

# iPECS SMB eMG Expansion (iPECS SMBSW-TRA-01-023)

**15. Oct, 2015**

**Ericsson-LG Enterprise**

# REVISION HISTORY

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

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# Table of Contents

- **Capacity**
- **Configuration**
- **Master system Configuration**
- **Slave system Configuration**

# eMG80E Capacity

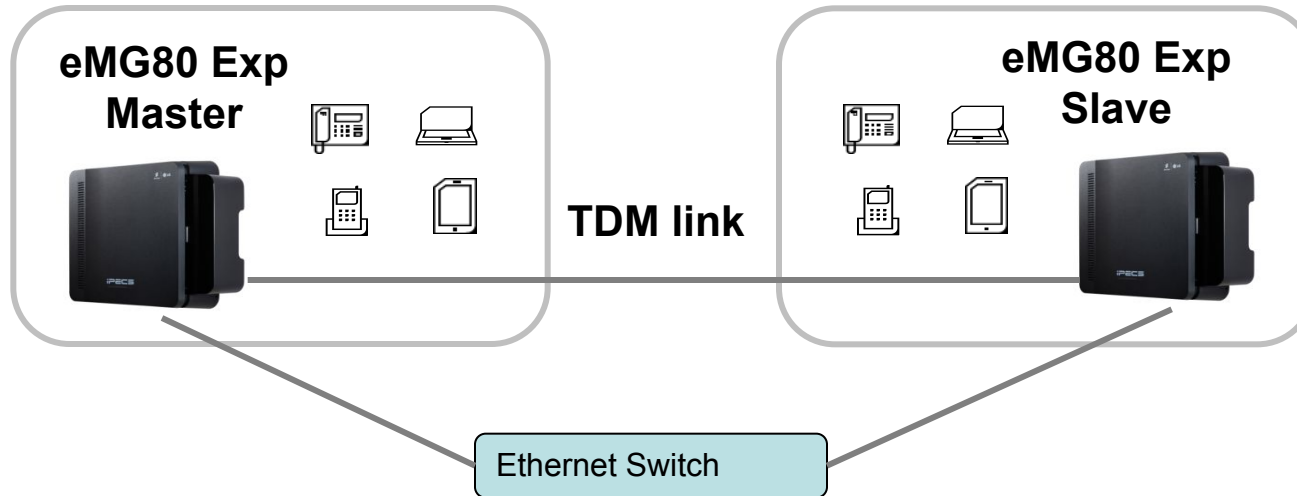
## eMG80E Capacity

		1 <sup>st</sup> KSU	2 <sup>nd</sup> KSU	Max	
Total	Max Port	<b>222</b>	<b>44</b>	<b>222</b>	Extension + Trunk + VM
Trunk	Max Port	<b>74(56)</b>	<b>12</b>	<b>74 (66)</b>	() : Ports except remote G/W
	Analog	12	12	24	
	PRI / T1 / E1	30	-	30	
	IP (SIP/H.323)	16	-	16	
Extension	Max Prot	<b>140 (36)</b>	<b>32</b>	<b>140 (68)</b>	() : 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 Administration interface. The browser address bar shows the URL [https://192.168.150.106/a\\_index.html](https://192.168.150.106/a_index.html). The interface includes a navigation menu on the left 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, and Networking Data. The 'T-NET Data' category is expanded, showing options such as 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)' option is selected. The main content area shows a table with the following data:

Order ↓ <sup>a</sup>	Attribute	Value
1	T-NET Enable	ON ▾

At the bottom of the interface, the version information is displayed: [Version] Appl(R1.0.2), Boot(A.0Aa), Kernel(-), H/W(0). The copyright notice reads: Copyright Ericsson-LG Enterprise Co., Ltd. 2013.

