

Unified Communications: An SMB Application Guide

Creating an Affordable Network Using
Grandstream IP-based Solutions





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What is Unified Communications?

Unified Communications is the ability to integrate a collection of real-time and non-real-time systems, products, services and devices to optimize business processes. Businesses that adopt a UC solution that integrates voice, data, video and mobility applications look to gain significant benefits including increased productivity/efficiency, reduced costs (capital and operating), better decision making, greater flexibility, improved workplace collaboration, improved professional appearance/customer service and increased revenue by enabling users to communicate anytime, anywhere.

Introduction

A huge factor for business success and growth, for any size company, is enabling employees to be as productive and responsive as possible. Previously, large enterprises controlled the vast purchasing power with respect to adopting new technology for improved communications and workplace efficiency. Smaller businesses used to only dream of having deep financial pockets to afford such business significant solutions. Those days are gone. The evolution of technology, based on open industry standards vs. proprietary protocols, along with increased marketplace competition has given SMBs access to all kinds of enterprise-grade communications technologies.

This application guide provides SMBs seeking to upgrade or create an IP-based network with useful information on how to start down the path of unifying voice, data, video and mobility applications for reduced costs and increased business effectiveness. Specifically, this guide summarizes the benefits of unified communications (UC), shares an example of how an SMB can move to an IP-based solution and how Grandstream can be your partner in building an integrated communications network for improved productivity, reduced costs and better customer service. Small businesses no longer have to shy away from, or sacrifice, enterprise capabilities based on cost or complexity issues. The most important things an SMB can do is to determine the level of UC applications required in their business and to accurately evaluate marketplace offerings to determine features, costs and ease of installation and ongoing maintenance.

Unified Communications (UC)

Today, there's an extensive and exciting array of communications products and applications (email, video conferencing, mobility, voice, surveillance) available to help businesses achieve heightened sales success and business growth. UC advancements have enhanced the way SMBs handle their operations with respect to how employees go about their day-to-day activities and as how the company interacts, services and builds its brand with the outside world. A key boost that UC offers SMBs is the perception that the SMB is a much larger organization. This increased perception helps SMBs to be more competitive in the marketplace to gain new customers and achieve business success.

Ways That Grandstream UC Benefits SMBs

- Ability to easily conduct own move, adds and changes (MAC) and customize, at any time; Robust UC user features/functions for proven increased in productivity and savings
- Connects geographically-dispersed offices and remote workers allowing them to access the same phone system features as the headquarters via desktop or mobile phone
- Reduces long distance calling costs and cellular charges; cuts travel costs
- Low upfront system costs and minimal longer term equipment and service costs provides excellent Return on Investment (ROI)

Key Differences Affecting Vendor UC Solutions

These costs can increase a UC solution by thousand of dollars depending on the vendor selected:

