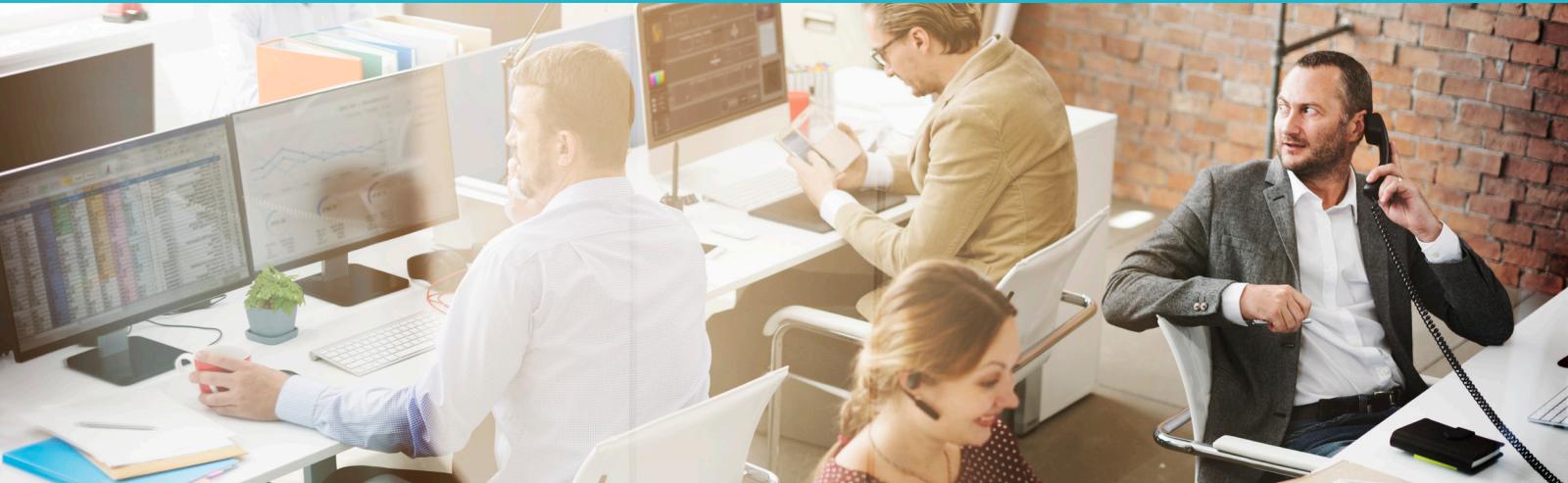


# *Comprehensive UCM series IP PBX Buyer's Guide*



**GRANDSTREAM**  
CONNECTING THE WORLD



## Build Powerful Communications Solutions with an IP PBX

Information is the lifeblood of an organization. Effective communication by conveying information back and forth is critical for both internal and external channels. An organization's business communications systems is a central component for delivering clear, concise verbal and non-verbal messages among employees as well as product and service information to partners and customers. Communications technology has advanced greatly from decades ago when most leading-edge voice solutions were proprietary and targeted at larger enterprises that could afford them. Today, VoIP business systems have allowed smaller businesses to gain access to big business features and applications, and Grandstream is helping to facilitate that effort. Even better, the modern IP PBX has really evolved and is now able to support a wide variety of communication, data and mobility solutions, allowing businesses to unify all of their communications on to one common, SIP network. The modern IP PBX can serve as the anchor for a variety of voice, video, data, mobility and security networks, allowing it to be much more than simply a voice server.

For telecom and IT resellers as well as businesses 'do it yourselfers' who have decided to install an on-site IP PBX to build a unified communications network, this buyer's guide will share information on the features and applications available on Grandstream's award-winning, versatile UCM series of IP PBXs. Since its launch in June of 2013, the UCM series of IP PBXs has become one of the most popular and award-winning on premise IP PBXs in the world. Grandstream developed this Unified Communications Manager (hence the UCM acronym) to offer a one-of-a-kind, easy-to-install, easy-to-manage, affordable SIP Unified Communications system with no licensing fees. The UCM series targets businesses looking to build a fully customizable, enterprise-grade unified communications network without the enterprise-level costs or on-going fees.

### The Power and Simplicity of Unified Communications



When on-premise IP-based PBXs were introduced, it opened up a whole new marketplace for businesses to gain access to sophisticated communication features and applications once only in reach of large enterprises. The best aspect that SIP has always offered is the ability to run many different types of communication applications and processes through it, and it has always had the potential to integrate everything a business is doing on one network. Many IP PBXs today are designed to increase efficiency by unifying all communication methods, along with data and mobility applications, on to one single network or device that can also be shared across multiple physical locations. This not only makes installing and managing business networks easier, but it saves money and actually increases communication options by allowing each type of technology to work together to expand functionality.

