

MODULAR UMG SERVER

INTEGRATED GATEWAY SERVER



Main Characteristics

- **All-in-one:** Server and Modular Gateway in a single appliance.
- **Server:** With a powerful processor to host any platform or application
- **Gateway:** SIP for the following interfaces: E1, FXS, FXO, and 2G or 3G GSM
- **Modular:** With storage, memory, and telephony interface options for each application scenario.

Typical Applications

- IP PBX and PBX
- Unified Communications Center
- Customized applications with telephony interfaces.

Overview

Modular UMG Server is an Appliance composed of one Modular Media Gateway, which can be assembled using different telephony interfaces, and a server with a motherboard dedicated for the installation of any Windows or Linux based platform.

With this appliance, it is possible to design a complete product, such as a unified communications manager or a telephone exchange with call routing. Additionally, you can generate firewall solutions, with the possibility of configuring alarm triggers by IP calls or cell phone. Everything in a single 1U device. Additionally, you can customize the cabinet, so it will be shipped from Khomp with a customized Logo (see conditions for [product customization here](#)).

Ideal for your business

Modular UMG Server can be assembled with several storage options, as well as telephony interfaces that best suit the business in which it will be applied. There are 3 telephony interface modules, that support technologies such as E1, FXS, FXO, and 2G or 3G GSM, in addition to a RAM module of up to 08GB, and two SATA ports for connection of an SSD and/or an HD of 2.5" with up to 500GB capacity each.

Exclusive processor for your solution

All signal convergence and call routing is processed by the gateway embedded in the Modular UMG Server, thus freeing the motherboard processing for the exclusive use of the operating system and installed application.

More space in the Data Center

The Modular UMG Server has all the features present in the UMG product family, with no need for an external server, combining both functions into a single device, which fits in a 1U space.