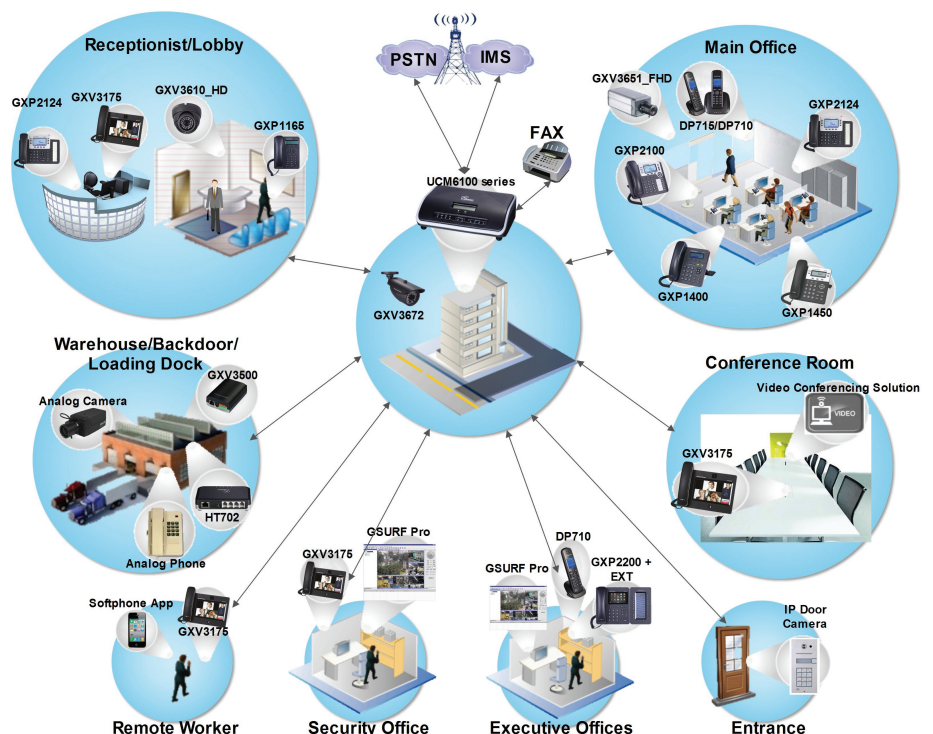
- **Initial upfront equipment costs** – research what features are included in the base product costs; ensure features like IVR, call routing are not considered add-on that will drive costs up
- **Ongoing or recurring fees** – using certain features on a yearly basis affects SMBs operating budget
- **‘Add-on’ licensing fees** – avoid these ‘turn on’ fees down the road by choosing a solution that already includes IVR, auto attendant, call reporting upfront – these are critical features SMBs need to be competitive
- **Future software upgrade fees** – Inquire about upgrades in the future and whether they are free or will be available at an additional cost

- Simple, user-friendly technology handled by internal staff; no outside IT firm required
- Offers perception that SMB is actually a bigger business that it is
- Adds mobile support for remote workers and road warriors; Employees able to access and share information internally and externally to be more productive and competitive; Ability to access work email and voicemail via mobile phones or to receive voicemail via email
- Telepresence and video conferencing technologies help to unite and manage off-site employees
- Integrated message handling (voice, fax, email, mobile, etc.) offers greater flexibility and time savings
- Eliminates third-party conference costs
- Strengthens customer service by using features like IVR and call routing queues for superior call handling
- And more

Implementing UC: An SMB Application Example

UC helps SMBs enhance the level of communications and customer service within a geographically-dispersed business while reducing capital and operating costs.

SMB Network Diagram



Grandstream Results Achieved

- New enterprise-grade UC features catered to their business operations for added cohesion and collaboration
- Reduced telecom and long distance costs between office locations and remote workers; Saves on cell phone bills by routing domestic and international calls made on a smartphone through VoIP instead of the cellular network
- Affordable 'get started' costs including all hardware and software (excluding SIP Phones)
- No annual licensing fees, recurring fees or software/firmware upgrade costs
- Migration to an IP network results in lower equipment and service costs
- Web interface simplifies set-up, customization, remote management and maintenance allowing internal staff to handle the system; outside IT firm eliminated
- Expanded voice communication options help to eliminate need for a full-time receptionist with custom voice features like IVR, call queue, call recording, call routing and conferencing features; Call routing, call queues and ring groups help to direct calls to appropriate departments improving customer service
- Adds mobility-based features to network including the appearance all locations are part of corporate office by uniting geographically-dispersed locations on one centrally-located IP PBX; extension dialing across network; mobile use of all features, mobile and remote workers located worldwide now have access to business calls, files, recordings and surveillance feeds
- Future expansion support
- Retains aspects of existing network including current analog phones by connecting to the VoIP network for extreme cost savings through SIP Trunking
- Introduces telepresence-based video conferencing for improved workplace collaboration and real-time video communications supporting video calling to any SIP video endpoint (curbs travel costs); Adds real-time video surveillance of facilities and IP door phones using a variety of video codecs
- Advanced data support through fax, fax/voicemail forwarding to email, call detail records, company phonebook integration and system backup

Implementing UC With Grandstream

With a full range of IP endpoints and networking products designed specifically for SMBs, Grandstream partners with customers to create enterprise-grade communication solutions for every business. These solutions offer rich feature functionality at an affordable price that delivers recognizable business benefits like increased productivity, reduced time on hold, streamlined call routing, reduced communication costs, fewer missed calls, etc.



