

# SMART COMMUNICATIONS SMART BUSINESSES





## CREATING NEW SOLUTIONS TO DELIVER REVENUE GENERATING SERVICES WITH LG-ERICSSON

LG-Ericsson is a global leader in providing innovative technology and business communications solutions enabling service providers and enterprises to boost revenue, reduce costs, enhance customer service, and increase productivity.

With over 5 decades of experience, LG-Ericsson's execution-oriented culture has a proven record of proactively responding promptly to rapid changes in the needs of our carrier and enterprise customers. LG-Ericsson staff is dedicated to providing the highest quality communications equipment with distinctive capabilities employing the latest product and manufacturing technologies.

A high level of our investments in R&D is focused on continued technology leadership in Wideband wireless and IP communications that paves the way to our introduction of equipment to simplify and improve business communications. Innovation is core to our business leading to market leadership in some of the world's most advanced communications markets in the world.

## DELIVERING SMART COMMUNICATIONS TO SMALL BUSINESSES

iPECS SBG-1000 is a truly converged communication platform tailored for small businesses integrating IP telephony, data networking, wireless, security and IT needs in a single unit. IP telephony and broadband Internet services are easily and securely delivered over a single broadband IP line from the service provider and connected to the iPECS SBG-1000 for delivery to the end-user.

iPECS SBG-1000 is optimized to deliver small businesses with limited budgets and resources the advanced communications capabilities of the larger enterprise yielding smart business outcomes.

With the iPECS SBG-1000, small businesses can now reap the efficiency and productivity benefits of advanced communication services. The all-in-one communication solution eliminates the need and added expense of dealing with multiple suppliers allowing the small business to focus on core business issues.

iPECS SBG-1000 is the right answer to today's converged communication needs and, with its high-performance IP based platform, is ready to integrate with future IP applications and technologies.

## ENABLING SMART SERVICES FOR SERVICE PROVIDERS

iPECS SBG-1000 is also designed to easily integrate with provider's advanced managed communication services such as high speed broadband access and value added business communication services while minimizing the technology expert's efforts to install and maintain the overall solution. As a smart platform for multiple communication services, iPECS SBG-1000 with its built-in SIP Proxy not only allows the interoperation with various carrier soft switches in the hosted IP-Telephony service models, but it also fits for IP managed service models by taking advantage of its embedded full featured IP-PBX capabilities.

## VALUE PROPOSITION TO BUSINESSES

- All-in-one communications for voice, data, security and IT services from a single platform
- Maximum cost-effectiveness by combining voice and data networks and providing all applications in a single unit
- IT services including Printer sharing, File sharing, etc through USB port
- Greater mobility for anywhere anytime connectivity using smart mobile devices
- Single platform from single provider for all communication needs

## VALUE PROPOSITION TO PROVIDERS

- Perfect fit for provider's IP Telephony hosted or IP managed services with new revenue streams while minimizing Capex and Opex from the installation to operation and management.
- Flexible deployment for a wide variety of environments from standalone, branch to multi-site locations
- Proven compatibility of embedded SIP proxy with major soft-switches
- Advanced IP-PBX features to meet various demands from small businesses and effective traffic management between local and remote locations
- Simplified network management and administration from both local and remote location



