



Product Description

Aastra

BluStar for Conference Room

Aastra BluStar™ for Conference Room expands the BluStar Ecosystem to include a versatile video conferencing solution for medium to large boardrooms or conference rooms. Supporting an external HD camera, HD capable displays or projectors and audio options, BluStar for Conference Room provides a powerful and flexible communication and collaboration solution to meet the needs of modern businesses.

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1 Market Overview

The market for video communications is growing at a rapid pace with analysts predicting that the market for video conferencing infrastructure and endpoints will grow at double digit rates over the next few years. This includes not only telepresence and room based systems, but also the fast growing market for desktop and mobile endpoints.

The need to reduce travel costs as well as lost productivity stemming from time spent away from the office has traditionally been one of the biggest drivers for video communications, and is a strong use case that can provide a solid return-on-investment (ROI). Today, companies are increasingly adopting video to gain a strategic advantage. The use of video for both conferencing and collaboration (i.e. real time sharing of documents and other forms of contents) can lead to faster decision making, improved communications with partners and customers, and a faster time to market for new products and services.

The Aastra BluStar portfolio is a fundamental part of the evolution of Aastra Unified Communication and Collaboration (UCC) solutions that addresses the video collaboration needs of this growing market. Aastra is therefore focusing its developments towards content-rich services, such as video conferencing, personal video and desktop sharing to make the paradigm shift from voice to video as the natural way of communicating between people.

2 BluStar Technology Overview

2.1 Aastra BluStar™ Ecosystem

The BluStar Ecosystem is a range of clients and devices that address the increasing market needs for video collaboration and multi-media communications. It provides true unified communication and collaboration capabilities and is fully integrated with Aastra communication servers.

BluStar takes business communications to a new level across a choice of devices and clients providing a consistent user experience by using video as the key mode of communication. BluStar productivity enhancing tools provide more choice and flexibility to answer the increasingly diverse communication needs of today's modern enterprise. As a BluStar user it is possible to use video across all BluStar devices and clients connected to the same communication server.

The BluStar Ecosystem currently includes both devices and clients which consist of different hardware and software based components:

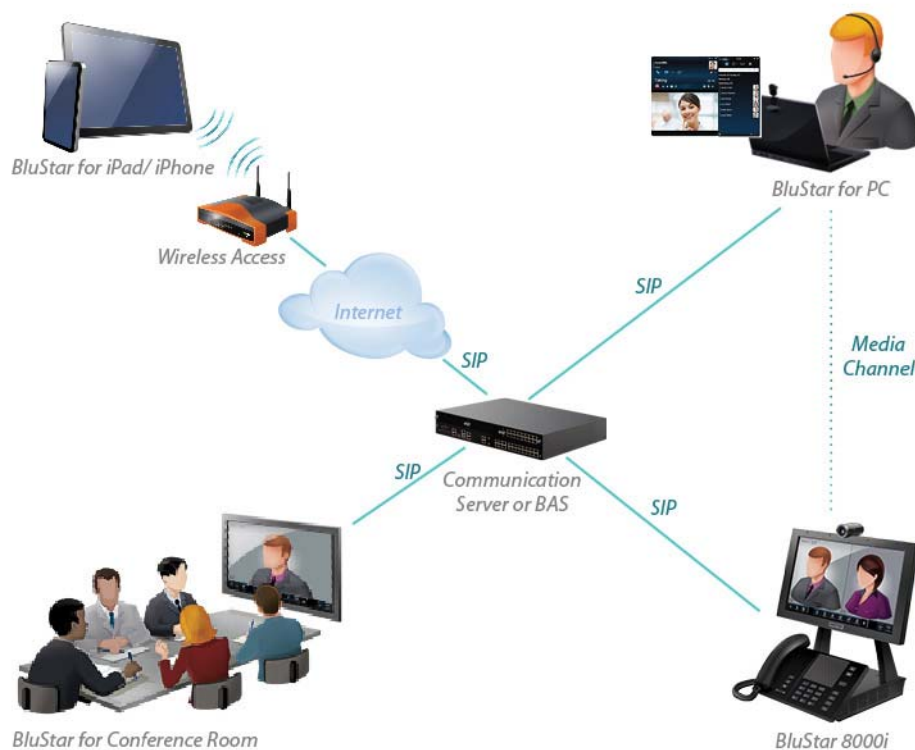
- BluStar 8000i Desktop Media Phone
- BluStar for Conference Room
- BluStar for PC
- BluStar for iPad
- BluStar for iPhone

