Samsung Enterprise IP Solutions

UNLIMITED CONNECTIVITY
Samsung Communication Manager

An “All-in-One” Solution in the Rapidly Changing Communications Market

Communications is a critical element for competitive advantage and business success. As such, businesses are focusing on optimizing the way employees collaborate and communicate for a more productive and agile work environment. Samsung Communication Manager offers an enterprise-class, full-featured phone system specially designed to create optimized collaborative work environments, operational efficiency and enhanced productivity.

Experience smart enterprise communications that enables your business to grow seamlessly and cost-effectively.

Pure IP-PBX

Samsung Communication Manager

Compatibility

Flexibility

Easy Management

High Availability

Samsung Communication Manager

Samsung Communication Manager is a SIP-based PBX that offers flexibility and stability. It is an all-in-one communication solution that enables mobility and enhanced productivity.

Experience smart enterprise communications that enables your business to grow seamlessly and cost-effectively.
**System Configuration**

**Straightforward Architecture**
- Single server architecture
- Accommodates up to 3,000 users (expandable to 6,000* users)
- Bundled software licenses
- Entire voice ecosystem consolidated into one interface

**Resiliency and High Availability**
- High availability modes: active-standby, active-active
- Switchover cases: LAN cable down, SCM down or process down
- Data Synchronization: real-time, total sync or by command

(*) System capacity up to 6,000 users in Active-Active redundancy mode.

**Features that Satisfy All Customer Demand Levels**
- Simplified MAC (move, add and change) process
- Integrated voice mail, auto attendant, email and access manager
- Excellent integration for mobile phones into your voice network

**Embedded Applications**
- Unified messaging
- Conferencing
- Mobile Extension (MOBEX)
- Call MOVE
- System monitoring
- Call trace
- ME VoIP (Mobile Application)
- Compatibility provides SIP features (300+) and CSTA Link for 3rd party connectivity

**Major Functions and Benefits**
Scalability and Easy Management

As your business grows, you can simply add user licenses without costly software or hardware changes. The SCM can be quickly installed and its easy management tools reduce time and money spent on system administration. This all-in-one solution allows you to efficiently and effectively manage your entire voice ecosystem in one interface, integrating all administrative functionality for your system’s database, applications, and troubleshooting.

Low Total Cost of Ownership

The SCM provides bundled software licenses that lower software costs, and its single-server architecture reduces hardware and management costs. The SCM requires less space with its all-in-one features and functionality on a single server, so your business saves money on electricity and cooling, supporting green initiatives.

Compatibility and Flexibility

The SCM is a SIP-based VoIP soft switch, which allows easy integration of 3rd party applications to meet your business needs. You can also improve productivity and customer experience with its simplified MAC (move, add and change) process and hot desking which enables ‘work-as-you-go’ environments.

Easy Management

Easy to set up. Easy to manage. Easy to use.

The SCM administrator GUI is configured and specially designed to help system administrators to efficiently control all functions. The SCM’s embedded call tracing, system monitoring and database management applications are convenient, powerful and intuitive.
Embedded Applications
• Eliminates additional cost of multiple application servers
• Eliminates complications from multiple servers running different operating systems
• Consolidates management of your business’s applications

Embedded UMS (Unified Message Service)
• Powerful auto attendant
• Robust voice mail feature package
• Real-time status monitoring per port
• E-mail server interface and Outlook integration

Embedded Personal Assistant
• Web-based user interface to manage settings
• Record greetings
• Set schedules
• Meet-me conference reservation and status monitoring

Embedded ACD Lite
• Queuing and routing control
• Agent status and real-time monitoring
• Call statistics on groups

Embedded MOH and TFTP Server
• Provides music or tone for on-hold calls
• Custom music or announcements loaded as .wav files
• Primary and secondary announcements for ACD Lite application
• Automatic phone software updates