Traditionally these solutions have been designed and priced for larger organizations with heavy call volume needs, big pockets and large IT teams. Grandstream has developed a small-to-medium business-targeted, feature-rich, affordable IP PBX for organizations wanting an on-premise solution. It's easy-to-install, maintain and requires no yearly operating expenses and additional licensing or recurring fees. When the system is purchased, all the vast inherent features and applications are available and ready to be used to help achieve business goals.



## The 5 Biggest Benefits of Unified Communications



### 1. Incorporate different communications technologies to enhance collaboration

The ability to combine every type of communication technology on to the same network allows each communication application to work together to actually expand business productivity and allows for expanded and more efficient communications options.

### 2. Create, unify and manage multiple networks under one roof

The ability to combine all voice, video, data and mobility applications and technologies on one common network makes managing and using these networks easier and less expensive. It also allows you to sync multiple offices or physical location on the same communications network, allowing companies to communicate with their offices across the world the same way they would with people in their same office.

### 3. Supports future expansion

As SIP supports nearly every type of communications technology, a SIP unified communication solution such as our UCM series allows businesses to easily add any new type of technology they may choose to their existing platform at any point.

### 4. Allows any business to compete on a global scale

With so many different communication options from UC, any business can multiply their communication flow, increasing their size but not their workload. This allows SMBs to compete with any business on a global scale thanks to cost-effective features that are easy to manage. UC solutions, especially our UCM series, offers high-end enterprise grade features that allow businesses to give off the impression of being a large enterprise.

### 5. It saves money

SIP UC solutions will reduce any businesses phone bill by using VoIP plans to communicate externally, which greatly reduces all calling costs. UC also allows you to build one network that can be shared by all locations and communication technologies rather than having to build multiple networks for each office and each method of communication.



## Grandstream's UCM series of IP PBXs

A powerful yet easy to manage voice, video, data, and mobility communications platform has never been more achievable than when anchored with Grandstream's series of UCM IP PBXs. The UCM series of IP PBXs offer an extensive set of unified communication features in an easy-to-manage on premise solution with no licensing fees, upgrade fees or costs per features. Our UCMs range from small and medium business deployments to small and medium enterprise solutions.

Powered by an advanced hardware platform based on the popular Asterisk® interface, the UCM series helps businesses to affordably use VoIP and UC to increase productivity, provide better customer service, unify communications on a single platform and save money on communications costs. Open source systems ensure compliancy to all SIP-based products and services, meaning the IP PBX can work with a range of SIP endpoints (IP phones, video cameras, etc.), popular service providers, SIP trunk providers and other SIP hardware. Open source solutions also provide flexibility to easily develop and customize applications to fit business integration, interoperability and communications needs.

### UCM series Model Options

The UCM series currently offers two main solutions: the UCM6200 series, which is ideal for small to medium businesses who need to support 500-800 users, and the UCM6510 which is ideal for larger companies who need to support up to 2000 users. Both solutions offer virtually the same features, functionalities, and interfaces with different capacities for supported users and concurrent calls. All UCM models come fully equipped with robust hardware and software out-of-the-box and are ready for immediate use.

The UCM6200 series features 3 models that differ slightly on supported users, concurrent calls and FXO port.



Model	UCM6202	UCM6204	UCM6208
Users Supported	500	500	800
Concurrent Calls	30	45	100
FXO Ports	2	4	8

\*the predecessor to the UCM6200 series, the UCM6100 series, is still available from various Grandstream distribution partners. All firmware and future upgrades for the UCM6200 series will also be fully compatible with the UCM6100 series.



The UCM6510 is a high-capacity solution that can support up to 2000 users and E1, T1, and/or J1 networks.



