designed to work in rigorous environments. High performance specifications include the following:

Feature	Specification	Benefit
Light Source	617 nm Highly Visible LED	Provides lighting and easy user targeting of barcodes
Scan Rate	Up to 500 scans/s	Ensures fast read/response
Scan Angle	38°	Allows reading over a wide range of scan angles
Label print contrast	Down to 25%	Reads barcode images of questionable quality & contrast
Min. label x. dimension	0.15mm (6 mils)	Reads barcodes of varying sizes and characteristics
Reading distance	Up to 40cm (16in.)	Reads barcodes over a wide range of distances

The integrated barcode reader supports numerous barcode symbologies, including: RSS, Stacked RSS, RSS-14, GS-1 DataBar, Code 39, Code 93, Code 128, UPC (E&A),

2. When will the 8400 series have a 2D barcode reader version?

The SpectraLink 8452 will have a 2D barcode reader. Availability is anticipated in the second half of 2011.

3. What is the difference between 1D and 2D barcodes?

One-dimensional (1D) and two-dimensional (2D) barcodes are the two primary classes of barcode label formats. Each class of barcode format supports a number of different encoding symbologies. In general, 2D barcode symbologies can encode more data, which may be contained in a physically smaller barcode label, as compared with 1D barcode symbologies.

The choice of 1D or 2D format depends heavily on the objectives and intended uses in a given enterprise process, or application. 1D barcodes have been in use for decades, whereas 2D barcode symbologies are a more recent technology.

1D barcode readers can only decode 1D barcode symbologies, whereas, 2D barcode readers are often able to decode both 1D and 2D barcode label formats.

Application Integration

1. What applications does the phone work with?

The SpectraLink 8400 series supports an enhanced application programming interface (API) using industry-standard XML and browser-based protocols. Polycom offers solution developers a software development kit (SDK) for the XML API that includes a fully-functional handset simulator. Applications using the XML API are currently under development by several partners and more information on application details and availability will be provided as it becomes available.

In addition, the SpectraLink 8400 series handsets support all legacy SpectraLink Open Application Interface (OAI) applications using the existing OAI Gateway. A wide variety of application providers support the SpectraLink OAI with solutions for various industries and these are listed on the Polycom.com website. (<http://www.polycom.com>)

2. Do the SpectraLink 8400 handsets work with SpectraLink OAI?

Yes, the handsets are backwards compatible with SpectraLink OAI.

3. Does Polycom sell applications for healthcare, retail, and other markets?

Polycom plans to offer applications and application development services for SpectraLink 8400 series handsets beginning in 3Q11. In addition, we are creating a robust ecosystem of application partners. Once the applications are validated, all partners will be listed through the Polycom ARENA program. Applications from partners will be available directly from the developer or their sales channels.

4. What do the applications cost? Where do I buy them? Does Polycom handle implementation?

API applications are available from our developer partners or their sales channel. Internet-based applications that leverage the web browser may or may not require a license fee from the third party, but Polycom does not charge an additional fee to use the web browser.

Applications that use the legacy SpectraLink OAI will require a Polycom OAI Gateway which ranges in list price from \$1,025 to \$15,400 depending on capacity. Polycom Global Services and our authorized service partners can provide installation and implementation services for the SpectraLink 8400 series handsets and OAI Gateway.

5. Is a dedicated server, like the SpectraLink OAI Gateway, required to access applications that use XML?

Unlike the OAI, there is no server required for the SpectraLink 8400 handsets to access XML-based applications. The on-board WebKit browser and standard XML-API enable direct access to web-based applications. If a customer is currently running applications that use SpectraLink OAI Gateway, the gateway will still be required to ensure backward compatibility.

6. Can my customer write their own application?

Yes. Polycom provides a standard XML-based Application Programming Interface (API) and a license-free Software Developer's Kit (SDK) to facilitate application development for the handsets.

7. Does Polycom have a proprietary middleware platform like some others in the industry?

No, it is not needed. Proprietary platforms can be limited in scope. The standard-based Polycom API allows integration with any platform, allowing greater flexibility.

Call Server Integration

- 1. Why does the SpectraLink 8400 Series only support SIP for call server integration?** SpectraLink 8400 series handsets support the market-leading Polycom® Unified Communications (UC) Software for SIP integration support. Polycom's support for SIP is widely-recognized as the most interoperable and feature-rich implementation on the market today. This approach ensures the best interoperability and ROI for our customers, based on where the industry is headed.

In recent years, proprietary IP protocols have lost favor, with call server providers moving to embrace SIP as the current and future standard for IP telephony integration. However, it is inevitable that many customers will still have these types of call servers. Therefore, Polycom is investigating the use of partner gateways to provide interoperability for the SpectraLink 8400 Series.

