# Empower
## Your Business Communications with iPECS-CM

iPECS-CM is an All-IP communications platform for medium and large enterprises. iPECS-CM provides IP telephony, various multimedia, applications, and mobility services over IP environment. Today's communications are converged across all media types over one network. iPECS-CM realizes an easy and cost-effective migration into the today's unified communications environment to help increase revenue, save costs and enhance productivity.

## Unified system across multiple site and single management point

CCM (Centralized Communication Manager) can have up to 255 LCM (Local Communication Manager) servers which bypass all the signal between CCM and gateways. IP Phone under LCM (bypass mode) in normal condition, which means it is a single system through WAN IP network. Thus, the administrator needs to access only CCM for system configuration and maintenance, and all the system data in CCM synchronizes to LCM servers automatically. In case of WAN failure between CCM and LCM, the LCM works as a standalone Communication Manager (in local survival mode) and supports PSTN fail-over as an option. Once WAN is recovered, automatically LCM returns to bypass mode and sends all SMDR generated during local survival mode to CCM.

## High Reliability

- The iPECS-CM's redundancy guarantees stable communications for your business.
- Geographical Call Server redundancy (up to 8 regions)
- Active / Standby Call Server clustering (up to 16 for CCM across all geographical redundancy regions, up to 2 for LCM)
- Power and Ethernet Link redundancy for Call Server and CM-MGC
- Local survivability and PSTN fail over for WAN fail (S2K or MFIM)
- GW and IP Phone Dual Profile for LCM fail (in case LCM fails, all gateways and IP phones under the LCM work with CCM directly)
- Application Interface redundancy for SMDA (up to 4), CSTA CTI (up to 5)
- Automatic System Database backup

## Full & Flexible Scalability

The iPECS-CM's server-based system with various modular-type gateways working on IP-backbone offers full scalability from small office to large enterprise environments.

- CM-S1K / S2K / S4K / S10K / S30K call servers based on capacity
- Scale up to 30,000 users with 255 Local Survival Branches (254 tenants support for large business building)
- Scale down with MFIM : Compatible with MFIM 50~ MFIM 1,200

## Call Server

| Model | CM-S1K | CM-S2K | CM-S4K | CM-S10K | CM-S30K |
|---|---|---|---|---|---|
| Max. User | 1,000 | 2,000 | 4,000 | 10,000 | 30,000 |
| Server Option | Standard Server can be used | Standard Server can be used | Standard Server | Standard Server | Standard Server |
| CPU | Single ATOM 1.6G | Single ATOM 1.6G | Intel 2.4G single (Quad-Core) | Intel 2G dual (Quad-Core) | Intel 2.9G dual (Quad-Core) |
| RAM | 2GB | 2GB | 4GB (DDR3) | 4GB (DDR3) | 4GB (DDR3) |
| HDD | SATA 160GB | SATA 160GB | SATA 250GB 2ea | SATA 250GB 2ea | SAS 300GB 2ea |



CM-S2K



CM-S1K

## Gateway Module

iPECS-CM has 3 types of TDM network or terminal gateway modules and 1 type of resource module working for media processing and VoIP routing.

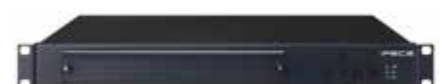| Item | Details | Max Port |
|---|---|---|
| CM-SLTM(MW) | SLT Gateway Module | Max 32 Port |
| CM-MATM | Analog TDM Trunk Gateway Module (ACO, LD, E&M) | Max 16 Port |
| CM-MDTM2 | Digital TDM Trunk Gateway Module (T1/E1, PRI, No.7, QSIG) | Max 30 Port |
| CM-VPCM | Resource Module for Voice Conference, VMS, Voice Prompt, Transcending, IP Rerouting | Max 256 channel |



CM-MGC2 (5U/ 6 universal slots)



CM-1URMC (1U)

## Key Features

- Web Based Maintenance System (JAVA)
- Multi Tenant with individual numbering plan
- ICLID (Incoming Call Line ID) Routing
- Mobile Extension with One number Service
- ACD (Automatic Call Distribution)
- Voice Recording
- Multiple Conference
- CDR (Call Duration Restriction)
- SMDR Record
- Traffic Report
- Advanced ARS (Alternative Route Selection)
- LCR (Least Cost Routing)
- CCR (Caller Controlled Routing)
- Hot Desk
- Phone Link
- Branch Line / Bridge Line
- Command Call
- Internal Paging
- Authorization Code
- PTT (Push To Talk)
- Manager / Secretary Service
- Spam call protecting
- Auto attendant and voice mail
- Headset Link for IP Attendant
- Multiple numbers
- Virtual Subscriber Service
- CID Conversion
- Fax Bridge and ARS Digit Conversion Class
- Hosted Service Solution
- Hotel Package
- Suite Room

