


iPECS-MG
Business Enabled Communications

 **LG-NORTEL**



What SMBS are looking for?



ATTRIBUTE	BUSINESS VALUE
Simplification	Will it be cost effective and easy to use as a combined/converged solution?
Efficiency	Will it allow me to enhance my system capabilities as my business needs grow?
Convergence	Will it meet customer's needs for converged services ? (including voice capabilities, application suite, data networks and management tools)
Compatibility	Will it protect my investment and adapt to change?

THE iPECS-MG IS LG-NORTEL'S RESPONSE TO SMB CHALLENGES AND NEEDS

The result is an optimized SMB solution built from the common challenges of SMBs in mind such as:

Growth, Flexible IP converged capabilities, Unified Communications, Ease of use, Mobility, Single management, Scalability, Reliability and Cost-effectiveness, etc.

QUESTIONS

for choosing the right solution...

- Industry?
- Current systems?
- User expectations?
- # of branches?
- Powerful and seamless features?
- Application required? Messaging, Presence/IM, Unified Communications, Mobility...
- Endpoint support?
SIP, H.323, digital/analog, Wireless...
- How to deploy, manage and maintain?
- etc.



■ HOW THE iPECS-MG MEETS SMB NEEDS

Simplification

The iPECS-MG simplifies communications with a high quality hardware platform offering your business all the benefits of rich features and a broad range of capabilities with the easy to use and simplified management.

The iPECS-MG, which is ideal for Small and Medium businesses, offers a number of features and capabilities including:

- Built-in services for customized platform
 - : Basic hybrid ports consisting of 12 extensions and 4 AA (or IP) lines
 - : SIP/IP capacity implemented for trunk and extension interfaces
 - : Advanced telephony features like Directory Number (DN), Tandem Switching, Tenant group, and LCR
 - : TDM signaling processors handling CID, SMS, CPT, DTMF
 - : Basic telephony resources such as door phone, alarm, paging, MOH
- Optimized simple architecture
 - : Less user options for hardware
 - : Cost effective expansion
- Easier operation and maintenance

Efficiency

The iPECS-MG offers an approach to IP that ensures increased application performance and enhancements in the areas of converged voice, data and multimedia along with security, mobility, management and serviceability. The iPECS-MG interworks seamlessly with LG-Nortel UC solutions to extend full headquarters-based applications and capabilities to branch and remote offices.

- Future-ready technology and open standards based architecture
- Enhanced IP capability
 - : Single IP for trunk, DHCP, SIP proxy, IP Security
- Implementing latest PBX functions
 - : Tandem, Directory number, Tenant group, etc.
- Rich applications
 - : LG-Nortel Unified Communications Solution
 - : Auto-attendant / Voice-mail for messaging
 - : Powerful in-building Mobility solution with LG-Nortel DECT and Wi-Fi technology
 - : Network management solution for centralized management
- Enhanced Terminal line-ups
 - : LIP-8000 series for proprietary IP terminals
 - : WiFi and DECT terminals for enterprise mobility

Convergence

As a standalone solution, the iPECS-MG can be combined with a full range of LG-Nortel voice and data products to create a complete converged business communications system that meets the unique requirements, challenges and budgets of SMBs. The iPECS-MG provides extensive telephony features and value-added applications and also supports a full range of LG-Nortel phones - fixed or mobile sets, both IP and digital based, conference phones and soft clients. On the data side, LG-Nortel's data portfolio drives the solution's networking capabilities with certified tested and proven Ethernet switches - providing high-speed data transfer, secure Internet access, VoIP Quality of Service (QoS) and Power over Ethernet (PoE). Tying these elements together are the Network Management Solution. These software tool allows centralized configuration and monitoring of all these devices, both on premises or remotely.

- Consolidated IPT portfolio : Single line-up for SMB
 - : Combined with a full range of terminals and applications
 - : Integrated with secure networking capabilities
 - : Centralized management with LG-Nortel data products



Competibility

A smooth migration from TDM based environment to a single IP network is eased with the iPECS-MG enabling SMBs to protect their investments and seamlessly migrate to an IP converged world when it works best for your business. The iPECS-MG platform simultaneously supports IP and traditional business sets to support a single IP network or mixed network (TDM & IP) solution. Whether you're ready for convergence today or a year from now, your options will be open and investment will be secure.

- Smooth migration path from ipLDK-100/300 in LG-Nortel BCS portfolio
- Former investments in TDM extensions and trunks protected and leveraged
- Enhanced IP generic platform and open standards based architecture for the future