- 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 navigation menu 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, Zone Data, and Device Login. The T-NET Data section is expanded, showing various attributes, with 'T-NET LM attributes(332)' selected. The main content area displays a table with the following data:

Index	Value	Range
1	MAC Address: b4edcb565fa	
1	IP Address: 192.168.150.113	
1	IPKTS Port: 5588	0001-9999
1	Total number of port: 100	000-999
1	Multicast IP Address: 239.20.19.1	
1	Zone Number: [ ]	1 - 32
2	MAC Address: [ ]	
2	IP Address: [ ]	
2	IPKTS Port: 5588	0001-9999
2	Total number of port: 0	000-999
2	Multicast IP Address: 239.20.19.1	
2	Zone Number: [ ]	1 - 32
3	MAC Address: [ ]	
3	IP Address: [ ]	
3	IPKTS Port: 5588	0001-9999
3	Total number of port: 0	000-999
3	Multicast IP Address: 239.20.19.1	
3	Zone Number: [ ]	1 - 32

- 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 shows the iPECS eMG80 Web Administration interface. The browser address bar displays `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 'T-NET Basic Attributes(330)' selected. The main content area displays a table with the following data:

Order	Attribute	Value
1	T-NET Enable	ON

At the bottom of the interface, the version information is displayed: [Version] Appl(R1.0.2), Boot(A.0Aa), Kernel(-), H/W(0). Copyright Ericsson-LG Enterprise Co., Ltd. 2013.

- 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 browser address bar displays `https://192.168.150.117/a_index.html`. The interface has a top navigation bar with 'Administration' and 'Maintenance' tabs, and a 'Change Language' and 'Log Out' button. A left sidebar contains a menu 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', 'Zone Data', and 'Device Login'. The 'T-NET Data' section is expanded, showing 'T-NET CM attributes(331)' selected. The main content area displays a table of configuration parameters for 'T-NET CM attributes(331)'. The table has columns for 'Order', 'Attribute', 'Value', and 'Range'. The following table represents the data shown in the screenshot:

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

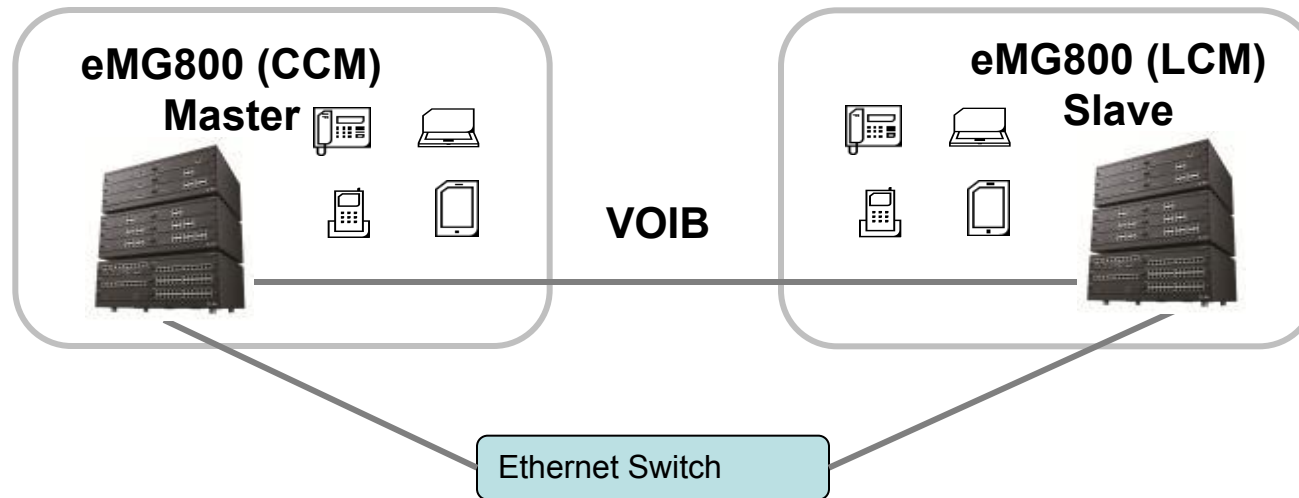
At the bottom of the interface, the version information is displayed: [Version] Appl(R1.2.8), Boot(2.0Bb), Kernel(R1.0.6), H/W(0). Copyright Ericsson-LG Enterprise Co., Ltd. 2013.