3 BluStar for Conference Room - Product Overview

3.1 Aastra BluStar for Conference Room – Expanding the BluStar Ecosystem

Aastra BluStar™ for Conference Room expands the BluStar Ecosystem to include a versatile video conferencing solution for medium to large boardrooms or conference rooms. Supporting an external HD camera, HD capable displays or projectors and audio options, the BluStar for Conference Room Codec provides a powerful and flexible communication and collaboration solution to meet the needs of modern businesses.

With its intuitively easy to use interface and controls, BluStar for Conference Room promotes frequent and ad-hoc use, making it easy for true HD face-to-face communication. Its flexible multi-component configuration not only enables traditional conference room setup and usage but also enables the system to be used for unique applications where maneuverable cameras can share video streams. The flexibility of the system is further enhanced through the use of a wireless keyboard controller, wireless speaker and wireless microphones. BluStar for Conference Room is fully integrated with Aastra communication servers, providing a video collaboration solution which is cost efficient, easy to deploy, manage and use.



BluStar for Conference Room is designed for ease of use and simple configuration. By utilizing the same user interface as the award winning Aastra BluStar 8000i Desktop Media Phone, users can easily initiate multi-way video conference calls promoting greater collaboration between remote teams.

BluStar for Conference Room is available as an integrated kit that includes the BluStar for Conference Room Codec, an HD camera, a wireless audio conference phone and a wireless controller. Each of the individual kit components can also be ordered separately to facilitate upgrading voice only rooms to a video enabled solution. To complete the installation, an HD capable display or projector is required and is not provided as part of the kit.

3.2 Highlights and Key Features

3.2.1 BluStar for Conference Room highlights:

- Designed for ease of use and simple configuration
 - Open standards based application – SIP call control & H.264 video encoding.
 - Intuitive user interface promoting frequent and ad-hoc use
 - Consistent UI with other BluStar devices and clients – identical to the BluStar 8000i
- Fully integrated with Aastra communication servers
 - Easy to configure, manage and use.
 - Deployed like any SIP extension off the call manager
- Ad-hoc conferencing capabilities for multi-way video conferencing and collaboration
 - Up to 4-way when deployed with Aastra communication servers
 - Up to 11-way when deployed with a BluStar Application Server (BAS)
- Does not require the use of a Multipoint Control Unit (MCU)
- True HD video and audio communication
 - 720p HD 1280x720 video image resolution
 - G.722 wideband audio
- Standard Telephony Features
 - On-screen dial pad, Hold, Transfer, 4-way Conference, Favorites, Call Forward, Call Pickup, Redial/Call Histories, BLF/Presence, DND, MWI
- Rich Presence capabilities including: Calendar and Line status
- Built in VPN client for remote access
- Directory integration with LDAP, Microsoft Exchange
- Supports most HD capable displays and projectors via HDMI interface
- Supports most Multi-Touch Screen TVs for direct on-screen touch UI control
- True 720p HD color video camera
 - Pan-Tilt-Zoom camera control from remote BluStar 8000i as well as room based control
 - 3x Optical zoom
 - Up to 30 frame per second refresh rate
- Wireless conference phone with full echo cancellation
 - Superior audio quality and high pickup range with two wireless omnidirectional microphones and wireless speaker
- Wireless keyboard controller for easy control and configuration
 - Flexibility to originate calls from anywhere in the conference room
- Multiple Language Support
 - User Interface (UI) is available in several different languages
- Power saving options to reduce energy consumption

3.2.2 Multiway Video Conferencing

Nowadays, the modern workforce is increasingly mobile and distributed. It has become imperative for businesses to make effective communication a priority in order to maintain a competitive edge. BluStar for Conference Room, with its high-definition and lifelike video conferencing solution allows users to be more productive and expressive. Body language is an integral part of human communication and with the BluStar for Conference Rooms users will be able to communicate and collaborate in a more natural and visual way.