Embedded Audio Conference
• Built-in audio conference bridge
• Flexible configuration
• Predefine, Progressive, Ad-hoc, Meet-me Voice Conference
• Up to 40 concurrent conferences serviced

External Applications
Samsung Communicator
• Softphone mode
• Desk phone mode
• UC phone

Embedded CSTA Server
• Interface function using standard CSTA Phase-I and II protocols to
  communicate with external application
• Enable organizations with larger channel/services requirements

Specifications

<table>
<thead>
<tr>
<th>Category</th>
<th>SCM-5500 Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Capacity</td>
<td></td>
</tr>
<tr>
<td>Users</td>
<td>Max. 3,000</td>
</tr>
<tr>
<td>Gateways</td>
<td>Max. 512</td>
</tr>
<tr>
<td>BHCA</td>
<td>60,000</td>
</tr>
<tr>
<td>CPS</td>
<td>59</td>
</tr>
<tr>
<td>Concurrent Calls</td>
<td>1,000</td>
</tr>
<tr>
<td>MOH Channels</td>
<td>256</td>
</tr>
<tr>
<td>UMS Channels</td>
<td>64</td>
</tr>
<tr>
<td>Minimum SIP Phones (Samsung + 3rdParty)</td>
<td>3,000</td>
</tr>
<tr>
<td>Maximum 4GM Devices</td>
<td>100</td>
</tr>
<tr>
<td>SIP Trunks</td>
<td>512 SIP trunk routes, Max. 1,000 concurrent calls</td>
</tr>
<tr>
<td>PRI Circuits</td>
<td>Depends on gateways selected</td>
</tr>
<tr>
<td>T1 Circuits</td>
<td>Depends on gateways selected</td>
</tr>
<tr>
<td>FXS</td>
<td>Depends on gateways selected</td>
</tr>
<tr>
<td>FXO</td>
<td>Depends on gateways selected</td>
</tr>
<tr>
<td>Paging Channels (Through IP Phone)</td>
<td>128</td>
</tr>
<tr>
<td>Conference</td>
<td></td>
</tr>
<tr>
<td>Total Conference Channels</td>
<td>128</td>
</tr>
<tr>
<td>Meet-me Conference Channels</td>
<td>Max. 64 (Requires license)</td>
</tr>
<tr>
<td>Predefined / Progressive / Ad-hoc</td>
<td>128 minus meet-me conference channels (No license required)</td>
</tr>
<tr>
<td>H/W Specifications</td>
<td></td>
</tr>
<tr>
<td>CPU</td>
<td>1.6GHz-quad core, Single CPU</td>
</tr>
<tr>
<td>RAM</td>
<td>4 GB</td>
</tr>
<tr>
<td>HDD</td>
<td>500 GB</td>
</tr>
<tr>
<td>Redundancy</td>
<td>Active-Standby, Active-Active</td>
</tr>
</tbody>
</table>
Media Gateway

Ubigate iBG Series

With full routing capabilities, enterprise-class switching capacity, VoIP and best-in-class integrated security, the Samsung Ubigate iBG Series Convergence Platform replaces a multitude of special-purpose network devices and delivers an agile and efficient network infrastructure. The Ubigate iBG Series offers analog and digital voice interface such as T1, E1, FXS and FXO.
Major Functions and Benefits

**Offers Various Interfaces and Functions for IPT**
- Offers voice interfaces such as T1, E1, FXO, FXS, etc.
- Offers QoS and security functions such as sRTP and TLS.
- Acquired compatibility certification with broad works products.

**Powerful Performance and Data Functions**
- Offers voice gateway, data and security functions without lowering performance quality.
- Provides 40% higher packet forwarding performance compared with competitors.
- Offers next generation technologies such as hardware based IPv6 (iBG 2006 is software based)
- Offers L2 and L3 switching functions. (Only L2 for iBG 2006)

**One Box Solution for the Enterprise**
- Simultaneously provides voice, and basic router and switch functionalities.
- Reduces purchasing and maintenance costs.