Grandstream: Your UC Partner

- **Enterprise-grade, on-premise communications solution for unifying voice, data, video and mobility apps**
- **Affordable to install and manage while reaping significant business rewards**
- **Robust features set with no large upfront or recurring fees**
- **Extreme value/Business Benefits/Payback**
- **Sophisticated entrée to mobility**
- **Easy to setup, use and maintain**
- **Open standards ensures network- and enterprise-side product interoperability and offers greater network flexibility**

SMBs have the same communications technology requirements as larger enterprises. What can cripple an SMB and affect their plan to migrate toward UC are future budget considerations involving ongoing licensing fees and the network set-up, maintenance and administration. Grandstream products are specifically designed so that SMBs internal staff or their reseller/system integrator can self-administer and manage the network versus having to hire an outside IT firm. Grandstream adheres to industry open SIP standards for product development ensuring network- and enterprise-side product and service interoperability. Ease of integration through open standards allows businesses to confidently add newer technology sooner rather than later.

UCM6100 series IP PBX

The backbone of a Grandstream UC network is the UCM6100 series IP PBX Appliance. The UCM6100 is an open source, licensing-free SMB IP PBX appliance for delivering secure and reliable voice, video, data and mobility apps. Powered by an advanced hardware platform based on Asterisk®, the UCM6100 series helps smaller organizations to affordably use VoIP to increase productivity, provide better customer service, unify communications on a single platform and save money on communications costs.

Listening to customers around the globe, Grandstream realizes that a large number of SMBs want to adopt UC to be more competitive. The common thread or barrier to entry heard most frequently is the SMBs ability to attain the features needed at a price they can afford.

What differentiates the Grandstream UCM6100 series IP PBX from other market solutions? No annual licensing fees, recurring fees or upgrade costs along with a robust feature set are key reasons why SMBs turn to Grandstream. The UCM6100 series includes valuable business transforming communications features, including video conferencing, video calling, Call Detail Records (CDR), IVR, voicemail/fax forwarding to email, voice conferencing and the ability to remain connected to the business anywhere at anytime. Traditionally, these advanced features were only in use by larger enterprises (and out of the reach of SMBs) because they could afford to spend hundreds of thousands of dollars per year. Today, these features are typically sold in modules on other vendor solutions and require annual licensing fees and upgrade costs, along with an on-site IT team to manage the solutions.

Network setup, customization and ongoing maintenance are also huge concerns for SMBs when selecting an IP PBX for unifying a communications network. The UCM6100 series merges all the voice, video, data and fax services into one, converged and unified IP network. This drastically cuts equipment, labor and service costs. Using the Grandstream's intuitive web interface with mouse-over descriptions of each reach field and best practices for setting up a specific field, all communications features of the UCM6100 series are easily setup and configured with a click of a mouse button.

SIP Endpoint Applications

Refer to Appendix A for more detailed descriptions of each SIP endpoint.

Receptionist/Lobby

GXP2124 IP Phone

- 4-line phone with 28 XML programmable speed-dial/BLF keys offers one-touch access to frequently dialed numbers.
- Monitors employees on the phone for call transferring, etc.

GXV3175 IP Multimedia Phone

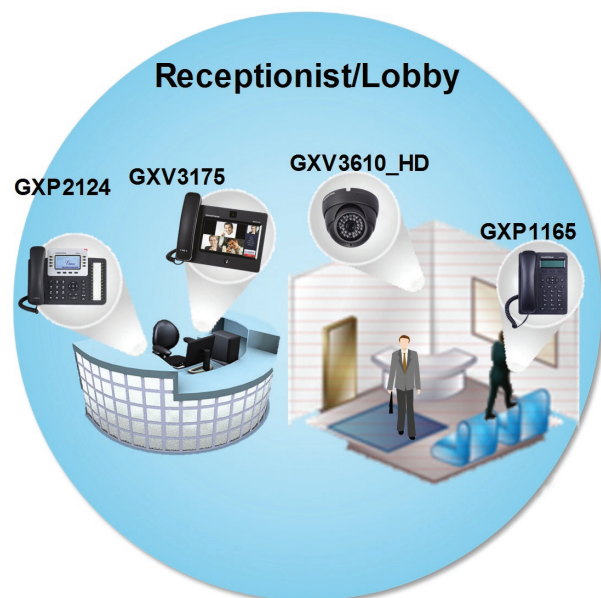
- Makes and receives video calls whenever an alarm is triggered by an office video surveillance camera.
- Uses phone to allow visitors access through the IP Door camera at the office entrance.