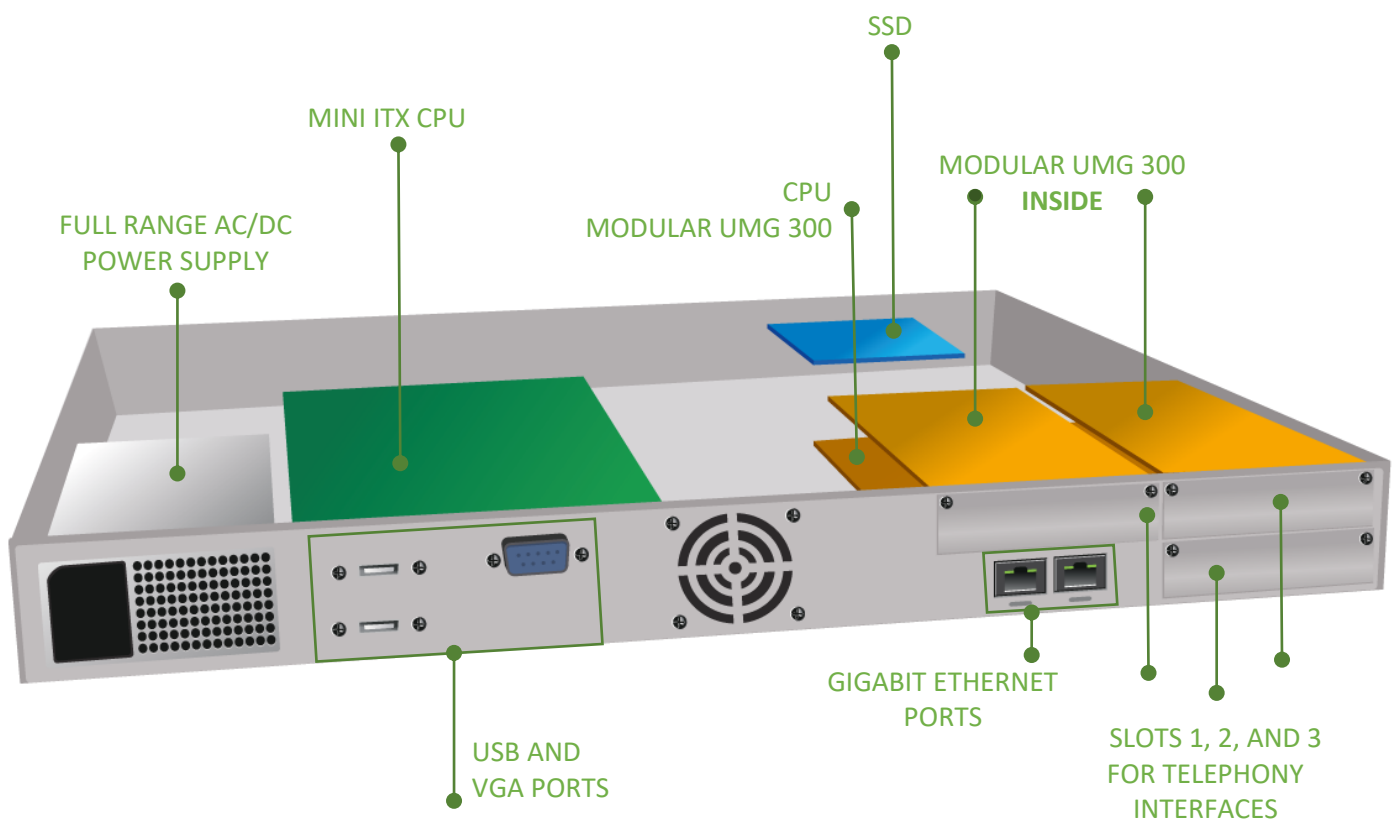
Greater practicality and organization

Because it is a single equipment, the Modular UMG Server uses only one power source. Moreover, it has two USB ports and one VGA port for connection of access peripherals only when needed.

Route failover

UMG has a route failover feature which prevents call failures in SIP servers. Failover is implemented using routes along with SIP server monitoring through the Keep Alive feature. When the Keep Alive is activated, UMG will send type OPTIONS messages to the SIP server in order to monitor its status. When the SIP server does not respond to OPTIONS, UMG ignores the route on which this server is being used and searches for other compatible route.

Internal Design



Features and Benefits

Server

- IPX1800 G2 motherboard
- Intel Celeron J1800 Dual Core Processor 2.41GHz 64-bits
- 2GB memory RAM
- 1 SSD 16GB
- Support for up to 2 SSD or HD SATA 2,5"

Optional Items*

- Graphic OLED display
- RAM memory expandable up to 4 or 8GB
- 2,5" SATA SSD or HD 16GB expandable up to:
 - 120GB
 - 500GB

* *Optional items at additional cost.*

Gateway features

- Up to 3 telephony modules
- **E1**
 - 1 link (30 channels. Usage may be fragmented.)
 - ISDN or R2 signaling
 - Limit of 30 E1 channels
- **GSM**
 - 2 channels per module
 - 3G Six Band: 800/850/900/1700/1900/2100 MHz**OR**
 - 2G Quad Band: 850/900/1800/1900 MHz
 - Limit of 6 GSM channels
- **FXO**
 - RJ11 connector
 - Ring Min Sensor 12 VRMS@ 14Hz-70Hz
 - 4 channels per module
 - Limit of 12 FXO channels
- **FXS**
 - 8 channels per module
 - RJ45 connector
 - Ring voltage 54Vpp / 25Hz
 - Limit of 24 FXS channels
- **VoIP**
 - 1 VoIP channel for each TDM channel adding up to the maximum of 46 VoIP channels
 - Support for up to 10 SIP accounts
- Supported codecs
 - G.711 (A-law and μ -law)
 - G.729A
- FAX support on pass-through and T.38 mode
- Voice quality
 - Echo canceling
 - SIP dedicated processing

Web Portal

- Monitoring
 - Dashboard
 - E1 Link
 - Physical channels
 - VoIP channels
- Configuration
 - Routing by prefix
 - Advanced routing by regular expressions
 - E1 Link
 - VoIP accounts
 - GSM accounts
 - FXS accounts
 - FXO accounts
 - Customizable CDR
- System diagnosis and debugging by means of log messages
- Management
 - System maintenance
 - Device configuration provisioning (exporting and importing)
 - Device restart
 - Admin user password change
 - System date and time setting
 - Device network configuration

Physical characteristics

- Power supply:
 - Input: 100-240V 50/60Hz
- Maximum power consumption: 150W
- Connections:
 - 2 Gigabit Network Ports: 100/1000 Base-T network port
 - 3 slots which may contain VOIP, GSM, FXS and FXO channels according to the modularity
 - 2 USB ports
 - 1 D-sub (VGA) port
- OLED graphic display (optional)
 - Display size: 62,5 x 15 mm
- Reset/restore button
- Equipment status LED
- E1 link status LED
- Error warning LED
- Appliance size: 21,1 x 4,5 x 18,2 cm
- Standard 1U Module for 19" rack