**High Availability and Convenient Management**
- Supports Hot Swap functions for power dualization, power supply, fan, and modules.
- Convenient system management using web-based management tools.

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### Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Ubigate iBG 1003</th>
<th>Ubigate iBG2016</th>
<th>Ubigate iBG3024</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Platform</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interface Slot</td>
<td>1 mini module, 1 internal</td>
<td>1 network module, 2 internal</td>
<td>2 network module, 3 mini module, 1 option module, 2 internal</td>
</tr>
<tr>
<td>Fixed Ethernet Ports</td>
<td>2 FE (2 UTP)</td>
<td>5 FE (4 UTP + 1 SFP)</td>
<td>4 GbE (2 UTP + 2 SFP)</td>
</tr>
<tr>
<td>Number of power supply</td>
<td>1 ea</td>
<td>1 ea</td>
<td>2 ea</td>
</tr>
<tr>
<td><strong>Max. Port Density</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voice</td>
<td>T1/E1 2 port 4 port 4 port, 2 port 24 port 28 port</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fax</td>
<td>16 port 40 port 60 port</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LAN Ethernet</td>
<td>4 fast ethernet 24 fast ethernet 54 gigabit ethernet</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Voice Interface / Signaling</strong></td>
<td>Analog FXS, ISDN, FXO, Analog DID (Direct Inward Dial)</td>
<td>T1 (FXO, FXS), E1 (CAS R2 MFC / DTMF)</td>
<td>T1 / E1 ISDN PRI Q.931, T1 / E1, Q.SIG, T1 R1, CAME Trunk</td>
</tr>
<tr>
<td><strong>Feature Protocols</strong></td>
<td>SIP, RTP, /RTCP, TLS, sRTP</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Samsung IP Phones

Samsung IP Phones can make your business more efficient, collaborative and agile. Their advanced features and functionality enhance productivity and communications among employees and off-site colleagues while helping your business to reduce costs.

**SMT-i5343**
- Top of the line full UC featured IP phone for executives
- Full duplex speakerphone
- 4.3” TFT color LCD (480 x 272)
- Intuitive UC dial
- 5 soft keys
- 14 programmable buttons
- 2 position base wedge
- XML support
- Full duplex speakerphone
- USB port
- Optional wall mount

**SMT-i5243**
- Full UC featured IP phone for executives
- 4.3” TFT color LCD display (480 x 272)
- Intuitive UC dial
- 5 soft keys
- 14 programmable buttons
- 2 position base wedge
- XML support
- Full duplex speakerphone
- Optional wall mount

**SMT-i5230**
- SIP phone specially designed for sales staff
- 3.2” mono backlit LCD display
- 20 button desk-leave with 2.2” x 1.6 LCD
- 15 buttons per page (6 pages)
- Intuitive UC dial
- 2 position base wedge
- XML support
- Full duplex speakerphone
- Optional wall mount

**SMT-i5220**
- IP phone for office administrators
- 3.2” mono backlit LCD display
- Intuitive UC dial
- 24 programmable buttons
- 2 position base wedge
- Speakerphone
- XML support
- Optional wall mount

**SMT-i5210**
- Ideal for office workers
- 3.2” mono backlit LCD display
- Intuitive UC dial
- 14 programmable buttons
- 2 position base wedge
- Speakerphone
- XML support
- Optional wall mount

**SMT-i3105**
- Entry-level IP phone
- 4 line mono 1.8” LCD display
- 5 programmable buttons with LEDs
- SIP capabilities
- Speakerphone

**SMT-i5264**
- Add-on module
- 2x10/100 Mbps Ethernet
- Support for IPv6 (IEEE 802.3af)
- 6A/6D/OSI/8UF buttons
- Web remote setting support
- Speed dial / Call pick up / Public / Extension
- IPv4 support
Wireless Enterprise Applications

**WE VoIP (Mobile Application)**
- The Samsung WE VoIP is an application for smartphones used in enterprise WLAN environments.
- The Samsung’s exclusive HD Voice technology and Samsung smart devices ensure crystal clear call quality better than 3G network.
- The Samsung WE VoIP provides frequently-used functions of an extension phone in the office, such as conference, transfer, hold, as well as work specific functions, such as Later and Wait, through interconnection with Samsung Communication Manager. The Business CID function, which displays work contact lists of WE Work and employees information, provides additional convenience to the user.

