

KMEDIA SBC 1600

LOW-DENSITY MULTIPROTOCOL MEDIA GATEWAY



Main Characteristics

- 9 to 16 E1/T1 and 256 to 512 VoIP channels
- Up to 2300 SBC sections and 686 SIP SBC sections with transcoding
- Increase by upgrade of software every 1 E1/T1
- Redundant source
- SIP, SIGTRAN, SS7 ISUP, ISDN PRI, E1/T1 CAS R2, T1 CAS R1, H.248
- Default dimensioning 1U for 19" rack

Typical Applications

- NGN Technology
- Gateway and routing between TDM and SIP interfaces
- Easy integration between dialer and operator in call center environments
- Full integration with operators using SS7 signaling
- Fax solution
- OAMP + T

Overview

Kmedia is a media gateway carrier grade, for converging applications in digital communication platforms (E1/T1, STM-1 or SIP), replacing several signaling and connectivity devices by a single item of equipment.

With hardware designed to work in heavy traffic environments, the Kmedia has the main protocols for NGN 's (Next Generation Networks) and universal codecs for all the channels, besides high performance and processing capacity of calls per second.

Offering the highest density of ports and processing of the sector and the lowest operating cost for a media gateway, the Kmedia presents an average energy consumption two thirds lower than other products of similar capacity, besides occupying less space in the Data Center, aiding to reduce rental costs and contributing to reducing the environmental impact.

Characteristics and Benefits:

Voice Processing Capacity

- 1 SIP channel for each TDM channel, using universal codecs and echo canceling in all the channels.

Voice Decodification

- Universal codecs: G.711, G.723.1, G.726, G.729ab, T.38, clear mode (RFC 4040)
- Additional codecs: G.722.2 (AMR-WB), G.728, G.729eg, iLBC, AMR, EVRC, GSM FR/EFR, QCELP

TDM (PSTN) Interfaces

- 1 to 8 E1/T1 (software upgrade every 1 E1/T1)
- Independent configuration by port
- Connectors RJ45 for link connection

Interfaces VoIP

- 6 port 100/1000 Base-T with redundancy
- Connectors RJ45

Fax / Modem / Data

- T.38 relay of fax (V.17 and V.34)
- Automatic fallback for G.711
- Modem and data pass-through

DTMF relay

- RFC 2833, SIP INFO Method, In-band

Echo Canceling

- Canceling of echo standardized by ITU-T G.168
- Canceling of echo of up to 128 ms in all the channels simultaneously

Voice Processing

- Dynamic and programmable Jitter Buffer (20 to 200 ms)
- Voice Activity Detection (VAD)
- Comfort Noise Generation (GNC)

Management Interfaces

- 100/1000 Base-T for operation, administration, maintenance and provisioning (OAMP)
- Serial port
- Virtual IP Support

Control

- 140 CAPS (Call attempts per second)
- Standalone Call Control
- Any-to-any call routes (TDM for VoIP, TDM for TDM, VoIP for VoIP with transcoding)
- Routing based on: E1 groups, source/destination, ASR (answer-seizure ratio) address nature, time of day, loads, costs, number redirection and other parameters
- Routing (tables with more than 100,000 routes, uploaded by CSV files)
- Route-Retry: attempts on other routes based on the response time (Alert - Call Accept), because of route disconnection and prioritization
- Call Transfer or Call Transfer
- H.248 (MEGACO) call control:
 - ITU-T H.248 versions 1 and 2
 - Transport by UDP, SCTP, IPsec
 - DTMF (Dual-Tone Multi-Frequency) and Fax Detection
 - Generating DTMF tones
 - Call quality and inactivity alerts
- Session management and pricing:
 - SIP client availability monitoring
 - Real-time Transport Protocol (RTP)
 - Generation of Call Detail Record - CDRs (RADIUS or text file)

OAMP+T

Operation and Administration

- Web interface for operation
- SNMP v2 GET, TRAPS and alarms
- Dynamic configuration exchange

Monitoring

- Graphic channel occupation
- Status of up and down of links and protocols
- Viewing of status of SS7 by layers
- TDM channel alignment status (Time Division Multiplex)
- Quantity of calls made per period

Maintenance

- Web interface for maintenance
- Automated upgrade system
- Recovery and copy of configurations (Backup)

Support for the Following Signalings:

SIP

- Handles the following RFCs: 2327, 2833, 2976, 3204, 3261, 3262, 3263, 3264, 3311, 3323, 3325, 3326, 3372, 3389, 3398, 3515, 3551, 3555, 3578, 3581, 3665, 3666, 3764, 3891, 4028, 4694, 5806
- SIP-I / SIP-T
- Manipulating SIP headers

SIGTRAN

- M2PA, M2UA, M3UA (IPSP, ASP, SG), IUA
- SCTP (raw IP and UDP)
- Supports SS7 termination and forwarding
- Up to 64 links M2UA / M2PA links
- Supports up to 64 M3UA peers

SS7

- Up to 64 x links MTP2
- Multiple redundancy of links MTP2
- Up to 64 MTP3 point codes of sources and targets
- ISUP variants: ITU 92, ITU 97, ANSI 88, ANSI 92, ANSI 95, Q.767, Telcordia 97, ETSIv2, ETSIv3, China, Singapore, UK, SPIROU, Japan NTT, Russia

ISDN PRI

- Q.931 ISDN PRI: NI-2, 4ESS, 5ESS, DMS-100, DMS-250, Euro ISDN, ETSI NET5 (France, Germany, United Kingdom, China, Hong Kong, Korea), NTT (Japan), Australia

CAS

- MF R2 (including ITU standards, Brazil, Mexico, Venezuela)
- Customizable protocol script that allows you to implement any other variation of the protocol

Provisioning

- Web interface for configuration
- Dynamic activation of configuration

Problem Solution

- Tracking per call (historical or real-time)
- Signal capture tools
- SSH

Physical Characteristics

Energy input

- 90 to 260 VAC, 47 to 63 Hz (source AC)
- -36 to -72 VDC (source DC)
- Maximum consumption of 70W

Dimensioning

- Default dimensioning 1U for 19" rack
- Measures: 44,5 x 429 x 406 mm
- Weight: 6,4 kg

Regulatory compliances

Environmental Conditions

Operating temperature: 0 to +70 °C, 95% relative humidity, not condensing
Inventory temperature: -10 a +85 °C, 95% relative humidity, not condensing

Guarantees and Certifications

- Factory warranty 1 year
- Anatel (Brazilian National Telecommunications Agency) Certification
- ISO 9001 industry certified

Other Product Images



Rear view