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- Supported protocols
 - Session Initiation Protocol (SIP)
 - Simple Network Management Protocol (SNMP)
- SNMP support and monitoring
- Route monitoring (Keep Alive)
- Log generation for diagnostics

Warranties and Certifications

- Factory warranty: 1 year
- ISO 9001:2008 certified industry

Other Product Images

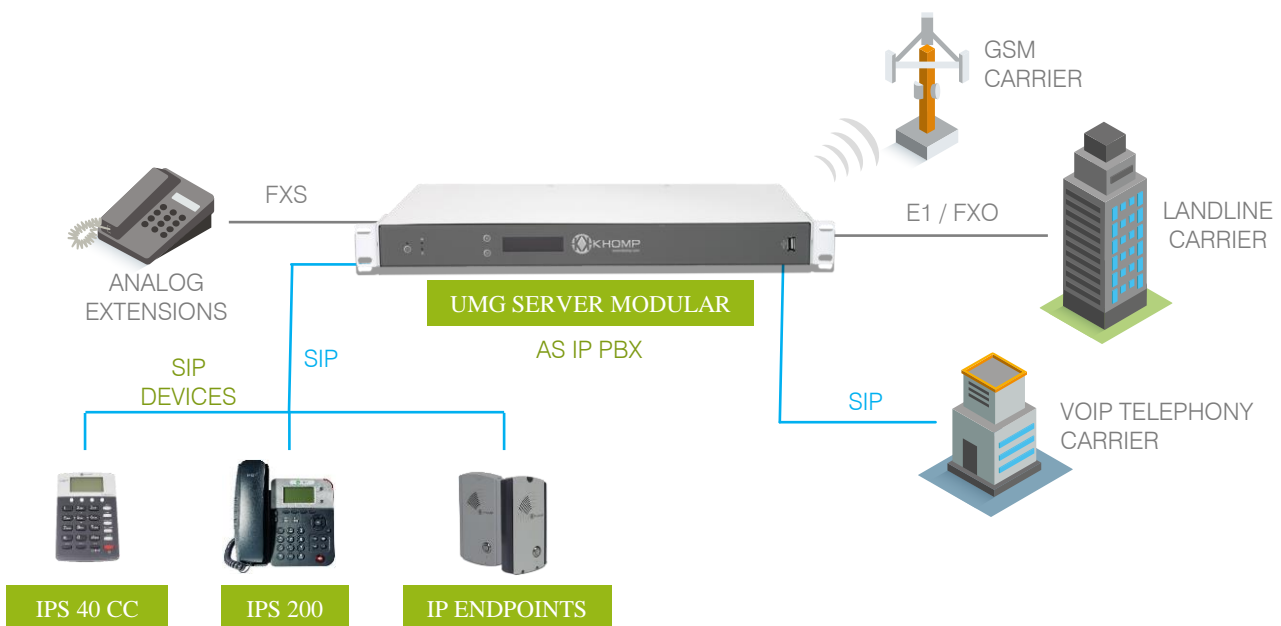


Rear view without telephony modules

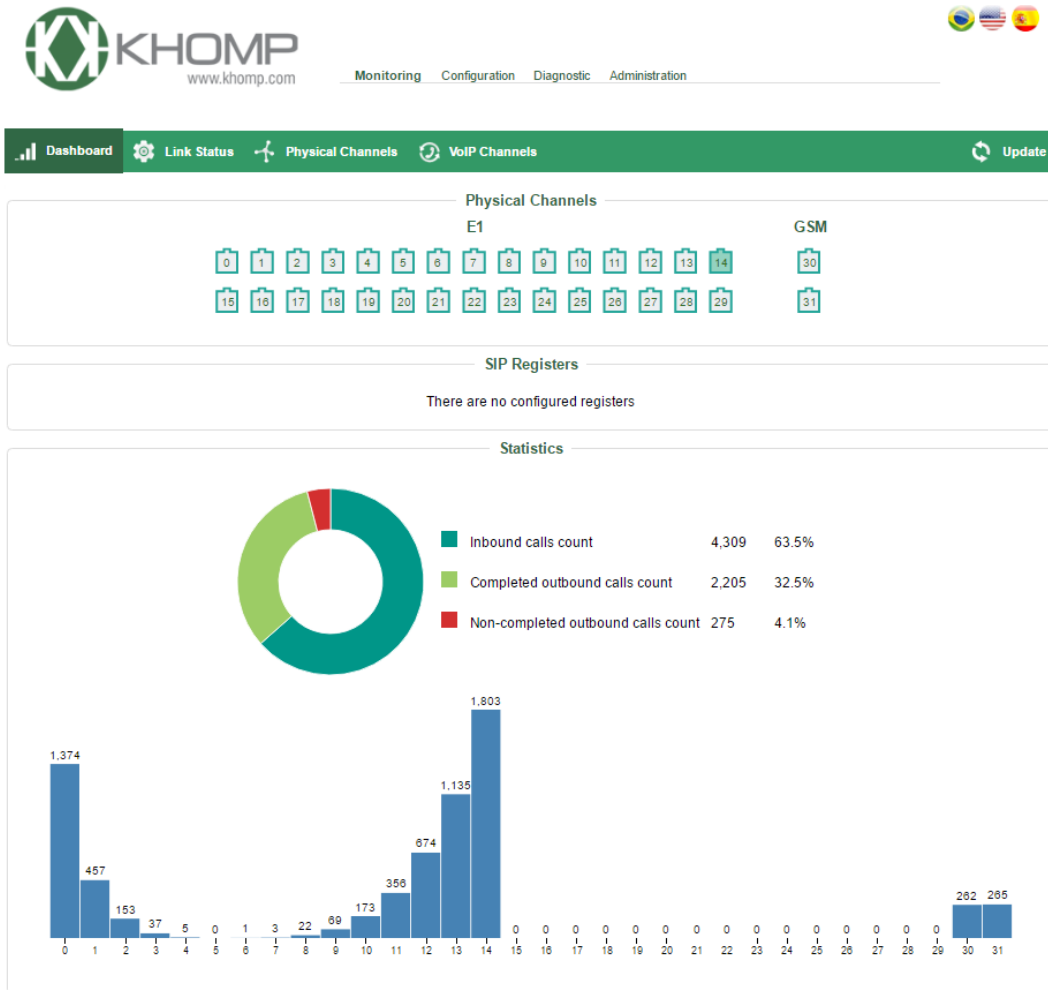


Rear view with 1 E1, 8 FXS and 4 FXO

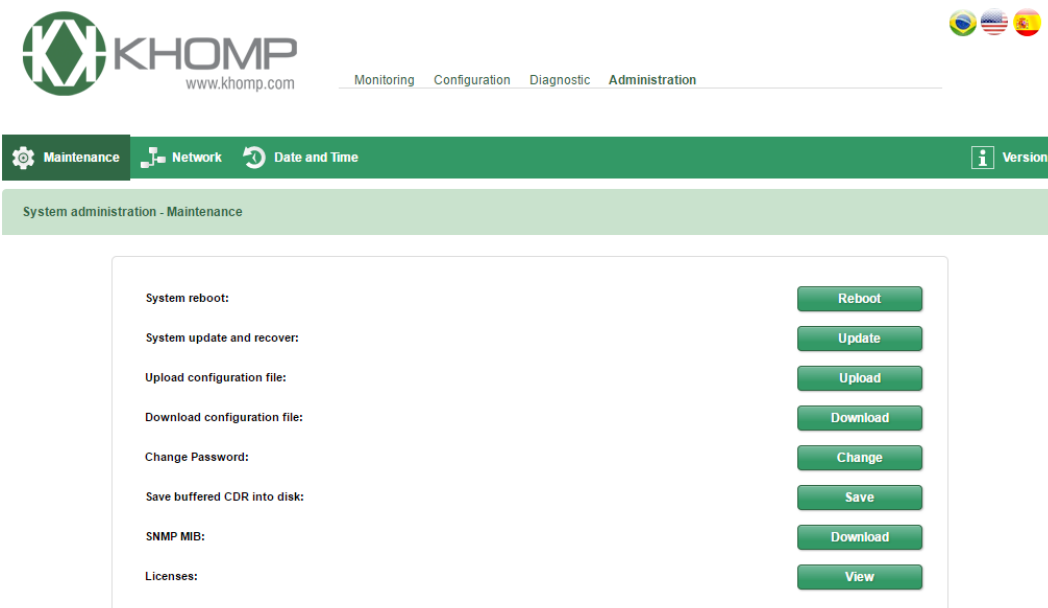
Application Model



Examples of System Screens



Monitoring screen



Management screen

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Monitoring Configuration Diagnostic Administration



