

Intelligence in business communications



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The ipLDK-60 is an intelligent IP telephony system delivered by the LG-Ericsson's customized communications technology.

Basically, it provides a complete communication

Basically, it provides a complete communication solution with SMB customers that range from small offices seeking for voice oriented legacy telephony system to multiple offices networked and deployed over wide areas.



Advanced **IPT Solution** IP Networking IP Telephony Server : Proprietary IP clients SIP/H.323 Trunk Latest digital PABX Voice Mail Auto-Attendant CTI PC-Application 03

Optimized SMB Hybrid KTS

Full featured - basic service unit : SMS, CID, LCR, SMDR, Conference, LAN connection Call cost control, etc..

IP Networking System

Using the latest VoIP technology, the ipLDK-60 can be a full networking system consisting of maximum 72 nodes and LG-Ericsson's proprietary IP Phones & PC or PDA based soft client.

Simplified Architecture

Its simplified architecture provides a plug & play facility with hybrid scalability up to 48 extensions and user friendly OAM tools.



Powerful Basic Telephony Services

The ipLDK-60 basic service unit offers a variety of features for enterprise communications to provide "A ready made telephony solution".

Call Budget Control

As cost in small business is always critical, the ipLDK-60 provides various telephony cost control facilities including prepaid call, barge-in, forced trunk disconnect, LCR, etc.

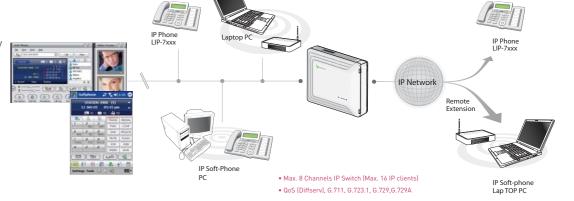
■ Intelligent

IP Communication Solutions

Affordable, innovative IP communication solution for small & medium businesses

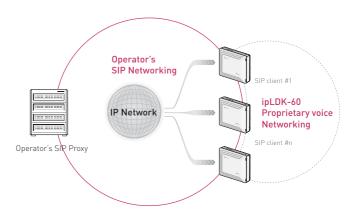
Business IP communications

The ipLDK-60 supports various proprietary IP clients such as LIP-7000 terminals and IP soft-client – Phontage where IP connection is available.



ipLDK-60 Networking

The ipLDK-60 can be a full networking system consisting of up to 72 nodes by SIP / H.323 dual stack. And for proprietary networking, a rich feature set shown below would be additional advantages.



- Net Call
- Identification Service
- Net Transfer
- Net Call Forward
- Net Conference
- Call OfferCall Completion
- Do-Not-Disturb (DND)
- CO Transit In / Out
- Message Waiting Indication
- Absent Text Message
- Centralized VM / Attendant
- Centralized SMDR for Transit Call
- Busy Lamp Field (BLF)
- Net Follow-Me Forward

Intelligent communication solutions

02

Intelligent telephony feature set

Affordable, innovative IP communication solution for small & medium businesses



LG-Ericsson DIGITAL technologies

For new telephony system deployments in an SMB environment, future service growth is an after thought for users as long as basic requirements are satisfied.

This lack of foresight often keeps users from evolving to a more advanced environment and also forces them to resort to additional costs when additional services are required.

As one of major benefits of the ipLDK-60, LG-Ericsson has built in several signal processing mechanisms to make those services costless:

- Call Processing Tone Detection
- SMS / Caller ID Sending / Receiving
- DTMF Processing
- Fax Tone Detection

Smart telephone system with plug& play facility

The ipLDK-60 is designed to be a user-friendly telephone system in installation and 0&M perspectives.

With its plug & play facility thru a full-hybrid architecture, It gives a maximum flexibility in selecting types of user terminals whether dealing with an analog SLT, fax or digital phone. And when accommodating external CO lines, the ipLDK-60 recognizes whether incoming messages are fax or voice and it automatically delivers them to the appropriate types of terminals.

Sophisticated applications

■ TAPI Interface

The most commonly used CTI interface TAPI can be enabled that extensions can use TAPI compatible software for making calls.

Phontage (IP softphone)

As an virtual station, The ipLDK-60 provides software IP phone for desk top PC and PDA. On securing data connection for an user's PC whether he is located on-the-site or remotely, He can make calls by logging in.

ez-phone (LG-Ericsson's TAPI based telephone)

Provides individual desk top call controls as well as a handy tool to send/receive/save SMS.

ez-attendant (Windows based PC-Attendant)

PC based attendant console running on MS-Windows will be a good supplementary option replacing an attendant console.

Call cost control/monitoring

As telecommunication cost seems to be one of critical issues that takes a big place in the cost sheet for running small enterprises. The ipLDK-60 provides a variety of call cost control/monitoring facilities.

Call Cut-Off Timer for each extension

Activated and set by system programming. When the timer expires, on-going calls will be disconnected.