## Standard Interfaces

- E1/T1 (DTMF/R2), PRI
- SIP Trunk and Extension
- T.38
- H.323 Trunk
- QSIG through PRI
- TAPI
- CSTA CTI
- TR.87 (CSTA V3-XML)
- SNMP
- LDAP
- XML
- LLDP / LLDP-MED
- 802.1x
- 802.1p/Q
- sRTP
- AES

## Proprietary Interfaces

- Billing
- PMS
- IVVR (SIP base) for IVR
- IP Networking through H.323/H.450
- UCTI API and SAPP for 3rd party UC
- SAPP (SOAP base) for 3rd party UC

## Applications

- Phontage
- iPECS Communicator
- iPECS Attendant
- iPECS UCS
- iPECS CCS
- iPECS IPCR
- iPECS ClickCall
- iPECS RCC Gateway/Client for MS Lync
- CM NMS

## 3rd Party Applications

- Fidelio PMS (Opera)
- MS OCS 2007 R2 / Lync 2010 & 2013
- IBM Lotus Sametime

## Supported Terminals

- LIP-9070
- LIP-9000 Series
- LIP-8000/LIP-8000E Series
- IP8800/IP8800E Series
- IP DECT (GDC-800H)
- WIT-400HE
- LDP-7000 / LDP-9000 Series

## System Capacity

|  |  | CML-S2K | CML-S4K | CML-S10K | CML-S30K |
|---|---|---|---|---|---|
| Channels | | 2,000 | 4,000 | 10,000 | 30,000 |
| BHCC | | Max 500,000 | | | |
| Extension (IP+TDM) | | 2,000 | 4,000 | 10,000 | 30,000 |
| Trunk (IP+TDM) | | 1,000 | 2,000 | 5,000 | 10,000 |
| Media Gateway | | 1,000 | 1,000 | 2,500 | 8,000 |
| LCM | | 255 | | | |
| Tenant | | 254 | | | |
| System Speed Code | | 3,000 (32 digits) | | | |
| Conference room | | 100 | | | |
| Conference member | | 128 / CM-VPCM | | | |
| Attendant | | 30 / tenant | | | |
| TAPI agent | | 1,200 | | | |
| IPCR Server | | 5 / tenant | | | |
| SMDR | | 1,000,000 | | | |
| UCS | | 250 / tenant | | | |
| ACD | Groups | 800 | | | |
| | Agent no. / group | 1,000 | | | |
| | Concurrent Log-in | 2,000 | 4,000 | 6,000 | 6,000 |

## Power Requirement

|  |  | Specification |
|---|---|---|
| PSUA | AC Input | 186-276 VAC@ 50/60 Hz |
| | Fuse | T6.3A, AC250V |
| | DC Output | -54VDC/12A, +5VDC/15A |
| PSUD | DC Input | DC -44V ~ -58V |
| | Fuse | T15A, AC250V |
| | DC Output | +5VDC/15 A |
| PSUA-1U | AC Input | 88-276 VAC @ 50/60 Hz |
| | Fuse | T6.3A, AC250V |
| | DC Output | -50VDC/2.5A, +5VDC/3A |
| PSUA-S1K | AC Input | 90-270 VAC @ 50/60 Hz |
| | Fuse | T2A, AC250V |
| | DC Output | +30V/1.85A, +5V/4A |

## Environment Condition

|  |  | Condition |
|---|---|---|
| Temperature | Operation | 0~40℃ |
| | Storage | 0~70℃ |
| Humidity | Operation | 20~80% non-condensing |
| | Storage | 10~95% non-condensing |

## Dimension & Weight

|  | CM-MGC2 | CM-1URMC | CM-S1K | Gateway Module | CM-PSUA | CM-PSUD |
|---|---|---|---|---|---|---|
| WxLxH (mm) | 443 x 370.4 x 221.5 | 440 x 361.8 x 43.4 | 436 x 344.5x 53 | 255 x 334.5 x 30 | 140 x 334.7 x 59.7 | 140 x 334.7 x 59.7 |
| Weight(kg) | 20 | 5.5 | 4.46 | - | 1.87 | 0.85 |

iPECS is an Ericsson-LG Brand