Model	<b>UCM6510</b>
Users Supported	2000
Concurrent Calls	200
FXO Ports	2

### UCM series Highlights

- Easy and intuitive web user interface for all setup and management
- Operating on the Asterisk platform, one of the most popular and stable open-source IP PBX interfaces in the world
- Two (2) year manufacturer warranty
- No licensing or recurring fees
- All hardware, software and features included
- Free lifetime firmware updates
- Auto discovery and zero configuration provisioning of Grandstream SIP endpoints
- Remote maintenance and administration
- Broad SIP interoperability with any SIP product or service

### UCM series Technical Highlights

- UCM6200 series: up to 50 SIP trunk accounts; UCM6510: unlimited SIP trunk accounts
- Gigabit Ethernet Port(s) with integrated PoE, USB, SD
- Built-in conference bridges
- Built-in call recording server and call detail records (CDR)
- Integrated NAT Router with QoS
- Integrated DHCP server
- Line echo cancellation
- 5-level IVRs (interactive voice response)
- Multi-language support
- Advanced security protection to safeguard account and encrypt calls
- Built in firewall, with SRTP/TLS encryption, 802.1X network security and HTTPS Web UI

For a complete list of technical specifications refer to the UCM series product datasheets on our website.



## What Sets the UCM series apart?

### Enterprise-grade Features Catered to Small to Medium Business

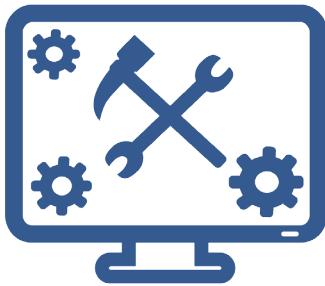


Smaller organizations have the same communications needs as larger enterprises. Often entry-level IP PBXs for smaller businesses include popular calling features like Caller ID, Call Hold, Call Forward, voicemail, etc., but require additional license fees for more advanced features like auto attendants and IVR. All UCM series models include all features and functionalities we can possibly offer with no licensing or on-going costs. You get access to the entire platform and all future feature upgrades or additions for just the one time upfront purchase price. This provides a significant savings of up to several thousands of dollars. Even further, the entire UCM solution is setup and managed from one centralized and intuitive web user interface with built-in tool tips.



### No Licensing or Recurring Fees / Includes Lifetime Firmware Updates

Most IP PBX vendors charge annual license fees for common and advanced features. Some manufacturers will charge you annual fees simply based on how many people use the IP PBX. These additional fees are often the determining factor on whether an SMB can afford an on-site IP PBX. The UCM series has no licensing or recurring fees - a key differentiating factor against other marketplace solutions. All hardware, software, features and functions are included. When Grandstream releases firmware updates for the UCM series, those updates are available at no charge for the life of the system. Not charging licensing or on-going fees saves users tens of thousands of dollars over the lifetime of the solution.



### Easy Installation and Management: Auto Discovery & Zero-Configuration

Installation and set-up of the UCM series IP PBX is handled with a few clicks of the mouse and minimal manual operation. With no advanced technology degree required, this plug and play UC system is able to auto-discover any Grandstream SIP endpoint on the same network as the UCM, which will populate on the Zero Config screen of the web user interface. The UCM can then automatically configure these endpoints using its' own or based on rules you apply, a process we call "zero configuration." Zero-configuration provisioning allows for setup and provisioning of entire networks in a matter of minutes, and makes it very easy to add devices after initial setup. Because all of this can be done through the web user interface, this process can also be done remotely by IT staff or resellers.



### **Full Video Support: Video Conferencing, Video Surveillance and Facility Management Applications**

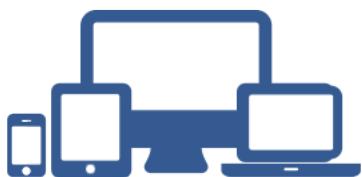


The UCM series is much more than a just voice server. Aside from a host of data and mobility applications, the UCM also offers full SIP video support, and therefore can be integrated with any SIP video product or service. Add video conferencing to your network which can be easily accessed by dialing an extension, and add IP video phones to allow for video calling. Integrate video surveillance and IP Door Systems to allow your cameras and door stations to notify your IP phones when security events occur or when someone needs to be let in.

### **Supports Customized Solutions for Sales Teams, Hotels, Restaurants, Call Centers and more**



If you are a business that relies on a CRM platform, our UCM series supports SugarCRM and SalesForce to allow you to share and access CRM information through an IP phone network. If you are a hotel or restaurant that relies on a Property Management System (PMS), our UCM is integrates with a variety of PMS', including H-Mobile and Mitel. This allows your UCM-anchored solution to feed and access information from the PMS. If you want to integrate your telephony system with an app your business uses, we offer Computer Telephony Integration (CTI). If you are a call center, we offer a variety of call-routing and data tools specifically for call centers.



### **Mobility Features**

As businesses add mobility-based applications for further productivity gains, the UCM series starts them on that journey. Grandstream's IP PBX appliance adds several mobility-based features to help businesses with single or multi-locations around the globe to take that initial step, including free softphone applications for mobile devices, peering of one UCM to cover multiple different physical locations, remote access to all data tools, fax/voicemail forwarding to email, remote monitoring of surveillance cameras, and more.



