



# Smart Communications In a Single Unit, iPECS SBG-1000

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.

# **Delivering Smart Communications to Small Businesses**

The iPECS SBG-1000 is an all-in-one communication platform for voice, data, security and IT services from a single platform, optimized for small businesses with limited budgets and resources. It delivers the advanced communications capabilities of the larger enterprise yielding smart business outcomes. The iPECS SBG-1000 provides the maximum cost-effectiveness by combining voice and data networks with all applications functions in a single unit. It also provides IT services including printer sharing, file sharing, etc. through USB port. Using smart mobile devices, the iPECS SBG-1000 allows greater mobility for anywhere anytime connectivity using smart mobile devices. 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. The 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**

The iPECS SBG-1000 is also designed to easily integrate with provider's advanced managed communications services. It is 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.

As a smart platform for multiple communication services, the 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 also fits for IP managed service models by taking advantage of its embedded full featured IP-PBX capabilities. In addition to its flexible deployment, the iPECS SBG-1000 enables simplified network management and administration from both local and remote location.

# Voice

IP-PBX & SIP
DECT for reliable voice
Multiple choice of terminals
VM & Applications

# **Security**

VPN (IPSec, PPTP, L2TP), Firewall Access Control, DMZ Rule-based packet filtering



# **Data**

Routing
Switching Enhanced QoS
WLAN for Voice & Data

# **IT Services**

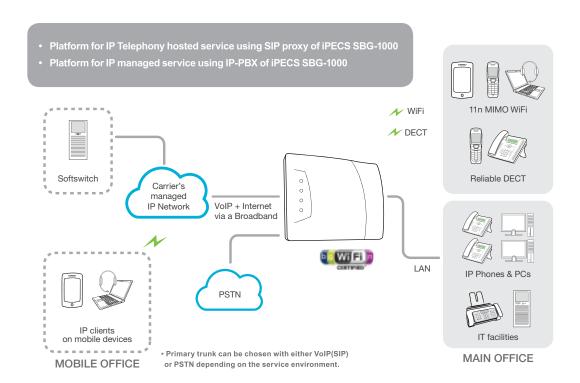
File server Print server
Fax / PoS connect
Relay for Door open/Alarm

# **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 Wi-Fi 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



# **TERMINALS & APPLICATIONS FOR IPECS SBG-1000**

# **IP Endpoints**

- Full feature system IP phones from Entry to Executive: LIP-9000 / 8000E series
- Standard SIP phones (Need IoT)

#### IP DECT / DECT Phone

- Built-in DECT Base Station
- 4 Simultaneous calls with 6 registered DECT terminals
- LWS-WK, GDC-800H/500H/450H/400H

# IP Softphone (iPECS 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 man agement, Video Conferencing, Instant Mes saging, LDAP Search, Audio Tuning Wizard

# **iPECS Communicator**

• Smart phone client for Android / iOS

# **Built-in Auto Attendant / Voice Mail**

- Well-organized & easy to set-up Auto Attendant & Voice Mail
- 4 simultaneous channels / 240-minute built-in storage (expandable up to 480 minutes with a license key)

# Software Attendant Console (iPECS ez-Attendant)

- PC based attendant software with flexible call handling, directory management
- · Easy to use attendant

# IP Call Recording (iPECS IPCR)

- · Voice packet encryption & call recording
- Agent monitoring / remote maintenance & automatic alarming

#### **iPECS NMS**

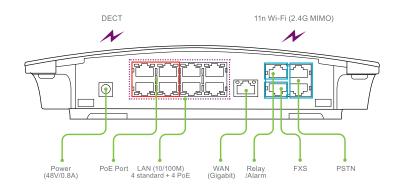
- Multi-site Management Tool
- Fault management and real-time system monitoring

# iPECS ClickCall

· Standard windows application for easy dialing



#### PORT CONFIGURATIONS



#### WAN

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

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

#### **FXO**

· Loop start CO, Caller Identification detection

#### **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

#### **Power over Ethernet**

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

#### **USB**

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

#### **Trunk**

- 6 SIP trunks + 4 PSTN trunks
- 4 SIP trunks 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

#### 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 Filterina
- · 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 (Wi-Fi Protected Set-up) support
- · Wireless Multimedia (WMM)
- Channel Width & Frequency Selection

# IP-PBX / SIP

- Ericsson-LG 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 the iPECS SBG-1000 either in the factory or locally (1CO, 2CO, 4CO, 1BRI or 2BRI).
- Extension
- 23 IP extensions
- 6 Ericsson-LG 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
- · Smart Installation Wizard

#### Services

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

#### Management

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

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