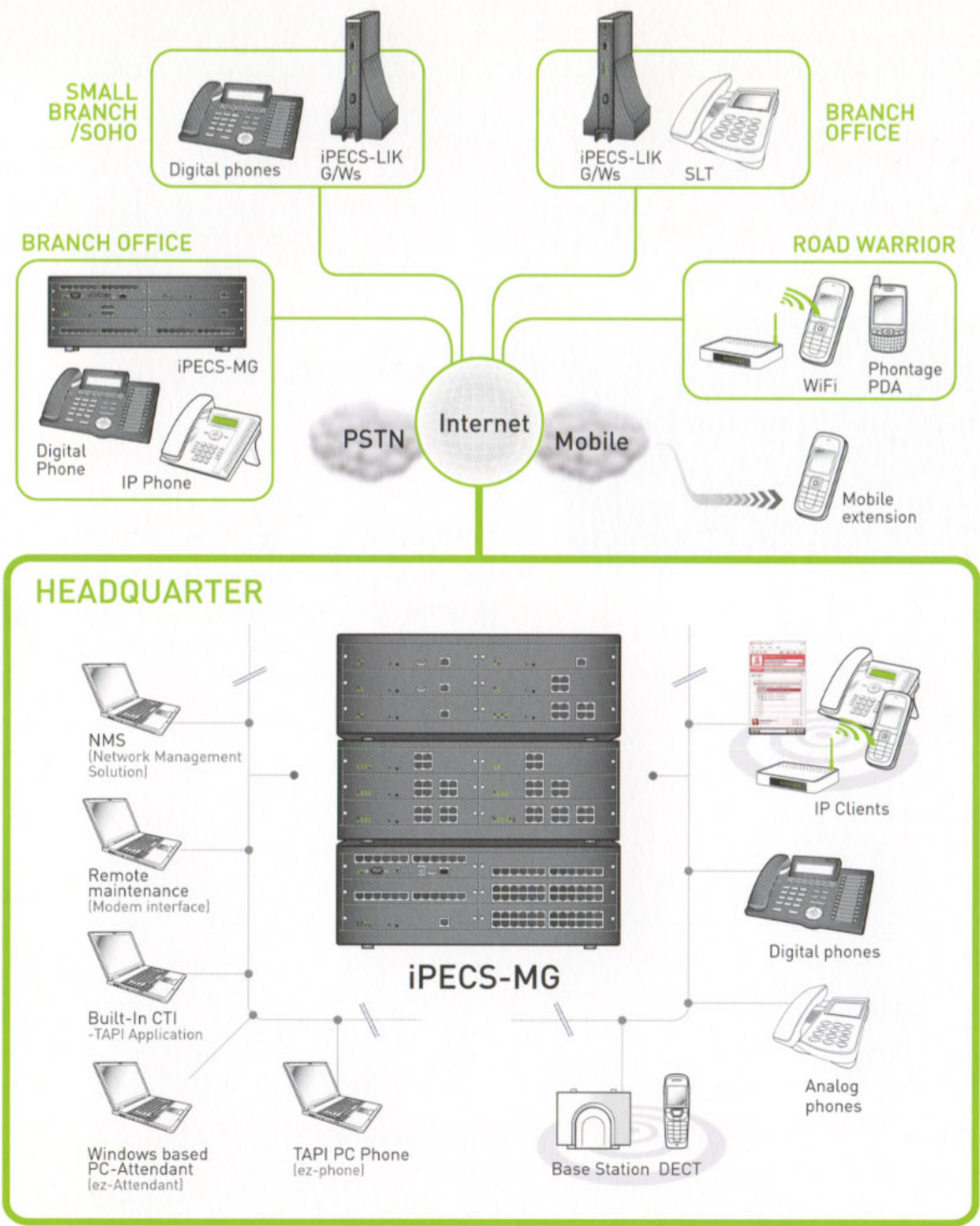


What is the iPECS-MG?

The iPECS-MG is a highly reliable, extensible and feature-rich business platform that integrates your PSTN, IP and mobile networks providing you with improved business productivity. As a hybrid system, the iPECS-MG supports complete single network IP solutions as well as mixed deployments consisting of both IP and digital phones. Businesses select the perfect combination of IP, digital or single line phones and analog, digital or IP lines based on their infrastructure needs.

THE iPECS-MG IS the most affordable way to

- Feature rich platform to enrich your way of business
- Simplified & customized business ready solutions
- Come up with latest standards & technologies
- IP networking for distributed business environment
- SIP trunking for ITSP
- Energy saving for Green IT
- Start-ups for SMB Unified Communication
- Voice messaging and Unified messaging
- Business mobile solutions for mobility
- Conferencing solutions for cost saving
- Centralized Management & Upgrades
- Etc...



OPTIMIZED COMMUNICATION SOLUTIONS FOR THE BUSINESS READY SERVICES



Platform

Simple Architecture

Modern telephony equipment is often required to be installed in a 19" rack along with other data equipments. The chassis for the iPECS-MG is optimized for rack-mounting installation while a wall mount bracket is separately provided for user's preference.

Highly available feature rich platform

As telephony services required customers' options according to their own circumstances & requirements, telephony system vendors have offered many options that add extra costs for users' basic business communication. The iPECS-MG offers no extra costs options by including them in its ready to use solution consisting of 12 ext. & 4 AA (or IP) lines used for SIP/IP capacity implemented for trunk and extension interfaces and advanced telephony features like ACD, LCR, 1st party CTI and TDM signaling processors handling CID, SMS, CPT, DTMF. It also supports interfaces for basic telephony resources such as door phone, alarm, paging, MOH, etc..

