



# Kmedia 6400

*64 E1's the largest capacity in the market*



- 16 to 64 E1s
- 512 to 2048 VoIP channels
- Increase by upgrade of software every 16 E1s and every 512 VoIP channels
- Comes with patch panels for expansion
- Default dimensioning 2Us for 19" rack, with double energy source
- Measures: 88.9 (height) x 442 (width) x 406 mm (length)
- Weight: 9,1 kg

## Features 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  
16 to 64 T1/E1 (software upgrade every 1 E1)  
Independent configuration by port  
Connectors SCSI for patch panel of RJ45





- Interfaces VoIP  
100/1000 Base-T with redundancy  
Connectors RJ45
- Fax/Modem/Data  
T.38 relay of fax (V.17 and V.34)  
Automatic G.711 fallback  
Modem and data pass-through
- DTMF relay  
RFC 2833, SIP INFO Method, In-band
- Echo Canceling  
Canceling of standardized 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

## Signaling

### Support for Simultaneous Signaling:

- 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  
(\*parcial)  
SIP-I/SIP-T
- SIGTRAN  
M2PA, M2UA, M3UA, IUA
- 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 92, ANSI 95, Tekcordia 97, Brasil
- ISDN PRI  
Q.931 ISDN PRI: NI-2, 4ESS, 5ESS, DMS-100, DMS-250, Euro ISDN
- CAS  
MFC R2 (default ITU, Brazil)  
Customizable protocol script

## Control

- Standalone call control
- Any-to-any call routes (TDM for VoIP, TDM for TDM, VoIP for VoIP with transcoding)
- Call route control based upon: trunk group, calling/called, address of nature, ASR, time of day, loads, costs, TO:, FROM: Request URI, redirecting of numbers and other parameters





- Routing (tables with more than 100,000 routes, upload by files in Excel or CSV)
- Route-Retry - Tentativas em outras rotas baseando-se em times de reposta (Alert - Call Accept ) e priorização de rotas.
- Call Transfer (Refer)
- H.248 (MEGACO) controle de chamadas
  - ITU-T H.248 versões 1 e 2
  - Transportes por UDP, SCTP, IPSec
  - Detecção de DTMF e fax
  - Geração de DTMF tom
  - Alertas de qualidade e inatividade de chamadas
- Gerenciamento de sessão e billing
  - Monitoração de disponibilidade do cliente SIP
  - Monitoração de inatividade RTP
  - Geração de CDRs (RADIUS ou arquivo de texto)

### OAMP+T

- Operation and Administration
  - Web system 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
  - Status of alignment of TDM channels
  - Quantity of calls made per period
- Maintenance
  - Web interface for maintenance
  - Automated upgrade system
  - Recovery and copy of configurations (Backup)
- Provisioning
  - Web interface for configuration
  - Dynamic activation of configuration
- Problem Solution
  - Tracing by call (history or real time)
  - Signaling pickup tools
  - SSH command-line

### Electrical features

- Energy input
  - 90 to 260 VAC, 47 to 63 Hz (source AC)
  - 40 to -60 VDC (source DC)
  - Redundant source with 2 inputs (optional in model 800)
  - Maximum consumption of 138W

### Regulatory compliances





- Environmental Conditions
  - Operating temperature: 0 to +55 °C, 95% relative humidity, not condensing
  - Inventory temperature: -10 to +75 °C, 95% relative humidity, not condensing
- Certifications
  - Anatel certification