# Hybrid Communications Platform for SME, iPECS eMG80



iPECS eMG80 adopts VoIP technology running in optimized IP/TDM hybrid switching platform. The ability to communicate seamlessly over IP networks delivers advantages over existing hybrid technologies permitting SMEs to access efficiency and productive applications with iPECS eMG80 in a simple and cost-effective manner.

#### **Embedded UC and Telephony**

As the most compelling advantage, Unified Communications services are embedded in iPECS eMG80. Users can improve business efficiency and productivity with embedded UC features including real-time voice, video and presence enabled IM with messaging services (Visual Voice Mail and SMS etc.) under a single user interface on multiple devices without the need of an external server. Also, it is seamlessly expandable to provide advanced collaboration services (File sending, application sharing and multi-party video conference etc.) by simply adding an external server.

#### Flexible Multi-Site Deployment

As a branch deployment solution, iPECS eMG80 enables flexible and cost-effective multi-site deployment as local/branch system. Also, it provides secure and seamless communication features. When a connection between the central system and the remote devices is fail, the local system will be worked as the call server responsibility for the local devices. Besides local survivability, it also provides PSTN back-up service (Fail-over) for internal calls.

#### Wide Range of Mobility

iPECS eMG80 provides multiple mobility solutions for internal and external mobile workers. Through a wide range of mobility solutions, users can improve productivity and decrease communication expense. iPECS DECT and Wi-Fi phones provide feature rich and reliable communications for internal mobile workers. For external mobile workers, iPECS UCS mobile client delivers the power of a desktop phone to smartphones or tablet PCs. Also, Mobile Extension lets users place and receive business calls from their smart phone.

#### Seamless Scalability

As a scalable call server iPECS eMG80 allows businesses to easily expand capacity with optional gateways or boards. If users using iPECS eMG80 and want to expand capacity, users don't need to change all IT resources. Only basic KSU need to be changed and other IT resources such as EKSU and desktop IP/Digital phones can be used as before. With iPECS eMG80's scalability, users can experience upfront investment savings and cost-effective expansion as a business grows.

#### Rich Business Applications

iPECS eMG80 provides a various range of applications and mobile clients to fulfill varying needs and requirements in SME environments. Also, it offers interoperability with various 3rd party solutions in hospitality, healthcare and other vertical industries.

#### **Embedded VoIP**

Embedded VoIP channels are one of the great advantages. iPECS eMG80's advanced VoIP technology supports low cost SIP trunking, on and off-premise mobility, remote connectivity and multi-site networking with minimal cost to overcome geographical boundaries.

#### **KSU Components**

Item	Description
KSUA	Basic KSU(4 CO, 1 DKT and 7 Hybrid Interfaces)  Voice Mail(Default : 2 ch/1 hr, Max : 16 ch/32 hrs with MEMU/VVMU, 16 ch/77 hrs with MEMU2/VVMU)  VoIP(Default : 2 ch, Max : 16 ch with VVMU)  Built-in UCS Desktop/Mobile, Built-in ClickCall : Default 2/2, 2 copy
KSUAD	Basic KSU(4 CO, 8 DKT and 4 SLT Interfaces)  Voice Mail(Default : 2 ch/1 hr, Max : 16 ch/32 hrs with MEMU/VVMU, 16 ch/77 hrs with MEMU2/VVMU)  VoIP(Default : 2 ch, Max : 16 ch with VVMU)  Built-in UCS Desktop/Mobile, Built-in ClickCall : Default 2/2, 2 copy
KSUI	Basic KSU(1 DKT and 7 Hybrid Interfaces)  Voice Mail(Default: 2 ch/1 hr, Max: 16 ch/32 hrs with MEMU/VVMU, 16 ch/77 hrs with MEMU2/VVMU)  VoIP(Default: 2 ch, Max: 16 ch with VVMU)  Built-in UCS Desktop/Mobile, Built-in ClickCall: Default 2/2, 2 copy
KSUID	Basic KSU(8 DKT and 4 SLT Interfaces)  Voice Mail(Default: 2 ch/1 hr, Max: 16 ch/32 hrs with MEMU/VVMU, 16 ch/77 hrs with MEMU2/VVMU)  VoIP(Default: 2 ch, Max: 16 ch with VVMU)  Built-in UCS Desktop/Mobile, Built-in ClickCall: Default 2/2, 2 copy
EKSU	Expansion KSU 4 CO and 8 Hybrid



#### **Key Features**

- Built-in iPECS UCS
- Built-in iPECS ClickCall
- Embedded VoIP
- Embedded Voice Mail
- Embedded ACD
- Embedded SIP
- Embedded audio conference
- Embedded hotel features
- Mobile extension
- One number service
- Web call back
- · ACD call statistics for multiple group
- Emergency paging/call monitoring
- Simplified directory search and dial
- Custom MOH support
- VM to E-Mail forwarding
- Web administrationWeb user portal

#### **Applications**

- iPECS UCS
- iPECS ClickCall
- iPECS RCC Gateway
- iPECS Attendant (Office/Hotel)
- iPECS IPCR
- iPECS CCS
- iPECS Report Plus
- iPECS NMS