**iPECS SBG-1000**



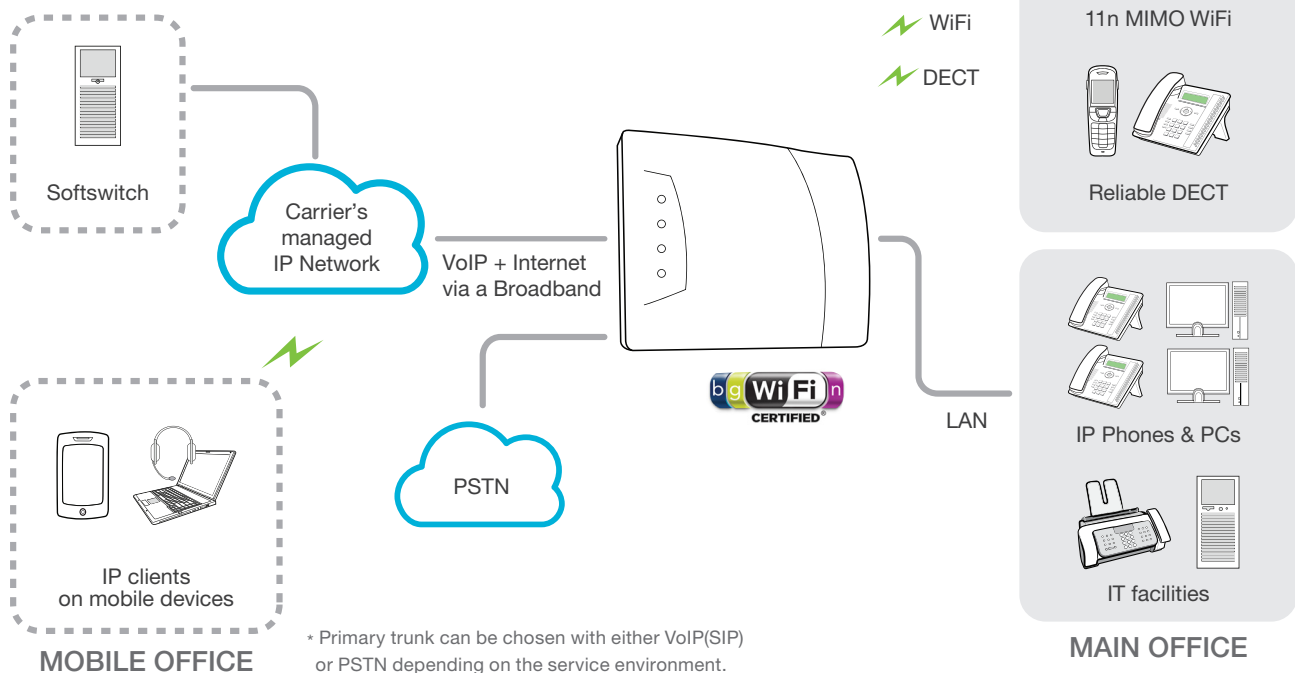
## iPECS SBG-1000 HIGHLIGHTS

### Smart, Simple, Secure and Mobile

- All-in-one, voice, data, security and IT services for small businesses, branch offices and remote locations
- Full-featured IP-PBX and standard SIP Proxy for enhanced IP telephony services combined with provider's multiple communication services.
- Value added applications and a variety of IP phones and soft phones for PCs or mobile devices give great effectiveness.
- Advanced 11n WiFi with MIMO and DECT for anywhere anytime connectivity inside offices or out of offices.
- Comprehensive data networking with embedded routing protocols, enhanced security, Gigabit WAN, 8 port FE LAN ports with 4 PoE, and Quality of Service.
- A robust set of embedded security methodologies protecting your networks using SPI firewall, IPSec VPN, authentication methods, access controls and rate limiting.
- Embedded file server & USB I/F to build shared storage network connecting an external USB storage device and built-in print server to share a printer over the same network.
- Simplified installation and configuration using embedded smart install wizard with pre-defined configurations.
- Local and remote management through an intuitive, Web-based GUI and interoperable with TR-069 and SNMP-based network management applications.

## CONFIGURATION DIAGRAM AND ITS SERVICE APPLICATIONS

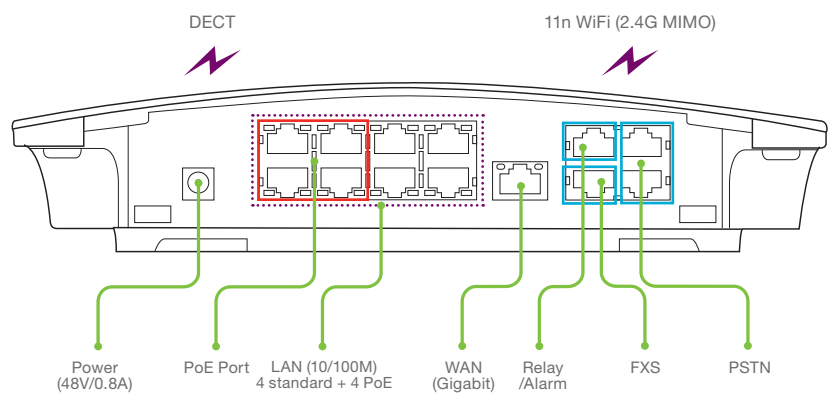
- Platform for IP Telephony hosted service using SIP proxy of iPECS SBG-1000
- Platform for IP managed service using IP-PBX of iPECS SBG-1000



SMART OFFICE IN A SINGLE BOX



HARDWARE INTERFACES



PORT CONFIGURATIONS

Type	Capacity
Trunk	6 SIP trunks + 4 PSTN trunks - 4 SIP turns if DECT in use - PSTN interface option (1CO, 2CO, 4CO, 1BRI, 2BRI) * Only one option can be mounted on iPECS SBG-1000 either in the factory or locally.
Extension	Max 24 extensions - 23 IP Phones, 6 DECT phones - 1 FXS port for SLT or FAX

## TECHNICAL SPECIFICATIONS

### Hardware Interfaces

#### WAN

- 1-port 10/100/1000BASE-T
- EEE(Energy Efficient Ethernet) ready
- Auto-sensing, Auto-negotiation

#### LAN

- 8-port 10/100BASE-TX
- Auto-sensing, Auto-negotiation

#### Power over Ethernet

- Port 1 ~ Port 4
- 802.3af (Total PoE budget : 20 Watts)