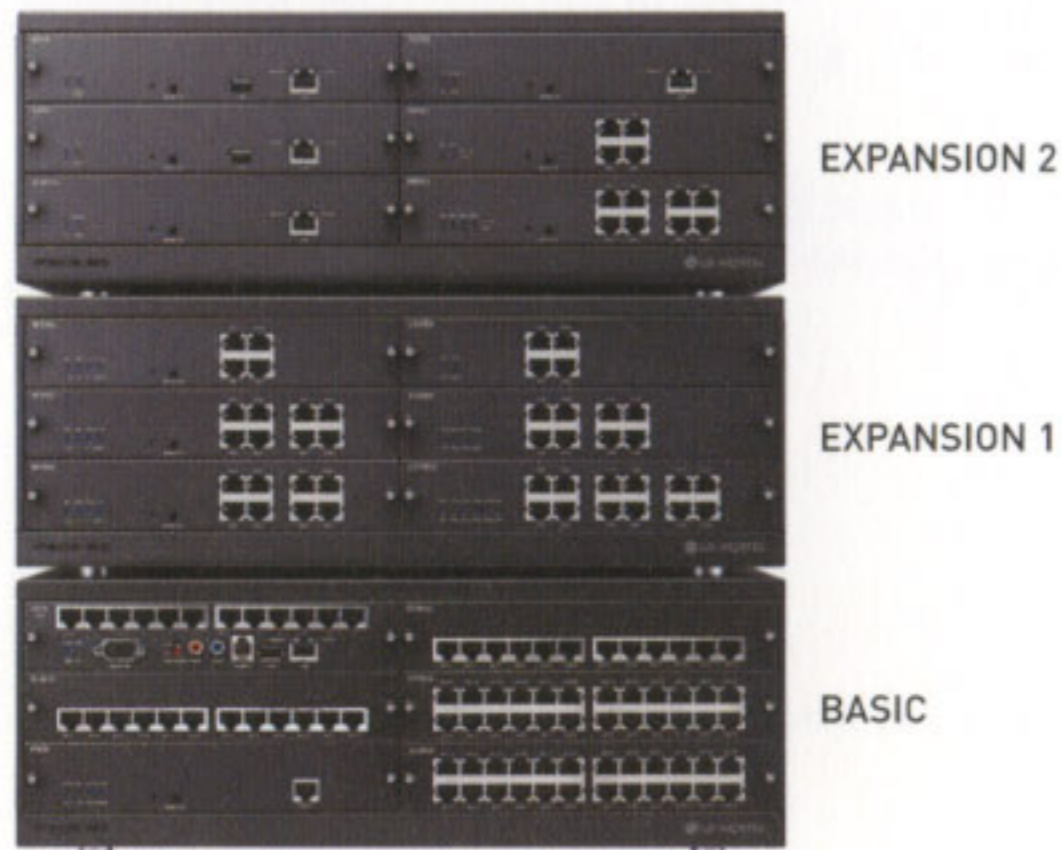
Highly scalable platform

The iPECS-MG gives simple components to deal with and flexible system architecture for cost effective expansion addressing from 30 up to 300 employees businesses. It has 2 kinds of variation for dedicated controllers which make the iPECS-MG100 and the iPECS-MG300. Each of those will have 200 ports and 414 ports respectively as a maximum capacity. The other system components are used commonly no matter which controller is used.

• SYSTEM CAPACITY

Item	iPECS-MG capacity	
	MG-MPB100	MG-MPB300
Total Line	200	414
CO	80	240
Extension	120	324

• CABINET EXPANSION



* MPB on Basic KSU



IP features

Security & Quality of Service (QoS)

In any networked environment, Security and QoS should be highly prioritized. IPSec, sRTP and TLS are all well known security standards for the internet employed to encrypting data into IP packets using advanced encryption techniques and tunneling to hide the real packet destination.

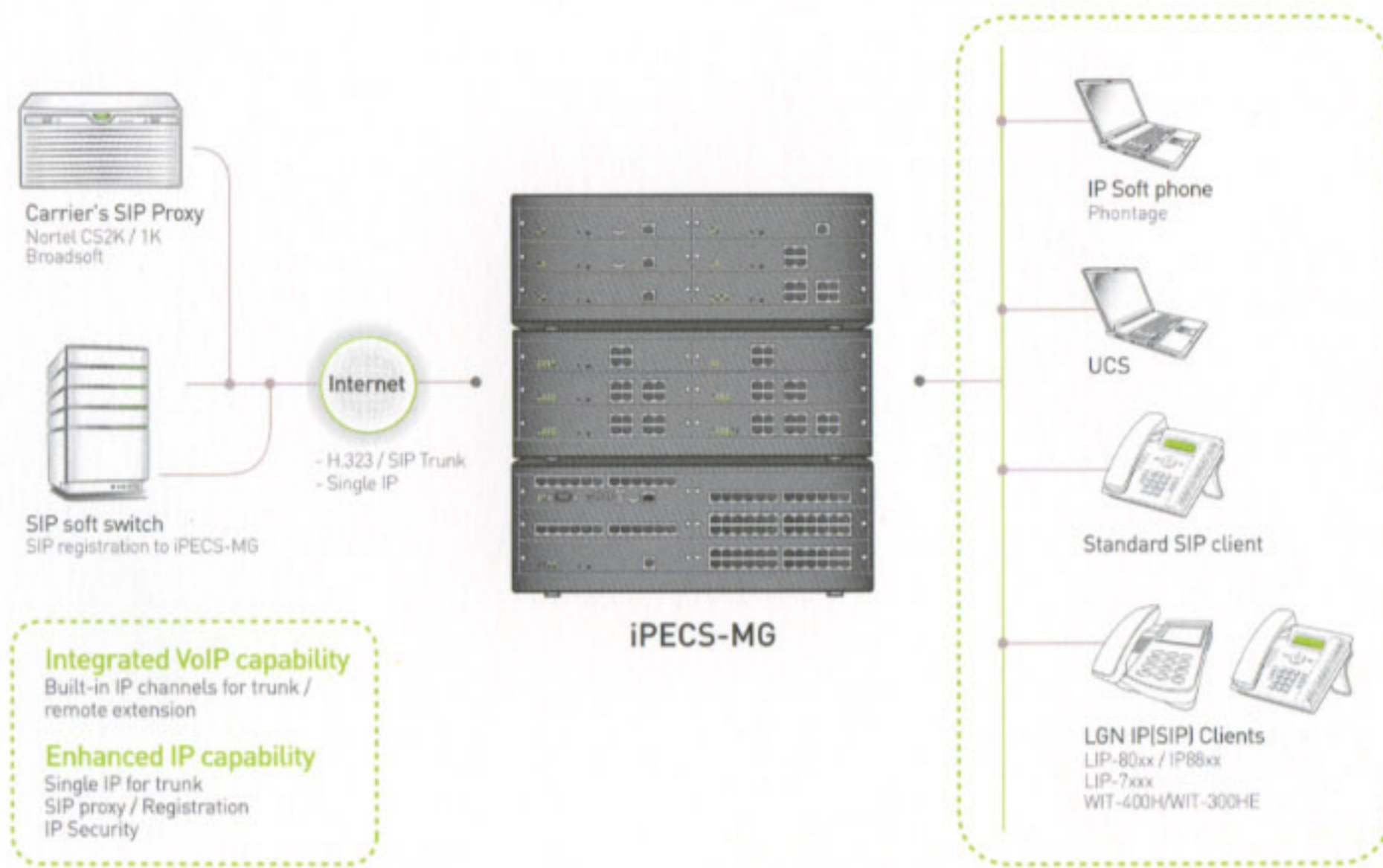
To assure the highest QoS, iPECS-MG supports these standards DiffServ pre-tagging and 802.1p/Q WALN technology.

For a clear voice quality, iPECS-MG has the echo cancellation ability, also.

Standards-based technology

The iPECS-MG provides standards-based technology which lets the SMBs take advantage of existing corporate architecture during transition to the network-centric communications environment.

