

iPECS SMB eMG Expansion

(iPECS SMBSW-TRA-01-023)

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Ericsson-LG Enterprise

REVISION HISTORY

ISSUE	DATE	DESCRIPTION OF CHANGES
1.0	15-Oct-15	Initial release

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eMG80E Capacity

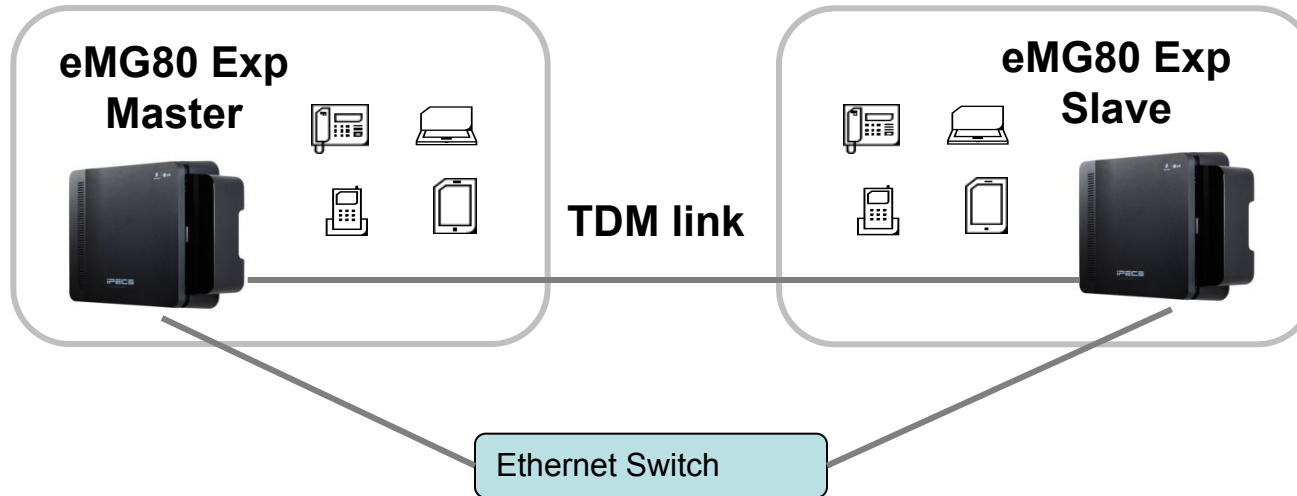
eMG80E Capacity

		1 st KSU	2 nd KSU	Max	
Total	Max Port	222	44	222	Extension + Trunk + VM
Trunk	Max Port	74(56)	12	74 (66)	() : Ports except remote G/W
	Analog	12	12	24	
	PRI / T1 / E1	30	-	30	
	IP (SIP/H.323)	16	-	16	
Extension	Max Prot	140 (36)	32	140 (68)	() : Port except IP, DECT
	SLT	31	32	63	
	Digital	24	24	48	
	Hybrid	*23	24	47	Port 1 : DKT only
	IP	32	-	32	Max Relay Channel: 16 Ch
	DECT	48	-	48	Max base channel : 24 Ch
VMIB	Max Port	8	-	8	

eMG80 Expansion (eMG80E)

Configuration

- eMG80 expansion is support by TNET feature
 - TDM voice connection is connected by TDM link.



- WTIB should be installed in master system (not in slave)
- One PRIB/BRIB line should be connected to master system if PRIB/BRIB is used in slave system.
- IP device (IP phone, UCS client, iPCR, Application) & VOIP trunk is need to be installed in master.
- Could you use expansion slave system to expand TDM port (DTIB/SLIB/LCOB/BRIB/PRIB etc.)

eMG80 Expansion (eMG80E)