Supported call server environments will be specifically identified in The *SpectraLink 8400 Series Wireless Telephone Call Server Interoperability Matrix* found on the [SpectraLink 8400 Support page](#) on Polycom.com.

- 2. Are the SpectraLink 8400 handsets used in a “hosted” environment?**

Like other Polycom voice endpoints, such as the SoundPoint IP products, the SpectraLink 8400 series can be deployed in a ‘cloud-based’ or hosted telephony environment. Generally, if the customer network (wired and wireless LAN and WAN) provides adequate performance in areas of packet loss, latency and jitter, then support in a hosted environment is feasible.

Supported call server environments (hosted and premises-based) will be specifically identified in The *SpectraLink 8400 Series Wireless Telephone Call Server Interoperability Matrix* found on the [SpectraLink 8400 Support page](#) on Polycom.com.

- 3. With the SpectraLink 8400 using the Polycom® UC Software, are all ARENA VIP and VFV partners automatically certified for interoperability?**

The 8400 series handsets incorporate the same SIP stack, core networking and RFC support as the SoundPoint and VVX platforms. However, to ensure interoperability resulting in a positive customer experience, testing will be required to validate each call server platform.

Supported call server environments will be specifically identified in The *SpectraLink 8400 Series Wireless Telephone Call Server Interoperability Matrix* found on the [SpectraLink 8400 Support page](#) on Polycom.com.

- 4. Which call servers are certified?**

Using Polycom® UC Software, the SpectraLink 8400 handsets will have direct integration with standards-based SIP call servers. For initial release, Polycom's intends to certify Avaya Aura® SIP Enablement Services (SES), Avaya Aura® Communication Manager, Avaya Communication Server 1000 (CS1000), BroadSoft Cisco UCM and Digium Asterisk. Polycom intends to certify additional SIP call servers to meet business and market objectives.

Supported call server environments will be specifically identified in The *SpectraLink 8400 Series Wireless Telephone Call Server Interoperability Matrix* found on the [SpectraLink 8400 Support page](#) on Polycom.com.

6. **Will the handsets work with Microsoft Unified Communications Platforms?**

At FCS, the 8400 handsets will support direct integration with Microsoft OCS 2007 R2 for instant messaging and presence at First Customer Shipment (FCS). The SpectraLink 8400 handsets will not work as Microsoft OCS telephony endpoints at that time. For telephony services, an alternate call server is required.

Additional testing is being done with Microsoft Lync, both natively and via gateway solutions. A gateway solution is available at FCS. Additional interoperability will be announced as it is certified and identified in the *SpectraLink 8400 Series Wireless Telephone Call Server Interoperability Matrix* found on the [SpectraLink 8400 Support page](#) on Polycom.com.

7. **What SIP call features are supported? How many line appearances are supported?**

Polycom® UC software supports the call features listed below. However, not all call servers are able to support the entire set. Therefore, the features available to a user will be dependent upon the individual call server tested, and may be a subset of the following:

Multiple (6) line appearances, Call Hold/Resume, Last Call Return, Music on Hold, Consultation Hold, Call Transfer, Overlap Dialing, Bridged Line Appearance, Three-Way Conferencing (local), Find-Me Call Forging, Call Screening, Call Park & Retrieve, Group Call Pickup, Redial, Call Waiting, Multiple Calls per Line, Do Not Disturb, Calling party ID, Called party ID, Connected party ID, Call Forward, Call Reject, Call Forward

8. **What licenses/resources are required to register on my call server?**

For supported call server platforms, valid line-side SIP licenses are required for registration of the 8400 series handsets. Call server support and licensing for SIP extensions vary from vendor to vendor, and platform to platform. The customer must contact the call platform provider to understand licensing requirements.

WLAN Integration

1. **Using QoS and security mechanisms based on industry standards means I can use the 8400 series with any AP, right?**

Standards for WLAN QoS and security ensure a baseline level of interoperability, but they don't address the performance requirements necessary for high-quality VoWLAN. Therefore, VIEW Certification is still required for WLANs supporting Polycom handsets.

2. **Which WLANs are VIEW Certified for the SpectraLink 8400 series?**

The VIEW Program will be expanded to include the SpectraLink 8400 Series. At first shipment, the 8400 handsets will be VIEW Certified with key WLAN partner's products, which will be announced at that time. Always refer to the [VIEW Certified Products Guide](#) to ensure proper interoperability and support.

3. **Do these handsets work on an 802.11abg WLANs?**

Yes, the SpectraLink 8400 handsets work on 802.11a/b/g and 802.11n WLANs.

4. **Does VIEW Certification apply to both 8400 and 80X0?**

The VIEW Certification Program will be expanded to include the 8400 Series. WLAN infrastructure products may be VIEW Certified with only one model handset or both. Be sure to consult the [VIEW Certified Products Guide](#) for the most current lists of which products are certified with the 8400 and the 80X0 handsets.