The iPECS-MG provides complete IP telephony features and functionalities over both local office and broadband networks. Using the SIP trunking interface connected to the growing list of SIP based ITSP (Internet Telephony Service Providers) will help your business achieve low-cost VoIP calls over managed broadband IP networks. Furthermore, the iPECS-MG has the ability to support the latest standards in IP protocol for carrier hosted services (H.323 Rev.4.2.3.0 / SIP Rev.4.5.0.26). It supports other industry standards such as IEEE standards (802.11b, 802.3af) and ITU standards (G.711, G.723.1, G.729 and T.38).



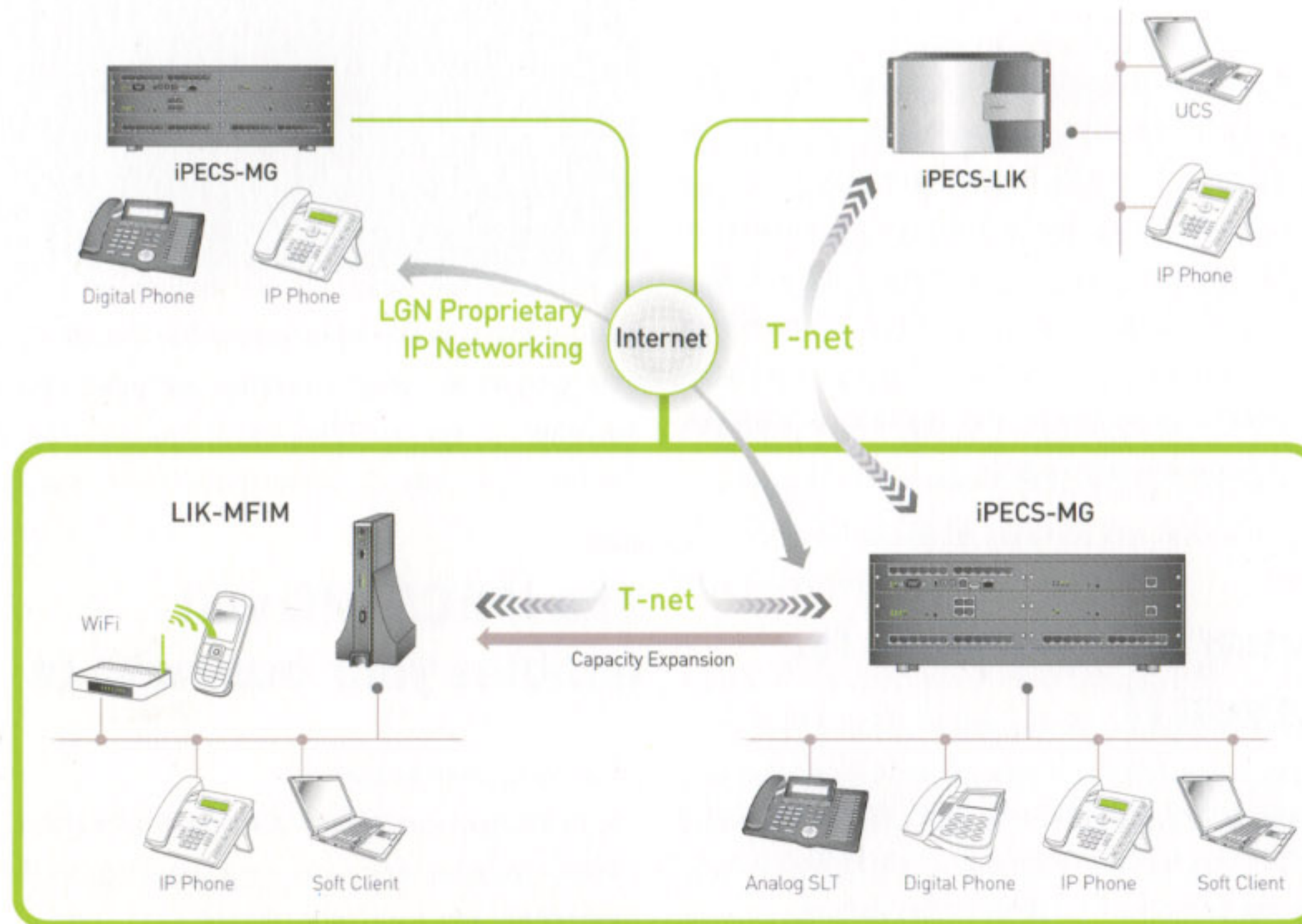
* IP clients needs relevant license keys for activation

Networking

Customers' workforce and locations are increasingly scattered with small and home offices needing to communicate as a single business. The iPECS-MG gives you the configuration methodology for customers who have branches with TDM extensions as well as IP extensions. LG-Nortel networking gives seamless communications under a centralized control. All features of the central system are available to the elements of the network while optimizing your communications costs.

Networking Scenario

In larger environments, the iPECS-MGs are networked through LG-Nortel's proprietary IP networking bringing together multiple branch office systems into a seamless telephony network. Furthermore, the iPECS-MG can be integrated in a powerful private network with other LG-Nortel systems including the ipLDK and the iPECS-LIK. With the iPECS-LIK, activated by T-NET (Transparent Networking), the iPECS-MG can provide seamless expansion up to 1,200 channels.



ENABLING UNIFIED COMMUNICATION SOLUTIONS FOR THE ENHANCED BUSINESS PRODUCTIVITY



Green IT

What is Green IT

Green IT is composed of initiatives and strategies reducing the environmental footprint of technology. It arises from reductions in energy use and consumables, including hardware, electricity fuel, and paper, among others. Because of these reductions, Green IT initiatives also produce cost savings in energy use, purchases, management and support, in addition to environmental benefits.