eMG80 Master system Configuration

The screenshot displays the iPECS eMG800 Web Admin interface. The browser address bar shows `https://192.168.150.106/a_index.html`. The interface includes a top navigation bar with tabs for 'Administration' and 'Maintenance', and buttons for 'Change Language' and 'Log Out'. A left sidebar contains a menu with categories like 'System ID & Numbering Plans', 'Station Data', 'Board Based Data', 'CO Line Data', 'System Data', 'Station Group Data', 'ISDN Line Data', 'SIP Data', 'Tables Data', 'Networking Data', and 'T-NET Data'. The 'T-NET Data' category is expanded, showing sub-items: 'T-NET Basic Attributes(330)', 'T-NET CM attributes(331)', 'T-NET LM attributes(332)', 'T-NET FoPSTN Table (333)', 'T-NET Control Contact(334)', and 'T-NET Music/Alarm(335~336)'. The 'T-NET Basic Attributes(330)' item is selected. The main content area shows a table with columns 'Order', 'Attribute', and 'Value'. The table contains one row: Order 1, Attribute 'T-NET Enable', and Value 'ON'. A 'Save' button is located at the bottom right of the table. The footer of the interface displays version information: '[Version] Appl(R1.0.2), Boot(A.0Aa), Kernel(-), H/W(0)' and copyright information: 'Copyright Ericsson-LG Enterprise Co., Ltd. 2013.'

Order ↓ ^a	Attribute	Value
1	T-NET Enable	ON ▼

- Enable TNET in eMG80 master system (eMG80N-EXPM license should be installed)

eMG80 Expansion (eMG80E)

eMG80 Master Site Configuration

The screenshot shows the iPECS eMG80 Web Admin interface. The left sidebar contains a menu with categories: Board Based Data, CO Line Data, System Data, Station Group Data, ISDN Line Data, SIP Data, Tables Data, Networking Data, H.323 Routing Table, T-NET Data, Zone Data, and Device Login. The T-NET Data section is expanded, showing options like T-NET Basic Attributes(330), T-NET CM attributes(331), T-NET LM attributes(332) (selected), T-NET FoPSTN Table (333), T-NET Control Contact(334), and T-NET Music/Alarm(335~336). The main content area shows the configuration for T-NET LM attributes(332). A table with three rows (Index 1, 2, 3) is displayed. Red boxes highlight the MAC Address, IP Address, and Total number of port fields for Index 1. The table has columns for Index, Value, and Range.

Index	Value	Range
1	MAC Address	b40edcb565fa
	IP Address	192.168.150.113
	IPKTS Port	5588
	Total number of port	100
	Multicast IP Address	239.20.19.1
2	Zone Number	1 - 32
	MAC Address	
	IP Address	
	IPKTS Port	5588
	Total number of port	0
3	Multicast IP Address	239.20.19.1
	Zone Number	1 - 32
	MAC Address	
	IP Address	
	IPKTS Port	5588

Footer: [Version] Appl(R1.2.8), Boot(2.0Bb), Kernel(R1.0.6), H/W(0) Copyright Ericsson-LG Enterprise Co., Ltd. 2013.

- Assign MAC/IP and total port number of eMG80 slave system.
The “total number of port” should be larger than CCM attribute of eMG80 slave system.

eMG80 Expansion (eMG80E)

eMG80 slave system Configuration

The screenshot displays the iPECS eMG80 Web Administration interface. The browser address bar shows the URL https://192.168.150.114/a_index.html. The interface includes a navigation menu on the left with categories like Board Based Data, CO Line Data, System Data, Station Group Data, ISDN Line Data, SIP Data, Tables Data, Networking Data, T-NET Data, Zone Data, and Device Login. The T-NET Data section is expanded, showing various attributes. The main content area displays the 'T-NET Basic Attributes(330)' configuration. A table lists the attributes, with the first row showing 'T-NET Enable' set to 'ON'. A 'Save' button is visible in the top right corner of the configuration area.

Order	Attribute	Value
1	T-NET Enable	ON

- Enable TNET in eMG80 slave system(eMG80-EXPS license should be installed)
All station and CO device will be registered to master system and license will be checked in master if eMG80N-EXPS license is used.
if Temp license is used then TNET should be enabled for all device in PGM 132.
TNET should be enabled for other device (not station and CO line) in PGM 132.

eMG80 Expansion (eMG80E)

eMG80 slave system Configuration

The screenshot shows the iPECS eMG80 Web Admin interface. The left sidebar contains a menu with categories: Board Based Data, CO Line Data, System Data, Station Group Data, ISDN Line Data, SIP Data, Tables Data, Networking Data, H.323 Routing Table, T-NET Data, Zone Data, and Device Login. The 'T-NET Data' category is expanded, showing sub-items: T-NET Basic Attributes(330), T-NET CM attributes(331) (highlighted), T-NET LM attributes(332), T-NET FoPSTN Table (333), T-NET Control Contact(334), and T-NET Music/Alarm(335~336). The main content area has tabs for 'Administration' and 'Maintenance'. Below the tabs is a breadcrumb trail: 'Favorite PGM' > 'T-NET LM attributes(332)' > 'T-NET CM attributes(331)'. A 'Save' button is located at the top right of the configuration area. The configuration table has four columns: Order, Attribute, Value, and Range. The table contains 9 rows of configuration items. Red boxes highlight the 'CM Server Type' dropdown (set to 'eMG/UCP'), the 'CM 1' row (IP Address: 192.168.150.111, MAC Address: b40edcb56512), and the 'Total number of port' field (set to 100).