BluStar for Conference Room offers true HD video quality with 720p @ 30 frames per second with progressive scan. Up to 4-way conferencing with Aastra communication servers in either portrait or landscape mode is possible.



Up to 11 participants can be displayed concurrently when used in conjunction with Aastra's BluStar Application Server (BAS).



3.2.3 Rich Presence

BluStar for Conference Rooms' rich presence capabilities improve productivity by making it easy to get in touch with contacts at the right time using the right mode of communication. It provides detailed information about a given user's availability and current activity. When viewing entries in the favorites list users can see each contact's presence status. Status information available includes:

- Presence status bar - color coded for easy availability assessment
- Text status summary – Available, in meeting, busy, don not disturb, free text
- Line state details – PBX Line status
- Calendar presence information - Microsoft exchange calendar activity



Users of BluStar for Conference Rooms will be able to view aggregated presence information from multiple devices, networks and applications to provide accurate view of user status. For example, when a contact's status is displayed as 'In a Meeting', navigating to the individual's partial contact information display will reveal when the meeting is scheduled to end and the full contact information display will show additional details such as the appointment's subject. This brings additional flexibility and creativity to the management of user interactions.

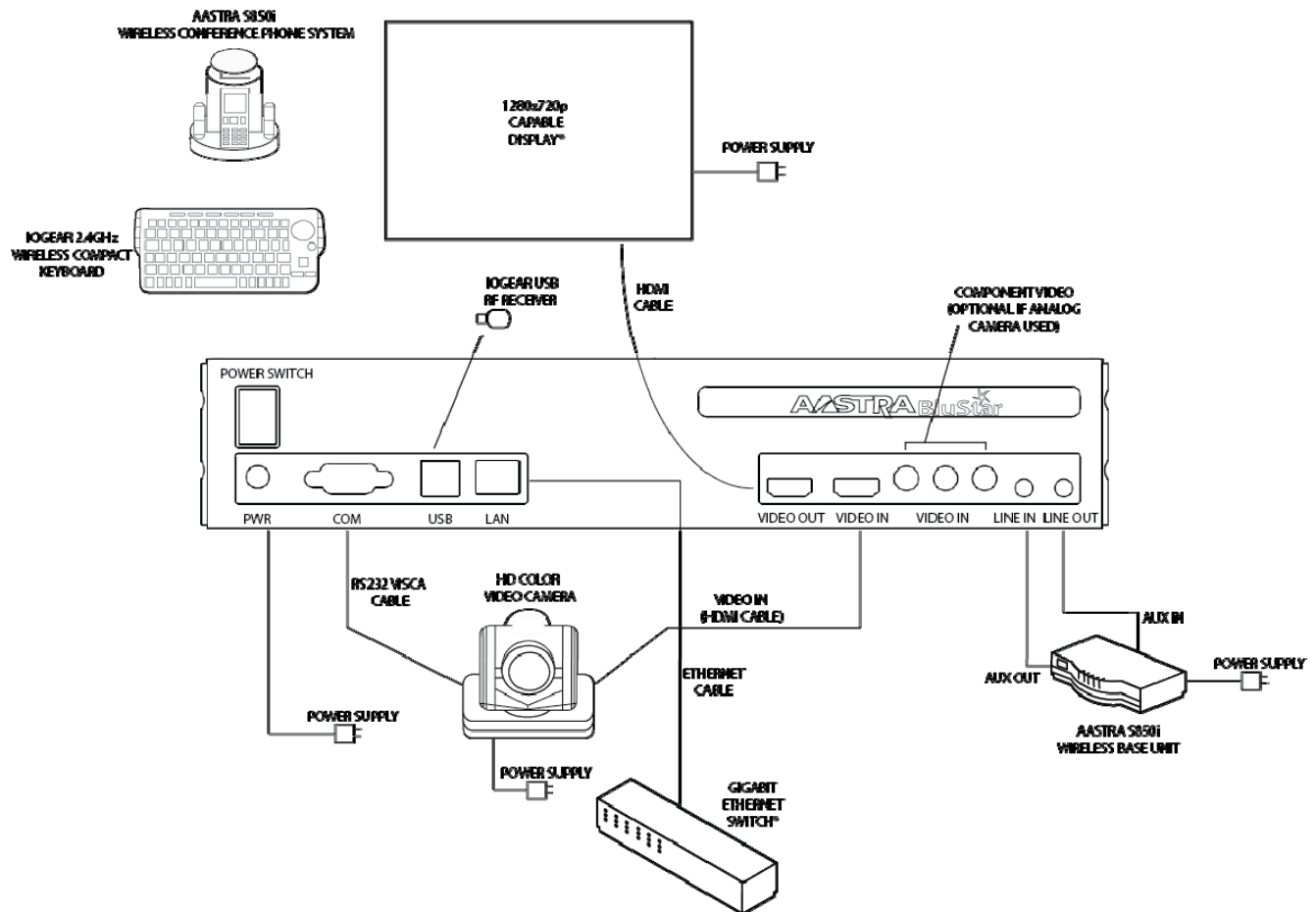
Rich presence features are supported in conjunction with Aastra's BluStar Server and Aastra's communication servers. Presence with Aastra BluStar Application Server (BAS) utilises has similar features but excludes calendar presence integration.