**WE Work (Mobile UC Application)**
- The Samsung WE Work is a Mobile UC Application used in both wireless intranet and internet.
- Used with a work contact list linked to a groupware of the WE Work Solution, you are able to search or view employee information and the organization chart without the need to save it to the smart device. The employee information saved in the work contact list cannot be searched from a personal application, hence the employee information is protected.
- Business Messenger application powered with work request and management functions enhances productivity.
- The presence service helps find employee’s location and status, providing you options to select an appropriate way to communicate.
**Specifications**

**Physical Features**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Ubigate iES4028FP</th>
<th>Ubigate iES4024GP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ports</td>
<td>24 10/100 base-T ports with PoE, 2 10/100/1000 base-T ports, 1 Console port</td>
<td>22 10/100/1000 base-T ports with PoE, 2 gigabit combo ports, 1 Console port</td>
</tr>
<tr>
<td>Switching Capacities</td>
<td>12.8 Gbps</td>
<td>48 Gbps</td>
</tr>
<tr>
<td>Forwarding Rate</td>
<td>4.13 Mpps</td>
<td>35.7 Mpps</td>
</tr>
<tr>
<td>Weight</td>
<td>4.13 kg</td>
<td>4.33 kg</td>
</tr>
<tr>
<td>Dimensions</td>
<td>440(W) x 43(H) x 330(D) mm</td>
<td>440(W) x 43(H) x 320(D) mm</td>
</tr>
<tr>
<td>AC Input</td>
<td>100 to 240 V, 50-60 Hz</td>
<td>100 to 240 V, 50-60 Hz</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>225 W (System 45 W, PoE 180 W)</td>
<td>225 W (System 45 W, PoE 180 W)</td>
</tr>
<tr>
<td>Power over Ethernet</td>
<td>Maximum output power per port : 15.4 W, Maximum output power per port : 7.5 W simultaneously</td>
<td>Maximum output power per port : 15.4 W, Maximum output power per port : 7.5 W simultaneously</td>
</tr>
<tr>
<td>Network Interface</td>
<td>10/100 BASE-T ports, SFP transceiver slots supporting SX, LX and ZX SFP, Multimode fiber cable: 62.5/125 or 50/125 microns, Single mode fiber cable: 6/125 micron</td>
<td>10/100/1000 BASE-T ports, SFP transceiver slots supporting SX, LX and ZX SFP, Multimode fiber cable: 62.5/125 or 50/125 microns, Single mode fiber cable: 6/125 micron</td>
</tr>
</tbody>
</table>
## Samsung Communication Manager

**Ubigate iBG Series**

- **Ubigate iES4000 Series**

### IP Phones

#### Applications

**Software Features**

- **Best Gigabit Port Density**
  - Supports up to four 10/100/1000 gigabit uplink Ethernet ports at the 1RU chassis

- **IP Clustering Support**
  - IP clustering support that can manage up to 32 switches with just one IP address

- **IGMP Snooping Support**
  - Allows IP multicast traffic only to registered members in the multicast environment to lower bandwidth and to enhance LAN performance

- **Improved Security Functions**
  - Supports L2 - L4 based ACL, Radius, TACACS+, SSL, 802.1X based Port Security, and DHCP Snooping

- **IEEE802.3af Standards for All Access Ports Support**
  - Supports IEEE Power over Ethernet for all access ports