Order	Attribute	Value	Range
1	Register Enable	ON	
2	CM Server Type	eMG/UCP	
3	CM 1	IP Address : 192.168.150.111 MAC Address : b40edcb56512	
4	CM 2	IP Address : 0.0.0.0 MAC Address :	
5	IPKTS Port Number	5588	0001-9999
6	Total number of port	100	0000-9999
7	Polling Count	5	00-99
8	Polling Interval	2	00-99
9	Zone Number		1 - 32

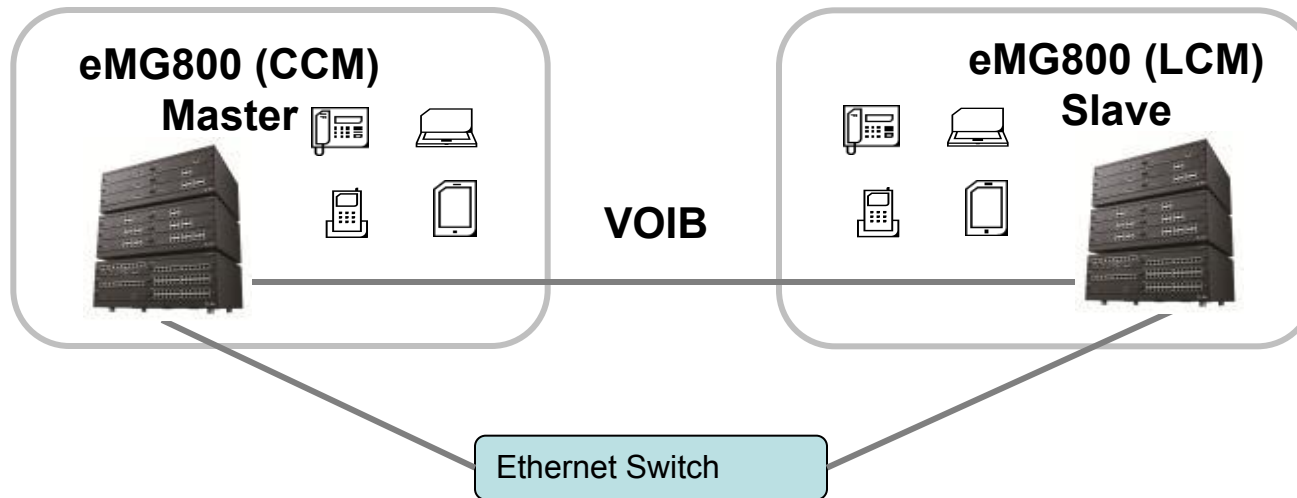
[Version] Appl(R1.2.8), Boot(2.0Bb), Kernel(R1.0.6), H/W(0) Copyright Ericsson-LG Enterprise Co., Ltd. 2013.

- Select master system type
- Assign MAC/IP address of slave system and total number of port that can be registered to master.

eMG800 Expansion

Configuration

- eMG800 expansion is support by TNET feature



- WTIB should be installed in master system (not in slave)
- IP device (IP phone, UCS client, iPCR, Application) & VOIP trunk is need to be installed in master.
- Could you use expansion slave system to expand TDM port (DTIB/SLIB/LCOB/BRIB/PRIB etc.)

eMG800 Master system Configuration

The screenshot displays the iPECS eMG800 Web Administration interface. The browser address bar shows the URL `https://192.168.150.106/a_index.html`. The interface includes a top navigation bar with tabs for 'Administration' and 'Maintenance', and buttons for 'Change Language' and 'Log Out'. A left sidebar contains a menu of configuration categories, with 'T-NET Data' expanded to show 'T-NET Basic Attributes(330)' selected. The main content area features a breadcrumb trail: 'Favorite PGM' > 'T-NET Basic Attribute...' > 'T-NET CM attributes(331)'. Below this is a table with the following data:

Order ↓ ^a	Attribute	Value
1	T-NET Enable	ON ▼

A 'Save' button is located to the right of the table. The footer of the interface contains the text: '[Version] Appl(R1.0.2), Boot(A.0Aa), Kernel(-), H/W(0)' and 'Copyright Ericsson-LG Enterprise Co., Ltd. 2013.'