4 Solution Components

BluStar for Conference Room is supplied as a fully integrated kit consisting of:

- BluStar for Conference Room Codec
- BluStar HD 610 Camera
- Aastra S850i wireless conference phone
- Wireless keyboard controller
- Interconnecting audio and video cables

Designed for ease of deployment and flexibility of configuration, BluStar for Conference Room enables users to easily initiate multi-way video conference calls promoting greater collaboration between remote teams.



* The 1280x720p capable display and Gigabit Ethernet Switch are not provided as part of the BluStar for Conference Room kit.

4.1 BluStar for Conference Room Codec

The BluStar for Conference Room Codec is at the heart of the conference room solution. Providing the video encoding and decoding capabilities as well as all IP routing, signaling, call control and user interface for configuration and daily use.

The standards based interfaces built into the Codec enables connectivity to cameras, audio and display devices. While the BluStar for Conference Room Codec can be bought separately and used with customer supplied devices, Aastra also offers a fully integrated kit that is pre-configured and certified and comes with all required connecting cables and power supplies for an easy to deploy option.



BluStar for Conference Room Codec highlights:

- Consistent UI with other BluStar devices and clients - identical to the BluStar 8000i
- Open standards based application – SIP call control & H.264 video encoding.
- Deployed like any SIP extension off the call manager
- Multi-way video conferencing and collaboration
 - Up to 4-way when deployed with Aastra communication servers
 - Up to 11-way when deployed with a BluStar Application Server (BAS)
- True HD video and audio communication
 - 720p HD 1280x720 video resolution 30fps
 - G.722 audio
- Rich Presence capabilities including: Calendar and Line status
- Does not require the use of a Multipoint Control Unit (MCU)
- Standard Telephony Features
 - On-screen dial pad, Hold, Transfer, 4-way Conference, Favorites, Call Forward, Call Pickup, Redial/Call Histories, BLF/Presence, DND, MWI
- Directory integration with LDAP, Microsoft Exchange
- Standards based interfaces for audio and video:
 - HDMI video IN and OUT
 - Component R/G/B video IN
 - Pan-Tilt-Zoom COM port for camera control
 - USB 2.0 for wireless keyboard controller
 - 3.5mm Stereo jacks for audio IN/OUT

- Supports most HD capable displays and projectors via HDMI interface
- Supports most Multi-Touch Screen TVs for direct on-screen touch UI control
- Flexible placement options
 - Can be placed on a media stand
 - Can be mounted in a standard 2U audio/video component rack
 - Can be mounted on the wall
- Multiple Language Support
 - User Interface (UI) is available in several different languages
- Power saving options to reduce energy consumption

4.2 HD 610 Colour Video Camera

The Aastra BluStar HD 610 camera supplied with the BluStar for Conference Room kit provides true HD 720p resolution video. The HD 610 is fully integrated with the BluStar for Conference Room Codec to ensure all configuration settings are pre-set to provide a plug and play solution that delivers crisp and clear images for true HD video conferencing.