GXP1165 IP Phone

- Single-line phone with an LCD screen that displays the date and time.
- Primarily for lobby visitor use and emergency calls.

GXV3610_HD IP Camera

- Indoor, infrared HD IP camera used to monitor the lobby during the day and at night for possible intruders when all of the lights are powered off.



Main Office

GXP1400/GXP1450 IP Phones

- These 2 line HD phones with graphical LCD, speakerphone and programmable keys are a popular choice for most employees as they take up very little desk space while offering advanced VoIP calling features.



Benefits of UCM6100 series IP PBX Appliance

- **Multiple office peering**
- **Ability to use SIP trunks and Analog (PSTN) trunks**
- **Video surveillance integration**
- **Fast, easy installation and remote management using Web UI**
- **Auto-detection provisioning**
- **Advanced SIP security protocols**
- **Fax inclusion**
- **Multiple locations on a shared network**
- **Advanced call-routing features built-in**

GXP2100/GXP2124 IP Phones

- Employees with high call volume use these 4-line phones that feature numerous soft keys that can be set as speed-dial/BLF keys and/or dedicated speed-dial/BLF keys.

DP715/DP710 DECT Cordless IP Phones

- For office mobility while making/receiving calls, DECT cordless phones are placed on the desk and configured to access any employee business extension.
- Can be configured to match ring or hunt groups, allowing a sales team, for example, to have multiple phones to alert them when a call comes into the sales line with the first pickup getting the call.

GXV3651_FHD IP Camera

- Features full 1080p HD recording and monitoring and also has advanced sensors for monitoring at night when the lights are turned off.

Remote Worker

GXP IP Phones/GXV3175 IP Multimedia Phone

- For a remote worker, any IP phone can be installed by simply pointing it back to the IP address on the UCM6100 series IP PBX Appliance. The UCM series will then auto-configure the phone, allowing the remote worker to be up and running in minutes.
- The GXV3175 is another good remote worker phone as it offers free video calls to other GXV IP Video Phones, while also being able to make and receive video calls to any endpoint that supports SIP – including any 3rd party video phone or video conferencing solution.



Softphones

- Extremely useful for remote workers, Grandstream's UCM6100 series IP PBX Appliance allows any employee to pair their extension with a compatible softphone application – such as Counterpath's Bria application. This lets the extension to be paired with a user rather than a hard location. Employees can make and receive calls using their business extension on their cell phone from anywhere.

Office Entrance

IP Door Camera

- Compatible with any SIP Video endpoint, the UCM6100 series integrates with an IP Door Access Camera to create the ideal entrance solution.



- A visitor to the door entrance simply buzzes in, the IP Door Camera makes a call to any desired extension on the IP network and then visitor is allowed to enter.
- Businesses use IP Door Cameras to manage who has access to the office, provide easy entrance into the facility and maintain a secure environment. Employees can also call the IP Door Camera to see what is going on at the door at anytime.

Security Office/Security Guard

GXV IP Video Cameras/VMS/Encoders & Decoders

- The UCM6100 series along with other IP surveillance products (analog or IP cameras connected to encoders/decoders) allow SMBs to create a comprehensive, facility-wide security solution.
- IP Video and analog surveillance cameras (analog cameras need to be connected to one of Grandstream IP Video encoders/decoders) can be easily monitored and controlled by GSurf Pro.
- GSurf Pro is Grandstream's FREE Video Management Software that monitors and records up to 36 cameras simultaneously. GSurf can be set to run on multiple computers throughout the office, including in the security office.



GXV3175 IP Multimedia Phone

- A security officer can use the GXV3175 to make and receive video calls to any of the IP cameras in the facility – offering an additional method for alerting the office to any security concerns that may arise throughout the office.