- Enable TNET in eMG800 master system (eMG800-EXPM license should be installed)

eMG800 Master Site Configuration

Board Based Data

CO Line Data

System Data

Station Group Data

ISDN Line Data

SIP Data

Tables Data

Networking Data

H.323 Routing Table

T-NET Data

T-NET Basic Attributes(330)

T-NET CM attributes(331)

T-NET LM attributes(332)

T-NET FoPSTN Table (333)

T-NET Control Contact(334)

T-NET Music/Alarm(335~336)

Zone Data

Device Login

< Favorite PGM T-NET CM attributes(331) x

Save

Order ↓ ^a	Attribute	Value	Range
1	Register Enable	ON ▾	
2	CM Server Type	eMG/UCP ▾	
3	CM 1	IP Address : 0.0.0.0 MAC Address :	
4	CM 2	IP Address : 0.0.0.0 MAC Address :	
5	IPKTS Port Number	5588	0001-9999
6	Total number of port	0	0000-9999
7	Polling Count	5	00-99
8	Polling Interval	2	00-99
9	Zone Number	1	1 - 32

[Version] Appl(R2.0.8), Boot(1.0Ca), Kernel(R1.1.4), H/W(1)

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- Assign zone number for master system (eg, 1)

eMG800 Master Site Configuration

The screenshot shows the iPECS eMG800 configuration interface. The left sidebar contains a menu with categories: Board Based Data, CO Line Data, System Data, Station Group Data, ISDN Line Data, SIP Data, Tables Data, Networking Data, H.323 Routing Table, T-NET Data, and Zone Data. Under T-NET Data, 'T-NET LM attributes(332)' is selected. The main area displays a configuration table for T-NET LM attributes. The table has columns for Index, Value, and Range. A red box highlights the values for Index 1: MAC Address (b40edcbf55fa), IP Address (192.168.150.113), IPKTS Port (5588), Total number of port (600), and Multicast IP Address (239.20.19.1). The Zone Number is set to 2. The table also shows configurations for Index 2 and Index 3.

Index	Value	Range
1	MAC Address	b40edcbf55fa
	IP Address	192.168.150.113
	IPKTS Port	5588
	Total number of port	600
	Multicast IP Address	239.20.19.1
	Zone Number	2
2	MAC Address	
	IP Address	
	IPKTS Port	5588
	Total number of port	0
	Multicast IP Address	239.20.19.1
	Zone Number	
3	MAC Address	
	IP Address	
	IPKTS Port	5588
	Total number of port	0
	Multicast IP Address	239.20.19.1

- Assign MAC/IP and total port number of eMG800 slave system.
The “total number of port” should be larger than CCM attribute of eMG800 slave system.
- Assign zone number for slave system (eg, 2)

eMG800 slave system Configuration

The screenshot shows the iPECS eMG800 Web Admin interface. The browser address bar displays https://192.168.150.114/a_index.html. The interface has a sidebar on the left with a menu containing: Board Based Data, CO Line Data, System Data, Station Group Data, ISDN Line Data, SIP Data, Tables Data, Networking Data, T-NET Data (expanded), Zone Data, and Device Login. Under T-NET Data, the following options are listed: T-NET Basic Attributes(330) (highlighted), T-NET CM attributes(331), T-NET LM attributes(332), T-NET FoPSTN Table (333), T-NET Control Contact(334), T-NET Music/Alarm(335~336), and T-NET ISDN Clock Priority(337). The main content area shows a configuration for 'T-NET Basic Attribute...'. It includes a 'Favorite PGM' dropdown and a table with the following data:

Order	Attribute	Value
1	T-NET Enable	ON

A 'Save' button is located at the bottom right of the configuration area. The footer of the interface displays: [Version] Appl(R1.0.2), Boot(A.0Aa), Kernel(-), H/W(0) and Copyright Ericsson-LG Enterprise Co., Ltd. 2013.