The robust features of the HD 610 enable it to easily handle the requirements of large conference room layouts, yet it is flexible enough to accommodate small to medium size applications as well. The BluStar HD 610 camera can also be ordered as a separate item.



HD 610 Camera highlights

- Pre-configured for BluStar for Conference Room Codec
- Supports Pan-Tilt-Zoom (PTZ) controls
 - via BluStar for Conference UI, IR remote control and optionally via remote BluStar 8000i
- IR remote control (supplied)
- Image: 16:9 2.1 Mega pixel
- Video Signal: 720p/30fps
- Lens zoom: 3x optical zoom
- Visual Angle: 70°
- Pan Rotation: ± 177.5 degree
- Tilt Rotation: ± 45 degree
- Connecting cables (PTZ and DVI for video) supplied
- 12v DC powered

4.3 Aastra S850i Wireless Conference Phone

The S850i wireless conference phone from Aastra, comprised of one wireless speaker, two wireless omnidirectional microphones and a handset dialer, completely transforms the conference call experience. Employing the latest in secure wireless audio technology, the S850i is designed specifically for use in conference rooms, boardrooms and executive offices. The S850i gives users unprecedented freedom with respect to placement and accessibility of the wireless speaker, microphones and handset dialer to meet the needs of the conference call setting.

Supporting wideband audio technology, S850i delivers superior sound quality and performance meeting all of your audio and video conferencing needs. The audio auxiliary IN and OUT connection ports allow integration with video conferencing solutions such the Aastra BluStar™ for Conference Room and enable connectivity with PC applications including the Aastra BluStar™ for PC.

The S850i provides excellent acoustic echo cancellation and the conference phone is immune against GSM interference. Using the latest and most innovative technologies the S850i allows you to hear and be heard effortlessly.

Completely wireless, the Aastra S850i is a unique marriage of innovative technology and ergonomic design allowing unparalleled freedom and flexibility for audio and video conferencing.



S850i highlights

- No more wires on the conference table
- Wireless flexibility for small, medium or large conference rooms
- Superior audio quality and high pickup range with two omnidirectional microphones
- Conference calls or private calls can be made using the handset dialer
- One touch toggle to switch between private and conference calls
- Connectivity with PC applications such as Aastra's Blustar for PC with optional USB connector kit
- Can be used as audio only conference phone with a communication server and be connected to BluStar for Conference Room for video conferencing use (not dedicated to video conferencing).
- Bluetooth enabled, allows S850i to be the speaker and microphone for cell phone calls
- Excellent acoustic echo canceller for speaker and microphones allows for a natural conversation
- The S850i is compatible with Aastra's MX-ONE, A400, A5000, Clearspan communication servers and multiple third party PBX platforms

4.4 Wireless Keyboard Controller

The wireless keyboard controller provides users the ability to remotely access and navigate the UI of the BluStar for Conference Room. It is all that is required to control and manage all aspects of making video calls and adding participants for multi-way conferencing. With its ergonomic design, it is convenient to hold and enhances the user experience by making the way you type, navigate and interact with the on screen user interface easier and more natural.

The wireless keyboard controller comes with a micro USB dongle which connects into one of the 2 USB interfaces on the BluStar for Conference Room Codec. Giving over thirty feet of wireless freedom.