Loading Dock/Warehouse/Back Entrance

GXV IP Video Encoders/Decoders & HT ATAs

- SMBs with existing analog cameras and/or analog phones can utilize the GXV350x series of IP Video Encoders/Decoders and HandyTone (HT) series of Analog Telephone Adapters to preserve their equipment investment while integrating those devices to an IP network.
- An existing analog camera can be connected to a GXV3500 IP Video Encoder to convert the video stream to IP so SMBs can essentially turn the analog camera into an IP camera.
- Analog phones can be connected to any of Grandstream HT series of ATAs, such as the HT702, to allow analog phones to make and receive VoIP calls.



Conference Room

3rd Party Conferencing/ GXV3175 IP Multimedia Phone

- Compatible with all SIP video devices, the UCM6100 series allows SMBs to implement any 3rd party video conferencing solution to cut down on communication costs by making IP voice and video calls in a conference room.
- The GXV3175 with a 7-inch display and touch screen functionality can be used in a conference room for free video calls to other Grandstream video phones, video calls to other existing SIP video endpoints and 3-way video calls.



Executive Office

GXP2200/DECT Phones/GSurf VMS

- The GXP2200 Enterprise IP Phone for Android gives executives access to one of the most advanced desktop communication tools.
- It's one of few IP phones in the world that runs the Android platform, allowing users to access the hundreds of thousands of business and productivity apps they already know and rely on from their smartphone or tablet use.
- The GXP2200 can be synced with an Android smartphone to allow easy transfer and access to calendars, contacts and more. The GXP2200 can be paired with up to 4 GXP2200 Extension Modules, which feature an LCD screen, for quick and easy speed-dial/BLF access to up to 160 contacts at the touch of a finger.
- Every executive can benefit from using a DP715 or DP710 DECT Cordless IP Phone in his office for split second mobility to move around the facility while never missing a call.
- To keep a pulse on the business's premises at any point in time and adjust the alert and notification settings of all cameras on the network, GSurf Pro on the executive's computer provides an easy surveillance-monitoring tool.





The UCM6100 series IP PBX offers enterprise-grade UC features for SMBs in a small, easy-to-manage VoIP PBX appliance with no expensive licensing fees or upgrade costs.

Key Grandstream UC Features

The UCM6100 series IP PBX has a wide range of features and functions to help businesses communicate more effectively, save costs and streamline business processes. Among the most popular capabilities includes:

Interactive Voice Response (IVR) - A built-in, multi-level IVR that lets incoming callers interact with a company's host system via a telephone keypad or by speech recognition, after which they can service their own inquiries by following the IVR dialogue. IVR systems respond with prerecorded or dynamically generated audio to further direct users on how to proceed. IVR applications are used to control almost any function where the interface can be broken down into a series of simple interactions.

Auto Attendant - Allows callers to be automatically transferred to an extension without the intervention of an operator/receptionist. The auto attendant offers a simple menu system ("for sales, press 1, for service, press 2, 0 for a live operator", etc.).

Call Queue - During peak business hours, businesses may experience a high call volume and not be able to immediately answer every forwarded call. Rather than missing important calls, the built-in call queue keeps a caller on the line listening to hold music while continuing to reach a list of call forwarding numbers.

Call Routing - Getting a placed call from one endpoint to another through the network is call routing. Decisions can be made for many reasons including least cost (toll bypass), least congestion, time of day, day of week, etc.

Call Detail Records (CDR) - Call detail reporting itemizes all incoming and outgoing calls and provides phone usage records broken down by line, date, time and more.

Call Recording - Comprehensive call recording allows calls to be recorded and saved onto the UCM6100 series flash memory for training, tracking, quality control or legal purposes.

BLF - Busy Lamp Field (BLF) is a light on an IP phone that identifies whether another extension connected to the same PBX is busy or not. From a BLF field, it can be known whether the line or user is currently making a call. A call can be placed directly from the BLF field making it easy to keep in touch with other employees using a single click.

Voice Conferencing (Up to 5-way) - Easily create up to a 5-way call from one IP phone to make keeping in touch easier and more efficient than ever before.