Messages Logs Remote Log

Download Update

W 09/06/2017 12:57:58.439 K3L	D67868 C30	CM_PRE_CONNECT: Function PreConnect not implemented (gsm)
W 09/06/2017 18:34:42.939 K3L	D67868 C30	CM_PRE_CONNECT: Function PreConnect not implemented (gsm)
E 10/06/2017 13:43:33.382 VOIP	[000]	ClearFrequencies - VAPI_StopTone error: -68002 (kardhmpms)
W 13/06/2017 17:49:26.959 K3L	D67868 C31	CM_PRE_CONNECT: Function PreConnect not implemented (gsm)
W 13/06/2017 18:31:22.649 K3L	D67868 C31	CM_PRE_CONNECT: Function PreConnect not implemented (gsm)
E 14/06/2017 10:42:53.550 VOIP	[003]	ClearFrequencies - VAPI_StopTone error: -68002 (kardhmpms)
W 14/06/2017 16:56:37.869 K3L	D67868 C31	CM_PRE_CONNECT: Function PreConnect not implemented (gsm)
W 16/06/2017 17:12:18.259 K3L	D67868 C31	CM_PRE_CONNECT: Function PreConnect not implemented (gsm)
W 16/06/2017 17:12:49.899 K3L	D67868 C31	CM_PRE_CONNECT: Function PreConnect not implemented (gsm)
W 20/06/2017 03:46:19.520 GSM	D67868 C30	Modem performed spurious reset (MdmState: Ready), power supply failure? Restarting... (gsm)
W 21/06/2017 16:29:46.339 K3L	D67868 C31	CM_PRE_CONNECT: Function PreConnect not implemented (gsm)
W 21/06/2017 16:30:51.759 K3L	D67868 C31	CM_PRE_CONNECT: Function PreConnect not implemented (gsm)
W 21/06/2017 16:32:03.299 K3L	D67868 C31	CM_PRE_CONNECT: Function PreConnect not implemented (gsm)
E 22/06/2017 09:25:35.631 VOIP	[000]	ClearFrequencies - VAPI_StopTone error: -68002 (kardhmpms)
W 22/06/2017 12:04:07.619 K3L	D67868 C31	CM_PRE_CONNECT: Function PreConnect not implemented (gsm)
E 22/06/2017 13:35:46.790 VOIP	[002]	ClearFrequencies - VAPI_StopTone error: -68002 (kardhmpms)
E 22/06/2017 13:36:28.990 VOIP	[000]	ClearFrequencies - VAPI_StopTone error: -68002 (kardhmpms)
W 22/06/2017 15:22:10.519 K3L	D67868 C30	CM_PRE_CONNECT: Function PreConnect not implemented (gsm)
W 22/06/2017 15:22:35.599 K3L	D67868 C30	CM_PRE_CONNECT: Function PreConnect not implemented (gsm)
W 22/06/2017 15:22:54.119 K3L	D67868 C30	CM_PRE_CONNECT: Function PreConnect not implemented (gsm)
W 22/06/2017 15:40:02.089 K3L	D67868 C30	CM_PRE_CONNECT: Function PreConnect not implemented (gsm)
W 22/06/2017 16:36:27.579 K3L	D67868 C30	CM_PRE_CONNECT: Function PreConnect not implemented (gsm)
W 23/06/2017 10:49:46.069 K3L	D67868 C31	CM_PRE_CONNECT: Function PreConnect not implemented (gsm)
E 23/06/2017 12:20:14.313 VOIP	[002]	ClearFrequencies - VAPI_StopTone error: -68002 (kardhmpms)
W 23/06/2017 16:08:26.259 K3L	D67868 C30	CM_PRE_CONNECT: Function PreConnect not implemented (gsm)

Diagnostic screen



Monitoring Configuration Diagnostic Administration



Routing Link E1 VoIP GSM CDR Reconfigure

Apply

General system configuration - Routing

Route	Called Number		Caller Number		Priority	Options
	Prefix Filter	Change Number	Prefix	Change Number		
E1 > VoIP					1	
VoIP > E1					1	
VoIP > GSM	Route in advanced configuration.				0	
VoIP > GSM	Route in advanced configuration.				0	
GSM > VoIP					0	
E1 > Wesley	Route in advanced configuration.				0	

Add Route

Setting screen