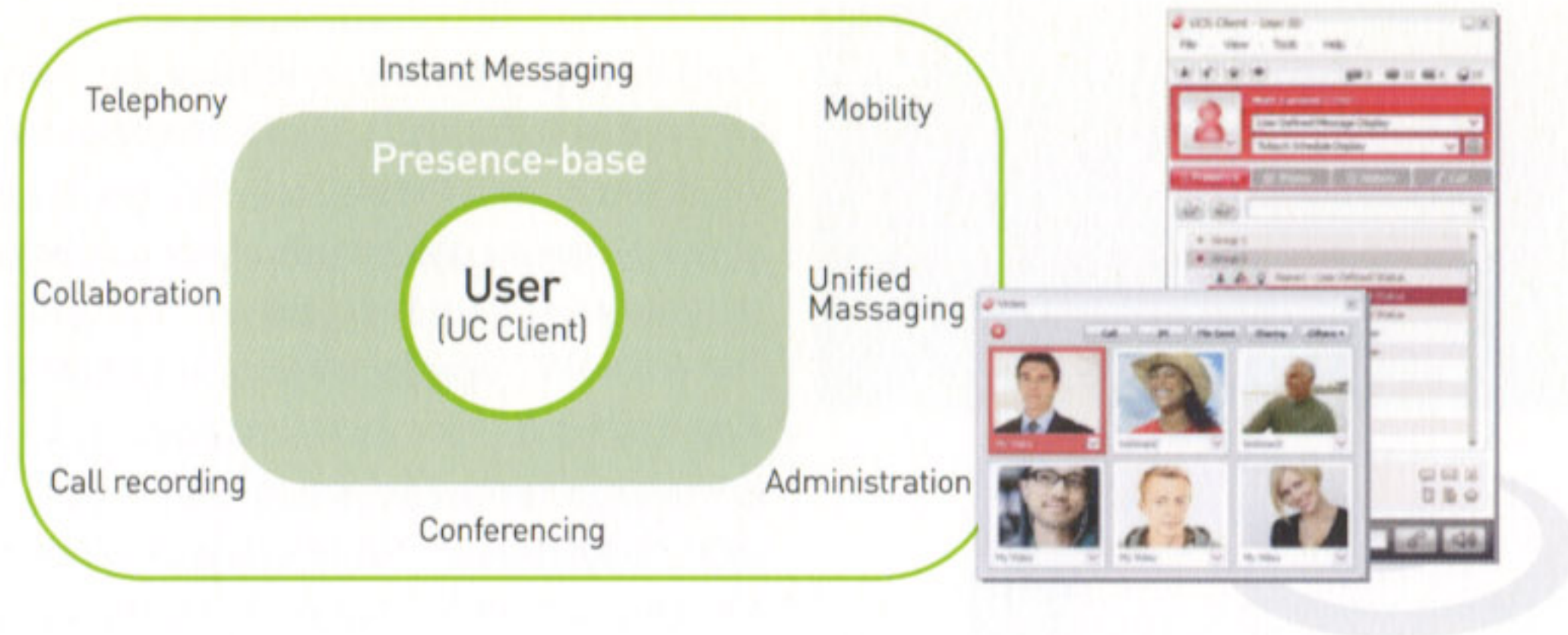
Smarter operation for Green IT

Most green IT initiatives have been discussed within the large enterprises. The SMB is catching up and adopting green initiatives as

well. Following this trend, the iPECS-MG is designed to be environmentally friendly, helping you reduce your Energy Consumption. The iPECS-MG really contributes to the effort for the energy saving and the protection of environment. Outside working hours, during weekends and holidays, the system will minimize the power consumption when set on remote administration. In case of an emergency, you can always turn your phone on and keep on going with your business.

The iPECS-MG will enable your business to

- Optimize energy use
- Actively manage system power consumption
- Make possible long term cost reduction in IT:
- Establish energy measurement



The iPECS UCS is the LG-Nortel proprietary Unified Communications Solution eliminating phone tag and other inefficiencies to make organizations more productive, agile and responsive.

CAPACITY

The iPECS UCS integrates all synchronous and asynchronous modes of communications into a single user interface - supporting up to 1,200 users simultaneously. The iPECS UCS expands and enhances the communication services of the iPECS-MG to dramatically improve productivity, collaboration and customer responsiveness.

SIMPLE TO USE AND MANAGE

The intuitive user interface is highly flexible and can be customized to address the needs of the individual users.

RICH PRESENCE BASED SOLUTION

The iPECS UCS helps users collaborate with colleagues and customers more effectively supporting real-time status and availability instantly reducing communication bottlenecks.

MANY NEEDS PACKED IN ONE SOLUTION

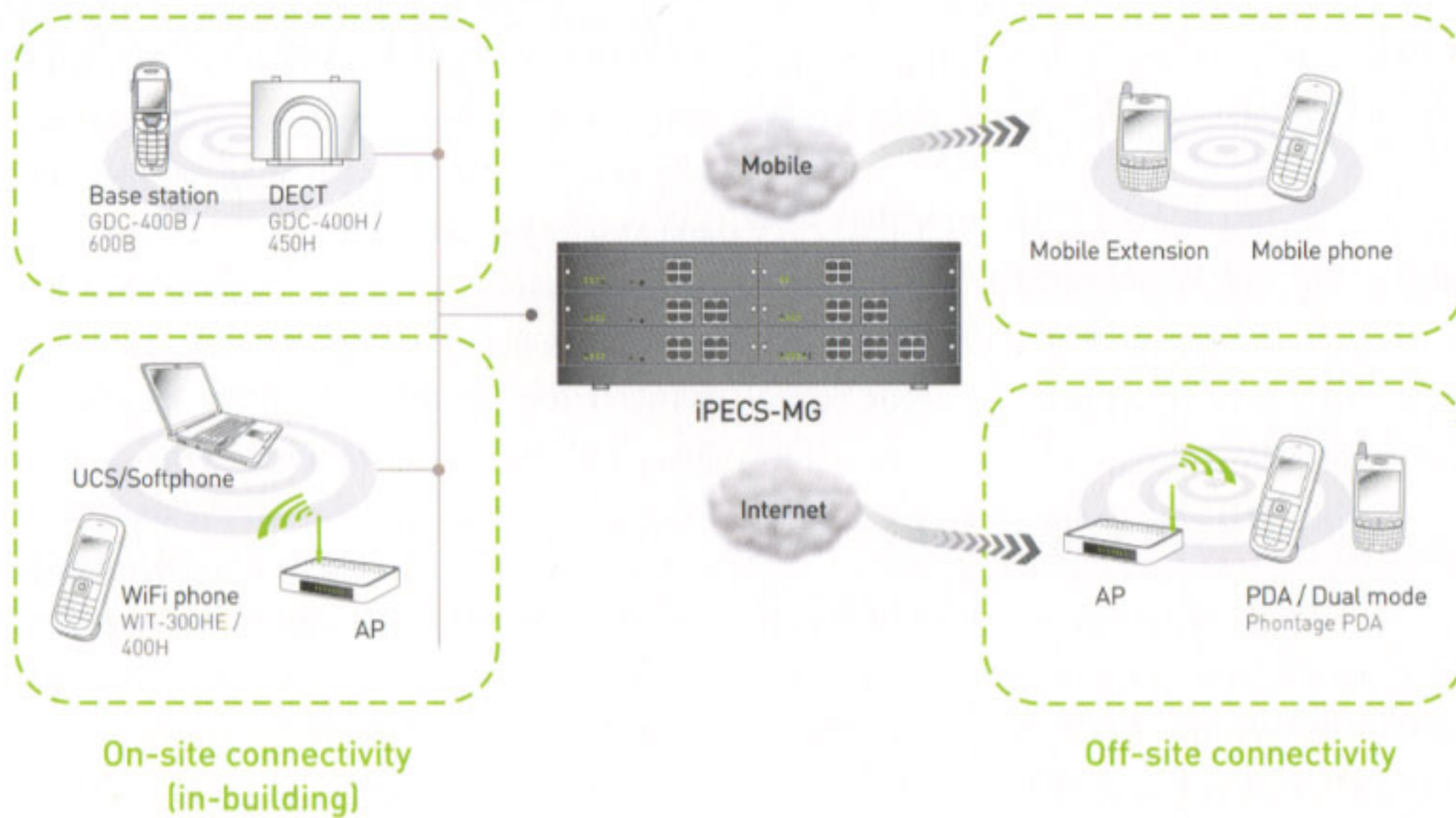
In addition to the rich voice service, the UCS users have access to a wide range of video, text, graphics and messaging services. Unlike other UC solutions, the iPECS UCS is designed as a single server solution which means that IM, video conference, shared and private directories, ICR, etc. are included in a single server application to improve performance, lower costs and reduce maintenance.