Voice Conferencing (Bridges) - Features up to five 32-user conference bridges, which can be accessed by dialing an extension or calling a direct number. Conducting large meetings with up to 32 people is made easy.

Codec Transcoding - The IP PBX transcodes any voice call in case the codec made to initiate the call is not supported by the call recipient, or visa versa. This ensures that all calls go through with the highest degree of clarity.

Voice Encryption - Safe and secure encryption is built-in. TLS encrypts calls so that no one can listen in to your calls. SRTP encrypts account information so it can never be hacked.

Video Conferencing Solutions - Full support for any SIP video device allows users to utilize the existing video conferencing solution already in place, or implement any new video conferencing solution directly onto the IP network using the UCM6100 series. Keep in touch with customers, employees, and perspective clients through face-to-face, more productive meetings.

Video Calling - Telepresence-based video calls can be made directly to and from any IP videophone or PC video client for more productive calls and to visually keep in touch.

IP Door Solutions - Integrate an IP door solution into UCM6100 series for increased security by keeping control of who can gain access to facilities. IP door solutions also allow organizations to effectively greet visitors and direct them appropriately once on-site.

Video Surveillance Solution - Grandstream uniquely lets SMBs to incorporate a comprehensive video surveillance solution into their business using the existing network infrastructure. IP video cameras utilize the IP network to stream, record, and deliver audio and video feeds from IP video surveillance camera. All that is required is to install the camera in the desired location and connect it back to the IP Network. Camera feeds are easily routed and viewed internally or remotely via password-protected interfaces. Sending alerts/notifications to any IP videophone on the network, cell phone number, email address, etc. is also available.

Fax - Integrate the fax line so making and receiving faxes is as cheap and easy as ever. Faxes can also be forwarded to email.

Phonebook File - Easily create a company (LDAP) phonebook from an Excel document simply by saving it to the UCM6100 series. All IP phones on the network will instantly pickup and access the phonebook without any further manual work needed. Other IP PBX market solutions do not support LDAP phonebooks and require users to manually point each phone to the phonebook server.

Fax/Voicemail to Email - Faxes and voicemail can be forwarded directly to email so employees can access anytime, anyplace.

System Backup - Never lose configuration files or settings with automatic backup of system settings to an external SFTP server, a USB drive or an SD card. This is especially useful when looking to mirror configurations on other UCM6100 series IP PBXs.

Multi-Language Support - The web user interface is available in up to 7 different languages, allowing the device to be easily deployed and utilized all over the world.

Remote Configuration - The UCM6100 series web user interface can be accessed remotely over the Internet (password protected). Businesses, resellers and integrators can configure phones, add extensions, and setup any of the UCM6100 series long list of customizable features from anywhere, anytime.

Auto-Discovery - Add any Grandstream IP phone or IP surveillance camera to the network with auto-discovery of Grandstream IP endpoints that occurs immediately when the endpoint is plugged into the network. The UCM6100 series automatically discovers the device and auto-configures it.

Zero-Configuration - With zero-configuration of Grandstream endpoints, once the device is plugged into the network, auto-discovery automatically finds the device. Zero-configuration automatically configures the device so it is fully usable within seconds.

NAT Router - A built-in NAT router allows it to serve as an internal router in addition to an IP PBX (UCM6102 only).

SIP Trunking - A Voice over Internet Protocol (VoIP) and streaming media service based on the Session Initiation Protocol (SIP) by which Internet telephony service providers (ITSPs) deliver telephone services and unified communications to customers equipped with SIP-based private branch exchange (IP PBX) and Unified Communications facilities. Most Unified Communications software applications provide voice, video, and other streaming media applications. (Source Wikipedia)

Appendix A: Grandstream SMB IP Product Solutions

IP Multimedia Phones/IP Phones

Grandstream phones, ranging from 6-line executive to 1-line basic IP phones, incorporate auto-discovery and auto-configuration by the UCM6100 series, making setup and configuration fast and effortless.