- Enable TNET in eMG800 slave system(eMG800-EXPS license should be installed)
All station and CO device will be registered to master system and license will be checked in master if eMG800-EXPS license is used.
if Temp license is used then TNET should be enabled for all device in PGM 132.
TNET should be enabled for other device (not station and CO line) in PGM 132.

eMG800 slave system Configuration

The screenshot shows the iPECS eMG800 configuration interface. The left sidebar contains a tree view with categories like Board Based Data, CO Line Data, System Data, Station Group Data, ISDN Line Data, SIP Data, Tables Data, Networking Data, H.323 Routing Table, T-NET Data, and Zone Data. The T-NET Data category is expanded, showing various attribute sets. The 'T-NET CM attributes(331)' set is selected. The main area displays a table of configuration attributes for the selected set. A red circle highlights the configuration fields for CM 1 and CM 2.

Order	Attribute	Value	Range
1	Register Enable	ON	
2	CM Server Type	eMG/UCP	
3	CM 1 (Active)	IP Address : 192.168.150.113 MAC Address : B40EDC281BAF	
4	CM 2	IP Address : 0.0.0.0 MAC Address :	
5	IPKTS Port Number	5588	0001-9999
6	Total number of port	600	0000-9999
7	Polling Count	5	00-99
8	Polling Interval	2	00-99
9	Zone Number	1	1 - 32

- Select master system type
- Assign MAC/IP address of slave system and total number of port that can be registered to master.
- Assign zone number for master system (eg, 1)

Assign VOIB/VMIB for each zone

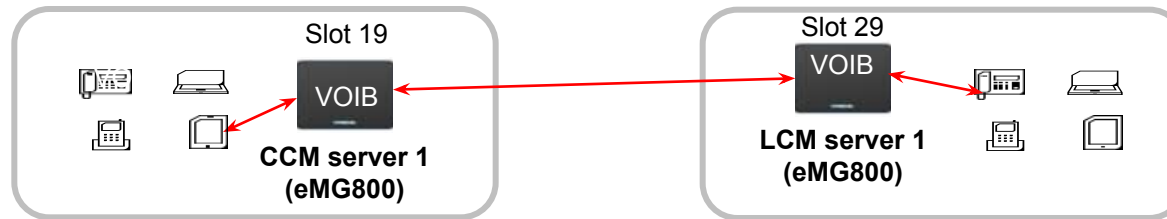
3	<input type="checkbox"/>	RTP Relay Rule	If Need ▼
4	<input type="checkbox"/>	1st RTP Relay Device Slot Seq.	19
5	<input type="checkbox"/>	2nd RTP Relay Device Slot Seq.	
6	<input type="checkbox"/>	VM Device Slot Seq.	1: 21 2: 3:

- Assign VOIB and VMIB slot number for zone 1
eg, 19 is VOIB slot number and 21 is VMIB slot number of master(zone 1)

3	<input type="checkbox"/>	RTP Relay Rule	If Need ▼
4	<input checked="" type="checkbox"/>	1st RTP Relay Device Slot Seq.	29
5	<input type="checkbox"/>	2nd RTP Relay Device Slot Seq.	
6	<input checked="" type="checkbox"/>	VM Device Slot Seq.	1: 30 2: 3:

- Assign VOIB and VMIB slot number for zone 2
eg, 29 is VOIB slot number and 30 is VMIB slot number of slave(zone 2)

Assign VOIB for inter zone (1 <-> 2)



Source Zone Range 1
Destination Zone Range 2

Order ^a	Check All	Attribute	Value	Range
1	<input type="checkbox"/>	Codec Type	N/A ▾	
2	<input type="checkbox"/>	RTP Relay Rule	FORCED TO DO ▾	
3	<input checked="" type="checkbox"/>	RTP Relay Device Utilization	Separated(SRC to DEST) ▾	
4	<input checked="" type="checkbox"/>	Src. RTP Relay Device Slot Seq	19	Sequence Number
5	<input checked="" type="checkbox"/>	Dest. RTP Relay Device Slot Seq.	29	Sequence Number
6	<input type="checkbox"/>	Max Inter Zone Connection	0	0-1200 (0:No Limit)

This configuration could be used to expand number of TDM port of eMG800.

- Assign two RTP relay deice for inter zone in PGM 441

eg, 19 is VOIB slot number of master(zone 1), 29 is VOIB slot number of slave(zone2)

iPECS

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