Services available include 32 party voice and 6 party video conferencing, business purpose instant messaging, application sharing and multi-party call recording, comprehensive presence information, individual call routing and more.

The UCS has access to both private and shared schedules for collaborating and the central UCS database or company's active Directory via LDAP. Furthermore, the UCS operates and synchronizes with all major personal information management applications and databases such as Outlook, ACT!, Goldmine and Excel.

Mobility

Transforming business processes is easily achieved with the iPECS-MG by providing each employee in the company with the benefits of mobility allowing them to be productive when they are away from their desk or their office. The iPECS-MG has a full suite of mobility offerings to choose from including digital and IP wireless handsets, PDA and PC-based soft clients. Regardless of location, your employees can stay connected resulting in increasing responsiveness and customers satisfaction.



IP soft client in dual mode phone

Using the LG-Nortel IP Softphone on a PC or a PDA enables mobile workers to contact their customers anytime anywhere. It expands the connectivity of the communications service to on-site as well as off-site through WLAN. The IP Softphone provides a transparent access to real time business communications and enhances productivity using the LG-Nortel Business Telephone System features such as call set up, transfer and multiparty conference-all in the convenience of a handheld device.

Mobile Extension

The iPECS-MG offers seamless mobility inside and outside the company using one number and one mailbox. Integrated with a mobile phone, the iPECS-MG allows remote workers to stay connected and respond to their customers' requests while they are on the move. The iPECS-MG routes the call to the office extension and the registered mobile phone at the same time. You can also make calls from your mobile phone using the iPECS-MG resources and features available at your office extension.

In-building mobility of WiFi and DECT

The LG-Nortel office mobility solution lets you carry on your conversation over both Wireless LAN and DECT terminals while you are away from your desk of moving around the office giving true communication mobility.

WiFi SOLUTION

Using a network of WiFi standard access point, the iPECS wireless LAN phone, WIT-400H, has access to the full the iPECS-MG functionality while on the move. Users have access to the same set of communications tools and features enabling mobility where coverage is provided. WIT-400H, the new trendy WiFi phone, implements an IEEE standard 802.11b/g wireless interface, WEP/WPA/WPA2 for wireless security and supports Web browsing on 2" TFT color LCD.



WIT-400H

- 2" TFT color LCD
- Backlit
- 802.11b/g compatible
- WEP/WPA/WPA2
- Web browser for public hot spot log in
- PTT
- Standby time 60hrs
- Talk time 3hrs

DECT SOLUTION

The iPECS IP DECT solution is built on LG-Nortel's DECT base station. It will allow wireless communications over an extended range using high density cell stations allowing up to 6 simultaneous calls with GDC-600B.

With seamless handover, the iPECS-MG DECT solution gives free roaming throughout the DECT coverage zone to remain available even on the move.

The GDC-400H DECT is a light weight handset with a stylish shape for users looking for a combination of quality business telephony features at a low cost.

The GDC-450H is a good choice for users who want to keep communicating not only indoor but also in rough environments. GDC-450H is made of ruggedized case and materials protecting the phone against drops, bumps and impacts while supporting more reliable call connection and roaming with the enhanced handset RF solution.



GDC-600B

- DECT Cell Station
- 6 simultaneous calls



GDC-400H

- 1.5" backlit LCD
- Navigation/Soft key
- Phonebook
- Standby time 150hrs
- Talk time 15hrs



GDC-450H

- 1.5" backlit LCD
- Navigation/Soft key
- Phonebook
- Scratchproof window
- Robust housing
- Standby time 150hrs
- Talk time 15hrs

Capacity	iPECS-MG100	iPECS-MG300
Handset registration	96	192
Interface board	2	3
Base station	16	24



Other Applications

Auto Attendant

The Messaging Solution of the iPECS-MG also provides the benefits of productivity gain and better customer services by using a optimized AA solution with personalized features such as custom greetings, menu options and call routing.

Voice Mail

If your business needs more channels or capacities, the voice mail board of the iPECS-MG provide enhanced message recording and greeting times allowing users to handle offline calls during busy hours and being away from the office. Employees can record personalized greetings and enjoy a password-protected access to their messages, with value added information such as CID, time and date of the call, etc.