### **Low Capital Investment / Ongoing Operating Costs**

Purchasing an on-site IP PBX can be a more cost-effective solution over time. While the initial investment may be slightly higher than a hosted VoIP solution, factoring the yearly recurring costs of a hosted solution is something that an on-site solution does not require, and can add tens of thousands in extra costs over the years. Overall, using an IP PBX with SIP Trunking helps to reduce monthly phone bills, especially long distance charges, by allowing businesses to connect using low cost VoIP providers. Also, our UCM series comes in at a price point you probably will not believe.



## UCM series - Exploring Voice, Video, Data and Mobility Functionality

Cost, ease of installation and maintenance, feature content and custom application support are key factors for determining whether or not an IP PBX is a good organizational fit. This section describes the features and functions of the Grandstream UCM series of IP PBXs. Specifically, it will convey what voice, data, video and mobility features are built-in and how businesses can customize the system to help unify communications for improved presence, company image and customer support.



### Voice features

- Secure, clear and reliable
- Fully customizable call routing
- Built-in conference bridges
- Support for all major voice codecs

### Data features

- Integrated phonebook files
- Call detail records (CDR)
- Built-in call recording server
- System backup
- CRM, PMS, CTI integration

### Mobility features

- Free softphone app
- Multiple office peering
- Remote access to CDR, etc.
- Fax/voicemail forwarding to email
- Video surveillance/Door Station alerts

### Video features

- Full SIP Video support
- Video conferencing
- Video calling
- Video surveillance
- Facility access / Video Door Systems

### Voice Features

To help improve communications, productivity and customer service, the UCM series IP PBX includes a suite of voice features that can be customized by an organization for the most impact. The UCM series uniquely includes several features, for no additional licensing fee, that are often considered optional with other marketplace solutions. These 'add-on' features are highly desired by businesses yet are cost-prohibitive for some businesses. Auto attendant, IVR and call-queue are popular ones. Auto attendant, for example, offers a professional image for any business and helps them to appear larger than they are to the outside world. With professional greetings and the ability to route calls immediately to specific departments this helps to aid call distribution and provide faster service. Another very useful voice feature is customized call routing based on time and location, meaning that incoming calls can be routed in any way you would like based on where the caller is calling from and what time it is.



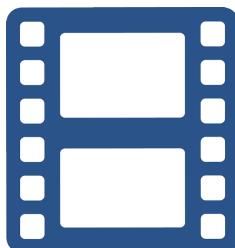


The voice features of the UCM series includes:

- Call Routing
- Auto Attendant
- IVR
- Call Forwarding
- Call Retrieval
- Music on Hold
- Call Transfer
- Voicemail
- Ring Group/Hunt Group
- Audio conferencing rooms (bridges)
- Call Queues
- Call Recording server (built-in)
- Message Waiting Indication (MWI)
- Busy Lamp Field (BLF)
- Intercom/Paging
- Click to Dial
- Multi-Language Support
- Call Hold
- Do Not Disturb (DND)
- Remote extension dialing

Voice codecs vary around the world; therefore, the UCM series is equipped to support all major voice codecs. The UCM series also has the unique ability to transcode codecs, meaning that if both callers may not have access to the same codec, the UCM will find a common codec for the call in order to maximize call clarity and lower bandwidth. This is extremely important for today's globally dispersed business environment.

## Video Features



Video applications are experiencing widespread adoption within businesses of all sizes. Once cost-restricted to larger enterprises that purchased expensive, large-scale teleconferencing systems for videoconferencing and employed a separate network for video surveillance monitoring, businesses can easily implement SIP-based endpoints to add these apps on a UC network. Here we will focus on 4 types of video communications: video calling, video conferencing, video surveillance and video door systems.

## Video Conferencing

Any SIP video conferencing endpoint or service can be easily integrated with the UCM series, and most popular platforms today are SIP-based, including our IPVideoTalk platform. You can integrate any SIP video conferencing endpoint as an extension on your UCM-anchored network to allow SIP phones and video conferencing devices within the network to call that device simply as an extension. Any device making a call into the video conferencing endpoint that supports video, and any device the endpoint calls that supports video will receive live video and audio feeds.





## Video calling



The easiest and most cost-effective way to add video communications to any SIP network is to deploy IP video phones, like our GXV3200 series of IP Video Phones for Android, as extensions on a SIP network. This allows all calls made between video phones and any other video-enabled devices to be full voice and video calls. Our GXV3200 series goes even further and offers direct access to Skype, Hangouts and the millions of apps in the Google Play Store. These devices can also make and receive video calls from IP cameras and door stations. See below for more.