5. **What are the advantages of an 802.11n support in the SpectraLink 8400 Series?**

The 802.11n radio allows interoperability with the 802.11n WLANs being deployed today. 802.11n offers increased range and throughput and is the state-of-the-art Wi-Fi technology. Having the latest Wi-Fi technology ensures Polycom's customers get the maximum useful life out of their investment.

6. What WLAN security options do the handsets support?

At first release, the 8400 handsets will provide the same WLAN security options as the SpectraLink 8020/8030, WPA2 Personal and Enterprise. The 8400 handsets provide a robust platform that has the processing speed, computing capacity and chipset flexibility for additional security WLAN features to be added in the future.

7. Are the handsets Wi-Fi Certified?

The SpectraLink 8400 Series is fully compatible with applicable Wi-Fi standards, including the forthcoming Voice-Enterprise certification program. Polycom plans to certify the 8400 handsets shortly after this certification program becomes available in 2011.

8. What is Wi-Fi Standard QoS?

Wi-Fi Standard QoS includes the use of all the three Wi-Fi Alliance QoS mechanisms – namely WMM, WMM Power Save, and WMM Admission Control – to deliver enterprise-grade VoWLAN. Wi-Fi Standard QoS will be required for the Wi-Fi Alliance's forthcoming Voice Enterprise certification program, planned for launch in late 2011. Therefore, it is expected that industry-wide support for Wi-Fi Standard QoS will be expanding over the next one to two years.

9. Does Polycom have Wi-Fi Alliance (WFA) certification for WMM, WMM Power Save, and WMM Admission Control?

The SpectraLink 8400 handset will be Wi-Fi certified after the Voice-Enterprise and WMM Admission Control certification programs are available from the Wi-Fi Alliance, anticipated for late 2011. At shipment, the SpectraLink 8400 is fully tested by Polycom to provide acceptable performance with AP implementations of WMM, WMM Power Save, and WMM Admission Control.

10. Can the 8440/8450 handset run with only WMM support in the AP?

No. The 8400 requires at least WMM and WMM Power Save support in the AP. Use of WMM Admission Control is not mandatory, but is highly recommended and therefore the handset's default operating mode. Without WMM Admission Control there will be no admission control for the WLAN and oversubscription of AP is likely in heavily-loaded networks, resulting in performance problems such as poor audio quality.

11. Why is use of all three Wi-Fi QoS mechanisms highly recommended?

The combination all three mechanisms, WMM, WMM Power Save and WMM Admission Control, are required to provide enterprise-grade QoS. The three elements together are necessary for best audio quality, battery life and call capacity.

12. Is the handset Cisco Compatible Extensions (CCX) certified like the 80X0?

The 8400 Series is fully compatible to operate on CCX capable WLANs, but supports industry standards instead of Cisco-specific protocols and mechanisms.

13. Is the SVP Server supported with the 8400 series?

No. Polycom and SpectraLink are pioneers in VoWLAN (Voice over Wireless LAN) technology. For nearly 10 years, while standards for enterprise-grade QoS were developing, the SpectraLink Voice Priority (SVP) server and protocol, was the defacto standard for quality of service (QoS) for voice over Wi-Fi networks. In the last two years, IEEE standards for wireless QoS have advanced and been ratified by the Wi-Fi Alliance (WFA). Now that industry standards have matured, the SVP server is replaced with support for standards-based QoS.

Legacy Products

- 1. Can I mix 8400 series handsets with the 8020/8030 on the same network?**
Yes, as long as all the handsets are using Wi-Fi Standard QoS. Specifics will be provided for a number of customer scenarios in a forthcoming white paper.
- 2. Can I mix the 8400 handsets with 8002 handsets on the same network?**
No. The 8400 series handsets will only be supported for interoperability with the 8020 and 8030 handsets.
- 3. Can I mix the 8400 handsets with e340, h340 or i640 on the same network?**
No. The 8400 series handsets will only be supported for interoperability with the 8020 and 8030 handsets.
- 4. Will it work with SpectraLink Telephony Gateways?**
No. The SpectraLink Telephony Gateways do not support SIP.
- 5. Where is the 900MHz version of the 8400 Series?**
There will be no 900MHz version of the SpectraLink 8400 handsets. SpectraLink 6000 technology is not capable of supporting the high data rates required to exploit the advanced application integration features of the Wi-Fi based 8400 handsets.
- 6. Has Polycom decided to exit the 6000 business?**
The SpectraLink 6000 products are —and will continue to be—an important part of Polycom's wireless product offerings. There are no plans to discontinue the 6000 product line, including 6020 handsets.

Contact us

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