Wireless Keyboard controller highlights

- Compact Wireless Keyboard fully integrated with BluStar for Conference Room
- 2.4GHz technology offers greater wireless range up to 33 feet away from the BluStar for Conference Room Codec
- Supplied with a USB wireless dongle which connects into any of the USB ports on the BluStar for Conference Codec
- Ergonomic design to make typing and navigation the user interface intuitively easy

4.5 Audio and Video Cables

While conference rooms come in all shapes and sizes, driving the need for a variety of length of cables, Aastra has supplied a complete set of cables to cover the majority of configurations. Supplied with each BluStar for Conference Room Kit are:

- One 3m DVI to HDMI cable (video stream) to connect camera to codec
- One 3m VISCA to DB9 COM port serial cable (PTZ control) to connect camera to codec
- One 3m HDMI to HDMI cable (video stream) to connect codec to HD monitor (monitor not supplied)
- Two 2m 3.5mm audio cables (audio in/out) to connect the codec to the S850i wireless conference phone
- Two 3m Ethernet cables (IP traffic) to connect codec and conference phone to local LAN
- Power supplies for codec, conference phone, camera with both EU and NA wall adapters

4.6 Output HD Display Device Options

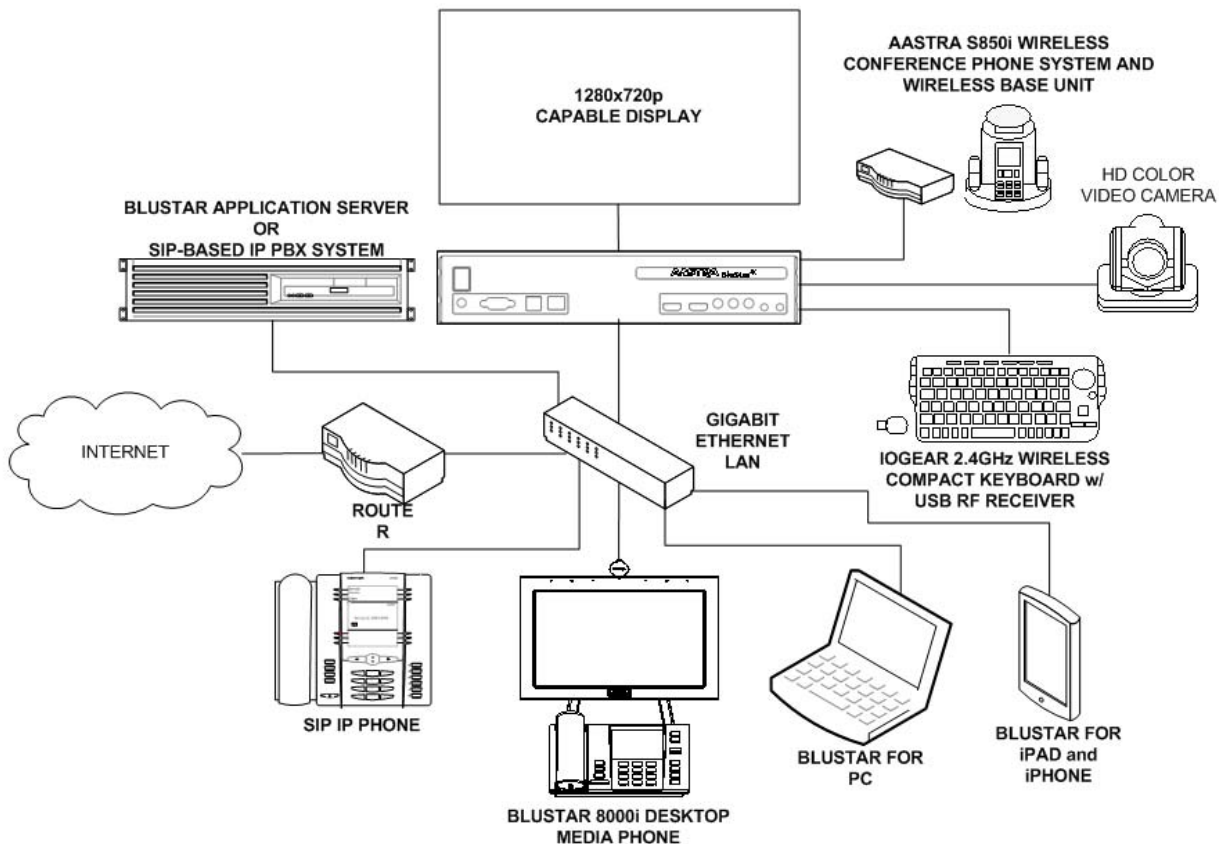
BluStar for Conference Room provides 720p HD video via a supplied HDMI cable. Compatible with most commercially available HD TV's, over head projectors and other display options. External monitors should be capable of displaying 720p at 30fps to enjoy the true HD capabilities that BluStar offers.