Phontage

TYPES : DESKTOP, PDA OR WEBPHONE

Phontage is a software base communication tool using a PC or PDA to link the operation of and on-screen with other communications related PC applications. While Phontage desktop provides excellent communication features based on multi tasking PC platform, Phontage PDA works as a perfect mobile communicator within wireless network coverage.

FEATURES

All the features of the traditional multi button phone are available to the user as well as 2 party call recording. In addition, a Phonebook database with links to the user's PIM (Personal Information Manager), provides pop-up windows for incoming caller identification. Phontage users can employ the Phonebook to place calls as well as manage contact records. The video interface in the desk top deluxe version delivers video for a multi party conference with up to 3 participants. Sharing allows multiple parties in a conference to view and manipulate files simultaneously.

Ez-ATD:PC based attendant console

The Ez-Attendant displays an attendant's multi-button phone which allows the operator to visualize both the status of incoming calls and other users. This visual presentation increases the attendant's efficiency and productivity. The application can manage and interact with a contact database (Outlook, Goldmine, ACT!, etc) in the Phone Book Window. The Phone Book can be used to place calls, send e-mails or SMS messages and display who is calling to improve customer service levels. In addition, Ez-attendant supports any language by translation all text including menus to the attendant's desired language with the local language feature. The iPECS-MG supports up to 5 ez-attendants for larger or high call volume environments and can be used as a centralized attendant in networked environments

Management

NMS is a Multi site management tool for the iPECS-MG

MANAGING CENTRALLY AS ONE GROUP

Network Management Solution (NMS) is a powerful tool for managing fault information, monitoring real time status, maintaining call statistics and databases of various the iPECS-MG appliances.

OPTIMIZED TOOL FOR MONITORING, STATISTICS AND REPORTING

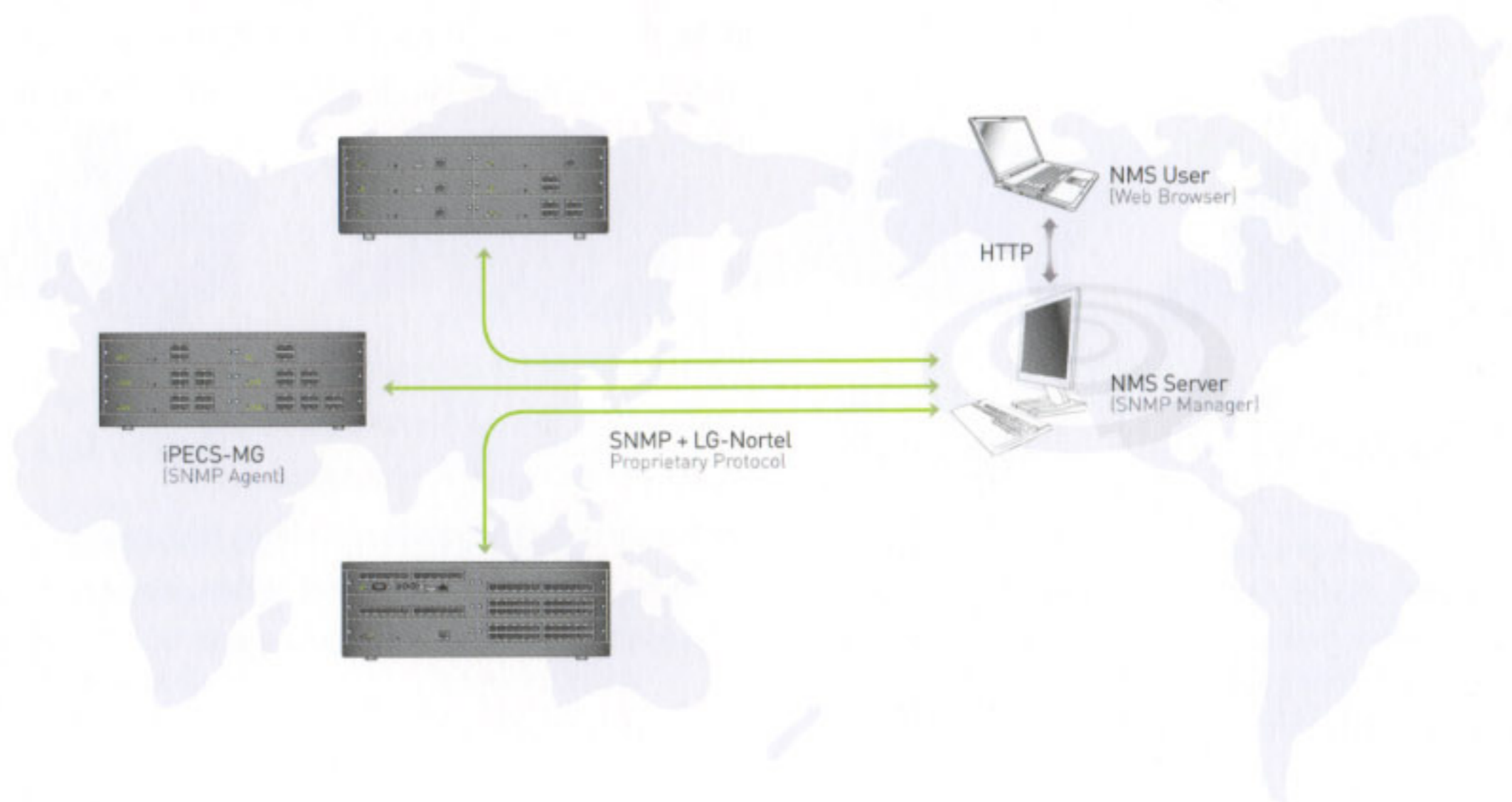
NMS monitors and stores call traffic and SMDR statistics from each registered system. Analysis of call (SMDR) and traffic statistics are presented in both graphical and tabular formats and to be for resource planning of the corporation. Select stations, lines, time interval, etc. to isolate the reporting you need.

NMS DEPLOYMENT

NMS is a Web based application so that communication managers access NMS via Internet Explorer from any remote PC. Providing services for up to 1,000 iPECS-MG systems, iPECS NMS employs based on standard SNMP (Simple Network Management Protocol).