GXP2200 Android Multimedia Phone w/optional extension module

Ideal for executives/busy phone users

A unique desktop IP phone that runs on the Android OS offering users the same look and feel as mobile phones. With Android, the GXP2200 syncs up to hundreds of thousands of applications from the Google Play Store. Robust features include built-in web browser, Bluetooth, integrated PoE, dual Gigabit ports, the easiest voice-conferencing setup on the market, USB and SD card reader, 1,000 person contact book, a 480x272 capacitive touch screen and more. SIP video is supported making it easy to make/receive video calls using a 3rd party web camera. Up to 4 GXP2200 Extension Modules can also be used for easy access to up to 160 contacts/BLF at the touch of a finger.



GXV3175 IP Multimedia Phone w/ 7" touchscreen

Ideal for executives (surveillance calls), conference room (video calling) and marketing and sales people

A powerful IP videophone with a 7-inch touchscreen and 1 megapixel CMOS tiltable camera for video calls/video conferencing, the GXV3175 comes preloaded with a collection of popular applications and a full web browser for complete Internet access. A valuable addition to a SMB solution with the videophone, users can make/receive video calls to/from any network IP video endpoint, such as any surveillance camera or IP door access camera. A video call from the GXV3175 to any IP camera lets users view live feeds in real-time and gives visitors' access to enter the property through an IP door camera.



GXP2124

Ideal for receptionists and busy phone users

The GXP2124 is a 4-line IP phone with 4 dedicated XML programmable context-sensitive soft keys and up to 28 XML programmable speed-dial/BLF extension keys. It's ideal for a receptionist or anyone needing to keep in touch with many people during their daily work. The GXP2124 makes multi-tasking easier with Electronic Hook Switch Support (EHS) for Plantronics headsets and Gigabit network ports for lightning-fast connection speeds.



GXP2100

Ideal for all employees

The GXP2100 is for users always on the phone. It features 4 lines, a 180x90 backlit graphical LCD, 3 XML programmable context-sensitive soft keys, 7 XML programmable BLF extension keys, 5-way conferencing, dual network ports with integrated PoE.



GXP1450

Ideal for all employees

The GXP1450 offers the same functionality as the GXP2100 in a 2-line IP phone that is extremely functional and cost-effective. With 2 lines and 2 SIP accounts, a 180x60 backlit graphical LCD, 3 XML programmable context-sensitive soft keys, dual network ports with integrated PoE, and 3-way conference, it's ideal for most employees.

Appendix A: Grandstream SMB IP Product Solutions *(con't)*



GXP1400

Ideal for all employees

The GXP1400/1405 is a powerful, extremely cost-effective 2-line phone offering the same functionality as the GXP1450, without the backlit LCD. It's been described as one of the best values on the IP Phone market. The phone is ideal for remote workers and employees who don't need access to many BLF/speed-dial keys. For PoE, choose the GXP1405.



GXP1165

Ideal for lobby and basic applications

The GXP1160/1165 is a 1-line IP phone that offers all the key features. It's a compact IP phone featuring up to 2 call appearances, a 128x40 graphical LCD, 3 XML programmable context-sensitive soft keys, dual network ports with integrated PoE (GXP1165 only), 3-way conference, and Electronic Hook Switch (EHS) with Plantronics headsets. This IP phone is suited for use in lobbies, common areas and hospitality locations.



DP715/DP710

Ideal for sales, warehouse and other common area worker locations

Move around the office and never miss a call with the DP715 and DP710 DECT Wireless IP Phones. Put a DECT phone on employees' desks so they can take calls with them while they walk to the conference room, kitchen, warehouse, etc. The DP715 features a handset and base unit. Up to 4 additional handsets can be registered to each base station. These DECT cordless phones include advanced telephony features including Caller ID, Call Waiting, 3-Way Conference, Transfer, Forward, Do Not Disturb, Message Waiting Indication (Stutter Tone), auto answer, multi-language voice prompt, flexible dial plan and more.

IP Video Surveillance Cameras/VMS

Using the existing IP network, Grandstream IP video cameras stream, record and deliver audio/video feeds. To install, all that's required is to place the camera in the desired location and connect it to the IP network. To make and receive video calls to/from the camera, users simply have to register any IP camera as an extension on the IP network. This then allows anyone using a videophone to call any camera to see a live feed from the camera. Any Grandstream IP camera can be set to call a videophone or email when an alarm is triggered.