#### **Supported Terminals**

- LIP-9071
- LIP-9070
- LIP-9000 Series
- LIP-8000E Series
- IP8800E Series
- LDP-9200 SeriesLDP-9000 Series
- LDP-7000 Series
- LDP-DPB
- GDC-800H (IP DECT)
- GDC-500H/480H
- WIT-400HE

# **3<sup>rd</sup> Party Applications** and Middleware

- TAPI (3<sup>rd</sup> Party)
- Fidelio I/F
- Microsoft Lync/SfB
- Tiger TMS for hospitality solution
- LAS for Healthcare solution

# System Capacity - KSUA/KSUI/KSUAD/KSUID + EKSU

		KSU	EKSU	Max
Trunks	Max Ports	36/62/36/62	12	48/74/48/74
	Analog/BRI trunk	12	12	24
	PRI/T1	-/30/-/30	-	-/30/-/30
	IP trunk(SIP/H.323)	16	-	16
	Remote Gateway	8	-	8
	Max Ports	104*/104/108**/108	32	136/136/140/140
	SLT	31/31/28/28	32	63/63/60/60
	Digital	24	24	48
Extensions	Hybrid(SLT or Digital)	23/23/16/16	24	47/47/40/40
EXTERISIONS	IP/MEX	32	-	32
	DECT	48	-	48
	UC Desktop / Mobile	32	-	32
	IP ATD	5	-	5
\	Built-in	8	-	8
VM channel	with VVMU	16	-	16
ValD abannal	Built-in	8	-	8
VoIP channel	with VVMU	16	-	16
E	BHCC	-	-	14,000

<sup>\*</sup> HYB(8) + DECT(48) + SLIB(16) + IP PHONE(32) = 104

#### Interface & Standard

Item	Specification
LAN Interface	10/100Base-T Ethernet(IEEE 802.3) 1 port, Half or Full Duplex(Auto-Negotiation)
Serial Port(RS-232C)	1
USB(2.0) Host port	1
VoIP Protocol	SIP and H.323 Revision 2
Voice Compression	G.711/G.726/G.729/G.723.1
Voice/Fax Switching	T.38
Echo cancellation	G.165

# **Operating Environment**

Temperature	0(°C) - 40(°C)/32(°F) - 104(°F)
Humidity	0 - 80%(Non-condensing)

# Dimension & Weight

Dimension		KSU	307 x 294 x 126.6
W x H x D(mm)	Expansion KSU	307 x 294 x 126.6	
Weight(Kg)	Ka)	KSU	2.03
	Expansion KSU	1.99	

### Power Requirement

Item	Description	Specification
PSU	AC Voltage Input	100~240 +/- 10% Volt AC @ 47-63 Hz
	AC Power Consumption	90 Watts
	AC Input Fuse	2A @ 250 Volt AC
	DC Output Voltage	+5, -5, +27, +30 Volt DC
External Backup Battery	Input Voltage	+24 Volt DC(+12 VDC x 2 each KSU)
	Battery Fuse	5.0A @ 250 Volts AC, 5AG
	Charging Current	Max 200 mA
	Battery Load Current	Max 3A(KSU only), Max 6A(KSU+ EKSU)

## **System Components**

Item	Board	Description
	eMG80-CH204	2 CO Line and 4 Hybrid Interface Board
	eMG80-CH408	4 CO Line and 8 Hybrid Interface Board
	eMG80-CS416	4 CO Line and 16 SLT Interface Board
	eMG80-BH104	1 BRI(2B+D) and 4 Hybrid Interface Board
Trunk/Extension	eMG80-BH208	2 BRI(2B+D) and 8 Hybrid Interface Board
Interface Boards	eMG80-HYB8	8 Hybrid Interface Board
	eMG80-SLB16	16 SLT Interface Board
	eMG80-PRIU	1 PRI/E1/R2 or T1(30 ch or 24 ch) Interface Unit
	eMG80-BRIU2	2 BRI(2B+D) Interface Unit
	eMG80-WTIB4	4 Wireless Terminal Interface Board(4 Base station, 6 ch per base)
Function/Accessory Boards	eMG80-VVMU*	Resource Unit for Voice Mail, Voice Mail Storage and VoIP Channel Max VM/VoIP 4 ch/8 ch or 8 ch/4 ch, VM storage 1 hour default plus 15 hours by license  Licenses required for VM, VoIP channel and VM storage
	eMG80-MEMU	Memory Expansion Module Unit for VM(15 hours)
	eMG80-MEMU2	Memory Expansion Module Unit for VM(60 hours)
	eMG80-MODU	Modem Unit
	MG-CMU4	4 Call Metering Unit, 4 channel daughter board for MBU, EMBU and analog CO Line Interface Boards
	eMG80-RMB	19" Rack Mounting Bracket(Option)

<sup>\*</sup> Both built-in DSP and VVMU's DSP of iPECS eMG80 are commonly used for VM and VoIP channels.(Max VM/VoIP 4 ch/8 ch or 8 ch/4 ch)

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<sup>\*\*</sup> DSIB(12) + DECT(48) + SLIB(16) + IP PHONE(32) = 108