## Video Surveillance and Video Door Stations



There is no better way for a business to protect and monitor their assets than by integrating a SIP UC network with IP video surveillance and an IP Video Door Station. Add IP cameras, like our GXV3600 series, as extensions on a SIP network to allow them to proactively alert other endpoints when security events occur, in addition to allowing you to monitor cameras with existing SIP endpoints.

- Our GXV3600 series can be set to automatically make a voice and/or video call to any in-network endpoint when a security event, such as motion detection, occurs. Voice phones can receive a pre-recorded message and video phones will actually see the cameras live feed.
- Many cameras, including all of our GXV3600 series, offer or can be integrated with intercoms, speakers and microphones to allow you to actually speak through the cameras from your IP phones to someone near the camera. This is ideal for delivery areas and office entrances.
- Using any in-network IP phone, you can call the cameras simply by dialing its' extension to see the live video feed or to hear the live audio feed.



You can integrate IP Video Door Stations, like our GDS3710, with the UCM series. This allows you to use your endpoints to track, monitor and control access to any building.

- Visitors can call from the GDS to any extension on the network, either by dialing the extension on the door station, by hitting the doorbell button on the door station, or by having the device set to automatically trigger a call upon motion detection. If the endpoint being called is a video device, full voice and video will go through if not, it will be a voice connection.
- Grandstream IP phones on the same network are optimized to actually open doors through the GDS3710 by pressing a pre-set key on the phone.
- Use any in-network endpoint to call the GDS3710 to see and/or hear the live audio and video feeds at any point.
- GDS3710 can also communicate with our Grandstream Wave softphone app to allow for full facility access control from any Android or IOS device.



## Data Features

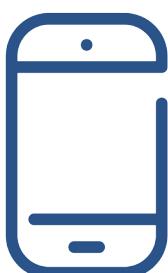
One of the main advantages of an IP PBX is the ability to access data tools that can measure and track your voice network and business activity. The UCM series provides businesses with many popular data capabilities, including:



- Fax Support, including analog fax
- Integrated LDAP phonebook files - corporate phone books are available across all locations; phones are synced with the IP PBX
- Call Detail Reporting – monitor user calling habits; view phone usage broken down by line, date, time, etc.
- Call Recording
- Voicemail/Fax to email
- System Backup
  - Never lose unique configuration settings and files
  - Backup to external SD card or internal Flash storage
  - Backup to user's network server
  - Create specific backup times
- Integration with SugarCRM and SalesForce allows CRM data to be accessed on any endpoint integrated with a UCM
- Integration with property management systems allows hotels to manage their PMS using their telephony system

## Mobility Features

The UCM series offers mobility features that help businesses to get started in the world of mobile access to business tools and information. Using an Internet connection, employees can connect with the UCM series from any location in the world.



- Access business files from anywhere in the world
  - Call recordings accessible remotely from Web UI
  - Voicemail to email - Listen to your voicemail (.WAV) while traveling
  - Fax to email - Receive faxes as (.PDF) on smartphone
- Mobile device integration - make and receive calls on any Android or IOS smartphones and tablets anywhere in the world using our free Grandstream Wave softphone app. If you are looking to use Wave with a SIP account registered to any UCM series IP PBX, the IP PBX can automatically send that user an email with a QR code, which when scanned in the Wave app, will automatically and instantly configure the app with that user's SIP account.
- Real-time business surveillance and video door station monitoring from anywhere in the world
- Manage the entire system remotely



## Sample UCM series Deployment



### How to buy Grandstream



Grandstream solutions are used and sold in over 150 countries across the world. All products are sold through our distribution and reseller network. To locate a Grandstream distributor or reseller near you, **visit our website and chat with us**, or use the "Contact Us" page to tell us where you are located and what you need: [www.grandstream.com/company/contact-us](http://www.grandstream.com/company/contact-us)

### About Grandstream

Grandstream Networks, Inc. has been connecting the world since 2002 with SIP Unified Communications solutions that allow businesses to be more productive than ever before. Our award-winning solutions serve the small and medium business and enterprises markets and have been recognized throughout the world for their quality, reliability and innovation. Our open standard SIP-based products offer broad interoperability throughout the industry, along with unrivaled features, flexibility and price competitiveness. Grandstream was named the 2016 Global Enterprise IP Endpoints Company of the Year by renowned market research firm, Frost & Sullivan



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