Pre-paid Call

Works with the optional Call Metering Unit (CMU) that recognizes specific billing signals received from PSTN and gives each extension limited minutes for out going calls.

Collect Call Blocking

The ipLDK-60 can be enabled to block incoming collect calls from analog trunk as well as digital trunk line.

Barge In

Enables a designated extension to intrude in on-going conversations after a warning tone is presented.

SMDR

For billing in the ipLDK-60, max. 2,000 calls log can be saved in system memory for printing out or downloaded to a PC.

Least Cost Routing (LCR)

Automatically uses LCR tables and types of operation to identify the least expensive routes for outgoing calls.

Short Message Service (SMS)

Messaging has become a very useful tool for modern lifestyles. No wonder that Its application in the business environment is recently being identified as an effective way for communication.

The ipLDK-60 recognizes SMS messages received from PSTN, where available, and delivers them to SMS capable SLT or LG-Ericsson's TAPI phone (ez-phone), digital phones and IP Phones.

Once voice mail is activated in the ipLDK-60, notification for voice mail can be given to mobile phones registered as an extension.

Caller ID for CO lines & analog extensions

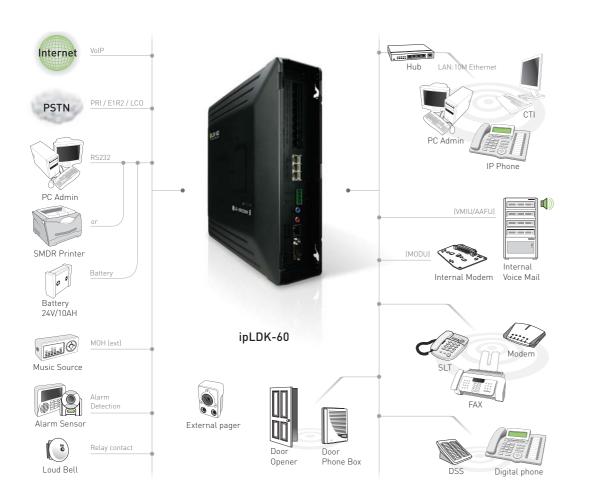
The ipLDK-60 detects caller identification information (CID) from the CO Line and displays it on CID capable SLT as well as digital telephone.

Compatible CID signals for CO line are FSK type, DTMF type and ANI.

≥ Simplified

architecture for communication

As its basic scheme, architecture of the ipLDK-60 allows easy connection to terminals, networks and peripherals.



Basic Resources

- CID : CO, SLT (FSK, DTMF)
- SMS receive / send
- DTMF receiver
- Call Progress Tone detection
- Auto Fax Tone detection
- 1 Int. MOH (8 Poly Music)
- 1 Ext. MOH & 1 Paging
- 1 LAN, 1 RS-232C
- 1 Alarm Sensor
- 2 Relay (Loud Bell or Door Open)
- RGU (25Hz)
- PSU (Ext. Battery Back-up)

Optional Components

- VOIB / VOIU (VoIP 4 + 4 ch)
- CHB308 (3 CO, 8 Hybrid)
- CSB316 (3 CO, 16 SLT)
- SLIB8 (8 SLT)
- PRHB8 (1 PRI, 8 Hybrid)
- VMIU (4ch) or AAFU (4ch)
- MODU (MODEM I/F Unit)

ipLDK-60 Configuration Matrix for TDM

Unit: CO / Extension

TDM configuration	EKSU (3/8)	EKSU+CHB308 (6/16)	EKSU+SLIB8 (3/16)	EKSU+CSB316 (6/24)
BKSU (3/8)	6 / 16	9 / 24	6 / 24	9 / 32
BKSU+CHB308 (6/16)	9 / 24	12 / 32	9 / 32	12 / 40
BKSU+CSB316 (6/24)	9 / 32	12 / 40	9 / 40	12 / 48
BKSU+SLIB8 (3/16)	6 / 24	9 / 32	6/32	9 / 40
BKSU+PRHB8 (33/16)	36 / 24	36*/32	36 / 32	36* / 40

^{*} The Maximum physical ports for CO line may exceed that of system limitation (36 CO lines).

Max. System Capacity

n		Extension			Trunk	
Unit	SLT	DKT	IP*	CO	PRI	IP**
Total	23	16	16	6	30	8
Total		40			36	
Unit SLI SIII	IP*	CO	PRI	IP**		
	47	32	16	12	30	8
Total		48			36	
	Unit Total Total Unit Total	Unit Total 23 Total Unit Total 47	Unit Total SLT DKT 23 16 Total 40 Unit Total SLT DKT Total 47 32	Unit Total SLT DKT IP* 23 16 16 Total 40 Unit Total SLT DKT IP* Total 47 32 16	Unit Total SLT DKT IP* CO 23 16 16 6 Total 40 40 40 Unit Total SLT DKT IP* CO Total 47 32 16 12	Unit Total SLT DKT IP* CO PRI 23 16 16 6 30 Total 40 36 Unit Total SLT DKT IP* CO PRI Total 47 32 16 12 30

^{*} IP : No. of registration



^{**} IP : No. of DSP channels

▶ Proprietary telephones

As proprietary terminals, the ipLDK-60 offers several choices



LDP-7224D

- 3 line LCD display
- 3 soft keys
- 24 flexible buttons
- Navigation key

As proprietary terminals, the ipLDK-60 offers several choices - LDP-7224D, LDP-7208D, DSS and digital door phone as digital proprietary terminals and LIP 7008D, LIP 7016D, LIP 7024D, LIP 7024LD as IP proprietary terminals.