USER SCENARIO

With NMS, communication managers can review real-time status of all devices and channels associated, with fault events highlighted for quick identification. Or E-mail fault notification assures the network managers to be informed of predefined events and faults on a real-time basis so unusual conditions can be addressed before their systems are affected. NMS maintains a database of all systems and permits direct access to each system's Web Admin function for remote adds, moves and changes. Instead of accessing the Web admin of each and dealing with multiple site IDs and passwords, the manager can download or upload multiple system databases.



EXTENSIVE LINE-UPS TO SUIT UNIQUE BUSINESS TELEPHONY NEEDS

The iPECS-MG supports an extensive range of terminals such as digital and IP phones, SIP phones, DECT, WiFi phones and legacy telephones. These terminals are designed for business users who require a range of feature-rich telephony devices to match your constantly changing business needs. The iPECS-MG gives you access to a large portfolio of terminals to suit your unique business telephony needs.

LIP-8000 series IP Terminals

The LIP-8000 series includes 6 phone models and 4 types of DSS/LSS consoles to provide a solution tailored to the needs of each user. The LIP series takes you to a new level of audio experience, communications productivity, broadband network connectivity allowing quick access to the entire range of advanced features and applications.

- Large color LCD Displays
- Stylish Navigation key
- 2nd hub IP port to connect PC
- High quality full-duplex speakerphone
- Video conferencing for rich collaboration
- XML open interface enabling various application
- Bluetooth module for wireless headset support
- 12/48DSS, 12/40LSS(LCD DSS) support



Premium LIP-8050V



Entry LIP-8004D

- 16 character 1 line
- OHD
- 4 flexible buttons
- 802.3af PoE



Basic LIP-8008D

- 148x80 LCD 5 lines
- Full duplex SPK
- 8 flexible buttons
- 802.3af PoE
- Wideband Codec
- 802.3af PoE
- 2nd hub port (10/100T)



Standard LIP-8012D

- 240x42 LCD 3 lines
- Backlit
- Navigation key
- Full duplex SPK
- 12 flexible buttons
- Wideband Codec
- 802.3af PoE
- 2nd hub port (10/100T)
- Optional DSS



Professional LIP-8024D

- 240x56 LCD 4 lines
- Backlit
- Navigation key
- Full duplex SPK
- 24 flexible buttons
- Wideband Codec
- 802.3af PoE
- 2nd hub port (10/100T)
- Optional DSS/Bluetooth



Executive LIP-8040L

- 240x144 LCD 9 lines
- Backlit
- Navigation key
- Full duplex SPK
- 10 flexible buttons (LCD)
- Wideband Codec
- 802.3af PoE
- 2nd hub port (10/100T)
- Optional DSS/Bluetooth

LDP-7000 series Digital Telephones

The LDP-7000 series includes 6 phone models and 1 DSS console. The LDP series is extremely reliable and provides a wide range of features to support your business environment



LDP-7004N

- 2 Flexible buttons
- 5 Fixed buttons
- OHD / Hold



LDP-7004D

- 1 line LCD
- 2 Flexible buttons
- 5 Fixed buttons
- OHD / Hold



LDP-7008D

- 2 Line LCD
- 8 Flexible buttons
- 5 Fixed buttons
- Speaker phone
- Headset jack



LDP-7016D

- 3 Line LCD
- Navigation
- 16 Flexible buttons
- 7 Fixed buttons
- Speaker phone
- Hand free operation



LDP-7024D

- 3 Line LCD
- Navigation
- 24 Flexible buttons
- 7 Fixed buttons
- Speaker phone
- Hand free operation



LDP-7024LD

- 9 Line Large LCD
- Navigation
- 24 Flexible buttons
- 7 Fixed buttons
- Speaker phone
- Hand free operation

SYSTEM COMPONENTS

Category	Component	Description
Cabinet	MG-BKSU	Basic KSU
	MG-EKSU	Expansion KSU
Power supply	MG-PSU	Power Supply Unit
Controller	MG-MPB100	Main Processor Board for iPECS-MG100 with DSIU [DKT6+SLT6, 4AA/VoIP]
	MG-MPB300	Main Processor Board for iPECS-MG300 with DSIU [DKT6+SLT6, 4AA/VoIP]
Function board	MG-DTIB12 / MG-DTIB24	12/24 Digital Phone Interface Board
	MG-SLIB12 / MG-SLIB24	12/24 SLT Interface Board
	MG-LCOB4 / MG-LCOB8 / MG-LCOB12	4/8/12 LCO Interface Board
	MG-PRIB	Digital Trunk Interface Board [1PRI or 1E1/R2, 30chs]
	MG-BRIB2 / MG-BRIB4	2/4 BRI Interface Board [S0&T0 selectable, 4chs/8chs]
	MG-VMIB	Voice Mail Interface Board [8chs, 100hrs]
	MG-AAIB	Auto Attendant Interface Board [8chs]
	MG-VOIB8 / MG-VOIB24	8/24 VoIP Interface Board
	MG-WTIB4 / MG-WTIB8	4/8 Base Wireless Terminal Interface Board
Others	GDC-400B / GDC-600B	4/6 channels DECT Base Station
	MG-MODU	MODEM Unit [33Kbps]
	MG-CMU4	4 Call Metering Unit [50Hz/12KHz/16KHz]
	MG-WMK	Wall Mount Bracket

OTHER SPECIFICATION

Item	Description	Specification
PSU	AC Voltage Input	100 ~ 240 +/- 10% Volt AC @47~63Hz
	AC Power consumption	350W
	AC Input Fuse	6.3A @ 250Volt AC
	DC Output Voltage	+ 5, + 30Volt DC
	Input Voltage	24Volt DC
External Backup Battery	Battery Fuse	15.0A @250Volt AC
	Charging Current	Max. 1A
	Battery Load Current	Max. 12A
Operating Environment	Temperature	0~40°C
	Humidity	0~80% non-condensing
Dimension	KSU	170.2 x 440 x 325.4 [mm]
Weight	Basic KSU	6.2 kg [without PSU]
	Expansion KSU	6.25 kg [without PSU]



LG-NORTEL

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