By offering standards based interfaces, BluStar enables customers to take advantage of the wide range of commercially available devices. In addition, by providing a USB interface for keyboard control, BluStar can support the emerging range Multi-Touch Display TV's that provide touch interface control identical to the BluStar for 8000i user interface.

Aastra does not offer HD capable display monitors as part of the BluStar for Conference Room kit and customers should note that we cannot guarantee compatibility with all monitors or multi-touch display products.

5 Network Integration

Aastra BluStar for Conference Room seamlessly integrates with all the BluStar Ecosystem devices and clients, Aastra communication servers and the BluStar Application Server (BAS). Integration into existing IP networks via Ethernet and connecting to the call control via SIP, BluStar for Conference Room presents itself as just another SIP extension.



Recommended system environment: Gigabit Ethernet LAN (1000 Mbps).

6 Licensing

BluStar for Conference Room, like all BluStar clients and devices, presents itself as just another video enabled SIP extension to the communication server. The BluStar for Conference Room device is logically separated from the user that logs into the device. Users themselves may need licenses allocated by the communication server to enable them to use a video enable SIP device. Alternatively the Conference Room device can be allocated its own unique user credentials for dedicated assignment.

Any user licensing requirements is determined by the communication platform that BluStar is connected to. BluStar for Conference Room natively supports 4-way video conferencing with its built in encoding/decoding capabilities.

7 Product Specifications

Product Compatibility	Fully Compatible with all BluStar ecosystem devices & clients. Compatible with Aastra MX-ONE, Aastra 50000, Aastra 400, Aastra Clearspan, BluStar Application Server and most standards based SIP call control	
Components	BluStar for Conference Room kit fully integrated and includes: Codec HD 610 Camera Wireless keyboard controller S850i wireless conference phone Audio and video cables	
Standards Supported	SIP Call control H.264 Video 1280x720p 30fps 16:9 ratio G.722, G.711 DECT 6.0 (1920-1930 MHz) DECT ETSI 3000 175 (1880-1900 MHz)	
Specifications/Interfaces	Codec H.264 SIP signaling Native 4-way encoding/decoding Up to 6Mb/s video streaming	Two HDMI PORTS VIDEO IN and OUT One component VIDEO IN R/G/B Two USB 2.0 ports Two 3.5mm audio LINE IN and LINE OUT One Gigabit Ethernet port One DB9 COM port
	HD 610 Camera 3x optical zoom 70 degree viewing angle 16:9 2.1 Mega Pixel Pan Rotation: +/- 177.5 degree Tilt rotation: +/- 45 degree Video signal 720p/30fps	One VISCA IN port One VISCA OUT port One DVI port
	S850i conference phone G.722 G.711 DECT 6.0 (1920-1930 MHz) DECT ETSI 3000 175 (1880-1900 MHz)	One 100BT Ethernet port Two 3.5mm auxiliary audio AUX IN/OUT Two USB 2.0 ports
	Wireless keyboard controller 2.4GHz wireless 33 feet connectivity to micro USB dongle	2.4GHz wireless keyboard Micro USB dongle 2.4GHz

8 Acronyms

AD	Active Directory
BAS	BluStar Application Server
BWM	Bandwidth Manager
HA	High Availability
HD	High Definition
LAN	Local Area Network
LDAP	Lightweight Directory Access Protocol
SBC	Session Border Controller
SIP	Session Initiation Protocol
UCC	Unified Communication and Collaboration
VPN	Virtual Private Network

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