LDP-DPB

- Digital door phone
- Volume control
- Dimension (W*H*D) : 99 * 132 * 33 mm



LDP-7208D

- 2 line LCD display
- 8 flexible buttons



LDP-7248DSS



LIP-7008D

- Multi language
- 2nd CID preview
- Full duplex speakerphone
- Headset jack
- PIM DB integration



LIP-7016D

- Navigation
- Switch port(10/100 T)
- Dual LED



LIP-7024D

- 3 soft key
- Navigation
- Switch port(10/100 T)
- Dual LED



LIP-7024LD

- SMS
- Phone book
- Scheduler
- Calendar

Product Components

	TEM	ADD ON ODTIONS	MAX. LINE		CDECIFICATION	
1	TEM	ADD-ON OPTIONS CO * Ext. SPECIFICATION		SPECIFICATION		
BKSU (Basic Key Serv	• 1 CHB308 / CSB316 / SLIB8 36 24 SLIB8 • 1 VMIU/AAFU • 1 MODU • 1 PRHB8 • 1 VOIB/VOIU		24	Main function of BKSU 3 CO, 1 digital ext. & 7 hybrid ext. interfaces 1 Optional slot for line expansion 1 Alarm Sensor, 1 RS-232C, 1 LAN interface, 1 External MOH, 1 Paging interface 2 relays for loud bell / door opener 1 power failure transfer circuit Power supply / ring generator unit Signal processor CID [PSK / DTMF] signal receiver & regenerator PSTN SMS receiver & sender DTMF receiver Call Progress Tone detection Auto Fax Tone detection		
EKSU (Expansion Key	Service Unit)	•1 CHB308 / CSB316 / SLIB8 •1 CMU	6	24	Main function of EKSU 3 CO, 8 hybrid ext. interfaces 1 optional slot for line expansion 1 power failure transfer circuit Power supply / ring generator unit Signal processor CID (FSK / DTMF / Russian CID) Fixed line SMS receiver / sender DTMF receiver Call Progress Tone detection Auto Fax Tone detection	
Expansion Board	CHB308	1 CMU	3	8H	O Lines and 8 Hybrid Ext. Power failure transfer circuit	
	CSB316	1 CMU	3	16A	•3 CO Lines and 16 SLTs Interface Board •1 Power failure transfer circuit	
	SLIB8	-	0	8A	8 SLTs Interface Board	
	PRHB8	-	30	8H	PRI/E1R2 and 8 Hybrid Ext.	
Function	VMIU	-	-	-	Voice Mail Interface Unit - 4 ch. / 2 hrs	
Unit	AAFU	-	-	-	Auto Attendant Function Unit, 4 channels	
	VOIB	1 VOIU	4	4 ch.	DSP channels VoIP interface – Master	
	VOIU	-	4	4 ch.	DSP channels VoIP interface - Slave	
	MODU	-	-	-	Modem Unit (33Kbps)	
	CMU12PR	-	-	-	Call Metering detection Unit (3 channels) : Polarity reverse & 12/16 K Hz	
	CMU50PR	-	-	-	Call Metering detection Unit (3 channels) : Polarity reverse & 50 Hz	

Other specifications

Note] A : Analog extension D : Digital extension H : Hybrid extension Combination of BKSU & EKSU makes 36 CO lines and 48 Extensions as a maximum system capacity.

ITEM	DESCRIPTION	SPECIFICATION	
PSU	AC Voltage Input	110-230 +/- 10% Volt AC @47-63Hz	
	AC Power consumption	90W	
	AC Input Fuse	1.25A @250Volt AC	
	DC Output Voltage	+5, -5, +27, +30Volt DC	
External Backup Battery	Input Voltage	+24 Volt DC(+12VDC x 2ea)	
	Battery Fuse	5.0A @250Volt AC	
	Charging Current	Max. 200mA	
	Battery Load Current	Max. 3A	
Operating Environment	Temperature	0 (°C) - 40 (°C)	
	Humidity	0 - 80% (non-condensing)	
Dimension	KSU	339mm(W) x 288mm(H) x 85mm(D)	
Weight	Basic KSU	2.0 Kg	
	Expansion KSU	2.0 Kg	