GXV3672

Ideal for outside applications

The GXV3672 series provides a weatherproof Infrared High-Definition IP camera for challenging outdoor monitoring applications where weather and light are a factor. The GXV3672 contains an 8mm lens which allows it to monitor up to 30 meters away from the camera. The GXV3672 series is the perfect IP camera for monitoring parking lots, the outside entrance to a building, a warehouse entrance, and any other outdoor, potentially low-light setting.



GXV3610

Ideal for indoor and/or outdoor applications

The GXV3610_HD is an indoor/outdoor, fixed dome weatherproof camera that includes IR capability with 90-degree angle monitoring for a variety of day/night lighting conditions. The camera includes 720p High Definition (HD) and a 3.6mm focal lens for wide-angle monitoring of nearby subjects in settings such as banks, hotels, retail, offices, warehouses, and building entrances.

Appendix A: Grandstream SMB IP Product Solutions (con't)



GXV3615WP_HD

Ideal for general indoor use & areas where 2-way audio is needed

The GXV3615WP_HD is a sleek wireless HD cube IP camera for indoor applications where it might be difficult to run hard wires. It has a built-in microphone and speaker that lets the user call the camera, view the camera's live feed, and have a 2-way conversation with a subject at a door location such as a warehouse, office entrance, etc.



GXV3651_FHD

Ideal for indoor monitoring

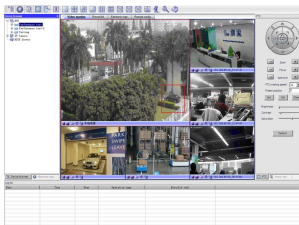
For indoor monitoring applications, the GXV3651_FHD is a powerful full high definition (FHD) 1080p box camera for producing outstanding video and image clarity. It features a 5 megapixel CMOS lens, integrated IR-CUT and light sensor for enhanced performance in low-light or dark conditions. The GXV3651_FHD features an adjustable lens that can be set to 4.5mm, 10mm, or anywhere in between – allowing utmost quality monitoring.



GXV3500

3-in-1 Encoder/Decoder/Public Service Announcement

The GXV3500 is a very unique device because it's an IP Video Encoder/Decoder as well as a built-in public announcement system (PAS). As a video encoder/decoder, the device allows you to connect any existing analog camera to the new IP network while offering more advanced IP video functionality. It features H.264 real-time video compression for analog video as well as IP video decoding with excellent image clarity. The GXV3500 also includes SIP/VoIP for 2-way audio, video streaming to mobile phones and videophones, integrated PoE, a large pre-/post-event recording buffer and advanced security protection. Its integration of comprehensive peripherals including microphone input, alarm control and TV/audio output allows the device to also function as a powerful and flexible voice/video PAS using microphones, IP phones, or IP video phones.



GSurf Pro Video Management System

GSurf Pro is the FREE Video Management Software (VMS) that comes with any camera purchase and is the central management system for all Grandstream cameras and encoder/decoders. It provides a one-stop control for devices, video recording and alarm events. Use GSurfPro to monitor, search and record up to 36 cameras simultaneously, manage videos locally or remotely via the controlled server with Client/Server architecture. Powerful features and easy to use design makes this a total solution package when combined with Grandstream IP surveillance products and 3rd party sensors. Did we mention it is FREE?

Grandstream Networks

A Complete SIP Business Communications Provider

A supporter of all things IP, Grandstream Networks believes that every business is unique and that 'no size fits all.' From its inception selling ATA's to customers wanting to migrate to IP while using their older, analog telephones, Grandstream has consistently worked to introduce products to help businesses, of all sizes, around the globe implement VoIP solutions that positively impact productivity and the bottom-line. A decade later, Grandstream has expanded its product set from ATAs to also include SIP-based telephones used in a variety of on-premise or hosted environments to IP Multimedia Phones for desktop video calling and Internet applications to IP video surveillance cameras for physical security monitoring. Grandstream helps bring the business value of VoIP to the desktop.

The information in this document is for informational purposes only and is subject to change by Grandstream Networks without notice.