- 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 shows the IPECS eMG800 Web Administration interface. The browser address bar displays `https://192.168.150.106/a_index.html`. The interface includes a navigation menu on the left 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, and Networking Data. The 'T-NET Data' category is expanded, showing options such as 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)' option is selected. The main content area displays a table with the following data:

Order ↓ <sup>a</sup>	Attribute	Value
1	T-NET Enable	ON ▾

At the bottom of the interface, the version information is shown as `[Version] Appl(R1.0.2), Boot(A.0Aa), Kernel(-), H/W(0)` and the copyright notice is `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)

Save

Order ↓ <sup>a</sup>	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) Copyright Ericsson-LG Enterprise Co., Ltd. 2013.

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

## eMG800 Master Site Configuration

The screenshot displays the IPECS eMG800 configuration interface. The left sidebar contains a navigation menu 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, and T-NET Data. Under T-NET Data, 'T-NET LM attributes(332)' is selected. The main area shows a configuration table for T-NET LM attributes, with a red box highlighting 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	b40edcbf55fa	
	IP Address	192.168.150.113	
	IPKTS Port	5588	0001-9999
	Total number of port	600	000-999
	Multicast IP Address	239.20.19.1	
	Zone Number	2	1 - 32
2	MAC Address		
	IP Address		
	IPKTS Port	5588	0001-9999
	Total number of port	0	000-999
3	Multicast IP Address	239.20.19.1	
	Zone Number		1 - 32
	MAC Address		
	IP Address		
3	IPKTS Port	5588	0001-9999
	Total number of port	0	000-999
	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 displays the iPECS eMG800 Web Administration interface. The browser address bar shows the URL [https://192.168.150.114/a\\_index.html](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 'T-NET Basic Attributes(330)' selected. The main content area shows a table with the following data:

Order	Attribute	Value
1	T-NET Enable	ON

Buttons for 'Favorite PGM', 'T-NET Basic Attribute...', and 'Save' are visible. The footer contains the text: [Version] Appl(R1.0.2), Boot(A.0Aa), Kernel(-), H/W(0) 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 Administration interface. The left sidebar contains a navigation menu 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 section is expanded, showing various attribute groups, with 'T-NET CM attributes(331)' selected. The main area displays a configuration table for 'T-NET CM attributes(331)'. The table has columns for Order, Attribute, Value, and Range. A red circle highlights the configuration fields for CM 1 and CM 2, including IP addresses, MAC addresses, and port numbers.

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:

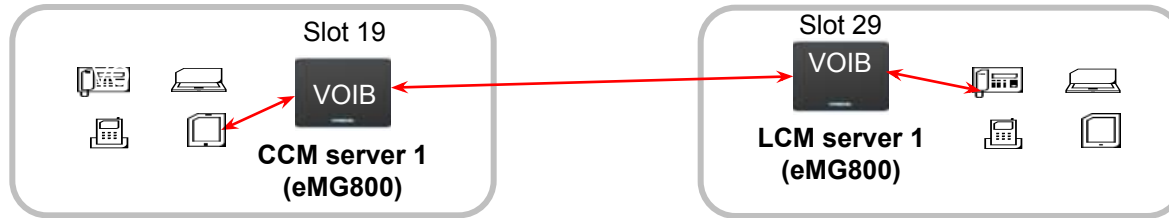
- Assign VOIB and VMIB slot number for zone 1  
eg, 19 is VOIB slot number and 21 is VMIB slot number of master(zone 1)

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 ↓ <sup>a</sup>	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)

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