#### Wireless LAN

- IEEE 802.11 b/g/n, 2.4GHz

#### DECT

- Frequency  
1,880 ~ 1,900Mhz for Europe  
1,920 ~ 1,930Mhz for US

#### FXS

- Loop distance : 1.5Km with AWG24
- Caller ID (CID) : FSK (ITU-T V.23 or Bell 202)  
or DTMF (ITU-T Q.23)
- Ring capacity / Frequency : 60Vrms / 25Hz

#### FXO

- Loop start CO, Caller Identification detection

#### USB

- Interface mode : USB V1.1, V2.0 Host mode

### AC/DC Power Adapter

- 100 ~ 240V AC @50/60Hz
- DC48V, 1A

### Physical dimensions & Weight

- Width : 278mm
- Depth : 233mm
- Height : 34mm
- Weight : 0.86Kg

### Firewall

- General Security Policy, Access Control
- Web Site Restriction, Port Forwarding, Port Triggering
- NAT/NAPT, DMZ Host, Rule-based Packet Filtering
- Connection Information, Security Log

### Security

- Virtual Private Network (IPSec, PPTP, L2TP)
- Remote Administration Access Control
- Digital Certificate Management

### Quality of Service

- General QoS Profile, Bandwidth Restriction
- Rule-based Traffic Priority & Traffic Shaping
- DSCP / 802.1p / Priority Queue Configuration
- Connection Utilization & Statistics

### Routing

- Static Routing (Routing Table Management)
- Dynamic Routing (RIP v1/v2)
- NAT/NAPT, IGMP/Multicast

### L2 Switching

- 8-port 10/100 BASE-TX with 4 built-in PoE  
(Total PoE Budget : 20 Watts)
- STP/RSTP, VLAN, LAN Bridge
- Broadcast & Multicast Storm Control, Loop Detect

### Wireless LAN

- 802.11 b/g/n (2.4 GHz)
- WEP, WPA, WPA2, WPA /WPA2 & Web Authentication
- 802.1x for Enterprise
- Multiple SSIDs (Virtual APs), MAC Filtering
- WPS (WiFi Protected Set-up) support
- Wireless Multimedia (WMM)
- Channel Width & Frequency Selection

### IP-PBX / SIP

- LG-Ericsson advanced IP-PBX features
  - Call Transfer, Call Forward, Call Park, Call Pick-Up, Call Waiting, Camp-On, CO Queuing, Speed Dial, Station Groups, Mobile Extension, 3-Party Voice Conference, IP Fax Relay (T.38)
- SIP Trunk
  - 4 trunks with DECT, 6 trunks w/o DECT
- CO trunk
  - Only one option can be mounted on iPECS SBG-1000 either in the factory or locally (1CO, 2CO, 4CO, 1BRI or 2BRI).
- Extension
  - 23 IP extensions
  - 6 LG-Ericsson proprietary DECT terminals
- Built-in SIP Proxy, Registrar, User Agent, Failover to PSTN

### Administration

- Web-based administration (HTTP/HTTPS)
- CLI (Telnet & Telnet over SSH)
- User management (role & permissions)
- Date & Time (NTP/TOD with daylight saving option)
- Smart Installation Wizard

### Services

- File Server (disk management, backup & restore)
- Printer Server  
(LPD, IPP, Microsoft Shared Printing support)
- DHCP/DNS Server, Dynamic DNS, UPnP

### DECT

- Built-in DECT Base Station
- 4 Simultaneous calls with 6 registered DECT terminals
- LG-Ericsson feature-rich DECT phones

### IP Softphone (Phontage, Webphone)

- High Voice Quality GIPS Engine, Multi-Codec (G.711/G.729)
- IP Bridge, Outlook Scheduler Sync, DB Import/Export, Phone Book/Call Log management, Video Conferencing, Instant Messaging, LDAP Search, Audio Tuning Wizard

### IP Endpoints

- Full feature system IP phones from Entry to Executive
- IP Softphones and SIP client for Smart phones
- Standard SIP phones (Need IOT)

### Auto Attendant / Voice Mail

- Well-organized & Easy to set-up Auto attendant & Voice Mail
- 4 simultaneous channels / 240-minute built-in storage (Expandable upto 480 minutes with a license key)
- On demand call recording, Voice Mail back-up & management

### IP Call Recording

- Voice packet encryption & call recording
- Agent Monitoring / Remote maintenance & automatic alarming
- Web based GUI, Statistics, User base access level management

### Management

- Device Information & Map View, SNMP, TR-069
- Network Connection Management, Monitoring & Diagnostics
- E-Mail Notification & Syslog Support, System Log

## IP TERMINALS



LIP-8002E

LIP-8008D

LIP-8012D

LIP-8024D

LIP-8040L

LIP-8050V

## WIRELESS TERMINALS



LWS-WK  
(DECT)

GDC-450H  
(DECT)

WIT-400H  
(WiFi)

## SOFT CLIENTS AND APPLICATIONS



Phontage

Webphone

Ez ATD

IPCR

The content of this document is subject to revision without notice due to continued progress in methodology, design and manufacturing. LG-Ericsson shall have no liability for any error or damage of any kind resulting from the use of this document



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