- **GVRP and Voice VLAN Support**
  - Supports tag or port-based VLAN, automatic GVRP LAN registration, and Voice VLAN for optimal IP environments

- **LACP Supported MultiLink Trunking**
  - Able to connect to high-bandwidth bases by trunking 10/100 or gigabit ports

### Description

- **IEEE802.3x for full duplex mode**
- **Back pressure flow control half duplex mode**
- **IEEE802.1D STP / IEEE 802.1w RSTP**
- **IEEE802.1s MSTP / Spanning tree fast forwarding**
- **Auto edge / Loop protection**
- **8K MAC address entries**
- **802.1Q tag-based VLAN**
- **802.1Q port-based VLAN**
- **802.1v protocol-based VLAN**
- **IEEE Power over Ethernet for all access ports (iES4028FP, iES4026GP)**

### Feature Flow Control

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC Addresses</td>
<td>IEEE802.3x for full duplex mode</td>
</tr>
<tr>
<td>VLAN</td>
<td>IEEE802.1Q tag-based VLAN</td>
</tr>
<tr>
<td>IGMP snooping</td>
<td>IEEE802.3x with LACP</td>
</tr>
<tr>
<td>Link Aggregation</td>
<td>IEEE802.3af with LACP</td>
</tr>
<tr>
<td>JVlt</td>
<td>IEEE802.3af with LACP</td>
</tr>
<tr>
<td>Jumbo Frame</td>
<td>IEEE802.3af with LACP</td>
</tr>
<tr>
<td>QoS</td>
<td>IEEE802.3af with LACP</td>
</tr>
<tr>
<td>Priority queue</td>
<td>- Scheduling: Strict priority, WRR - 4 queues per port</td>
</tr>
<tr>
<td>DSCP</td>
<td>IEEE802.1p - DSCP based CoS</td>
</tr>
<tr>
<td>Rate limiting</td>
<td>IEEE802.1p - DSCP based CoS</td>
</tr>
</tbody>
</table>

### Feature Security

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storm control</td>
<td>- Broadcast storm - Multicast storm - DLF (Destination Lookup Failure)</td>
</tr>
<tr>
<td>MAC address filtering</td>
<td>- Access control list (L2 / L3 / L4)</td>
</tr>
<tr>
<td>AAA - RADIUS, TACACS+</td>
<td>- MAC based Authentication</td>
</tr>
<tr>
<td>HTTPS / SSL</td>
<td>- GDH v1 / v2</td>
</tr>
<tr>
<td>802.1X - Port-based, Eap supplicant support, VLAN assignment, Guest VLAN, Co-working with radius, TACACS+ server</td>
<td>- Management interface access filtering - 802.1x, 802.1x, Telnet</td>
</tr>
<tr>
<td>DHCP snooping</td>
<td>- 802.1x, 802.1x, Telnet</td>
</tr>
</tbody>
</table>

### Feature Management

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management interface</td>
<td>- Web-based - Telnet (4 sessions)</td>
</tr>
<tr>
<td>Software download</td>
<td>- TFTP, Xmodem</td>
</tr>
<tr>
<td>Dual firmware images</td>
<td>- Configuration file download - TFTP</td>
</tr>
<tr>
<td>802.1Q / 802.1Q</td>
<td>- RMON (Group 1, 2, 3, 9)</td>
</tr>
<tr>
<td>Bootup Client</td>
<td>- DHCP - Client, Relay (Option 82)</td>
</tr>
<tr>
<td>Port mirroring (one-to-many)</td>
<td>- Event/Sensor log - Local, Syslog, SMTP</td>
</tr>
<tr>
<td>Remote Ping</td>
<td>- NTP - IEEE802.1ab (LLDP)</td>
</tr>
<tr>
<td>IP clustering (OSI members)</td>
<td>- UPnP, Banner, Web authentication</td>
</tr>
</tbody>
</table>