TMGIP800 VoIP Transcoding Gateway – Up to 530 transcoding sessions

The TelcoBridges *T*trans™ TMGIP800 is our entry-level VoIP transcoding gateway.

Recognized for its high-capacity and high-performance, the TMGIP800 is a 203 to 530 simultaneous G.711 to complex codec VoIP transcoding sessions gateway that offers the industry's highest density in a single box (1U) solution.

Product Characteristics:

- ✓ Up to 530 sessions of G.726 <-> G.711
- ✓ Up to 424 sessions of G.729A <-> G.711
- ✓ Up to 371 sessions of G.723 <-> G.711
- ✓ Up to 326 sessions of EFR <-> G.711
- ✓ Up to 288 sessions of AMR-NB <-> G.711
- ✓ Up to 278 sessions of G.723 <-> G.729
- ✓ Up to 203 sessions of AMR-WB <-> G.711
- ✓ Up to 203 sessions of G.722 <-> G.711
- ✓ 203 to 530 simultaneous G.711 codec VoIP transcoding sessions
- ✓ Hot-swap redundant power supply (AC or DC)
- ✓ 1U VoIP transcoding gateway

*T*trans™ TMGIP800 Data Sheet

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*T*trans TMGIP800 1U VoIP transcoding gateway, front and rear view (dual AC power input shown)

Capacity and Voice Processing

VoIP interfaces
Up to 6 Ethernet ports 100/1000Base-T
RJ45 connectors on rear of unit
Up to 16 different IP addresses
Ethernet port bonding and 802.1q VLAN support

Vocoding
203 to 530 VoIP transcoding sessions
Universal codecs: G.711, G.723.1, G.726, G.729ab, T.38 V.17, clear mode (RFC 4040)
Other codecs: G.722, G.722.2 (AMR-WB), G.728, G.729eg, iLBC, AMR, EVRC, GSM FR/EFR, QCELP, T.38 V.34

Fax/modem/data
T.38 fax relay (V.17 and V.34)
Automatic G.711 fallback
Modem and data passthrough, NSE, VBD support
Clear mode (RFC 4040)

DTMF relay
RFC 2833/4733, SIP INFO method, in-band

Echo cancellation
G.168 echo cancellation
128 ms echo tail on all channels simultaneously

Voice processing
Adaptive and programmable jitter buffer (20 to 200 ms)
Voice activity detection (VAD)
Comfort noise generation (CNG)

Voice recording and announcement playback
Up to 512 channels (using optional IVR mezzanine)
Also available using existing VoIP channels

High Availability & Redundancy
Power supply redundancy
IP port redundancy
Self-recovery software
Configuration database redundancy
Seamless software upgrade
Fault tolerant software

Signaling
Simultaneously supports any combination or all of the following signaling protocols:

SIP
Supported 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, 4733, 5806
SIP-I/SIP-T
Extensive SIP header manipulation

TMG-CONTROL (Call Control)

Embedded call control
Call routing based on: trunk group, calling/called numbers (with digit manipulation) and/or various other protocol information/headers.
Customizable routing including priority-based, load-balancing, black listing, call limiting, route retries, etc.
Customizable call cause code mapping
Programmable call routing
Access and manipulation of call
RADIUS authentication and authorization (supports multiple RADIUS servers)
SIP-based local number portability and CNAM lookup

H.248 (MEGACO) call control
ITU-T H.248 versions 1 and 2
UDP, SCTP, IPSec transport
DTMF and fax detection
Call progress, DTMF and COT tone generation
Call quality and inactivity alerts
H.248 control port redundancy (supports virtual IP)

Session management and billing
SIP peer availability polling
RTP inactivity monitoring, RTCP
CDR generation (RADIUS and/or csv files)
Integrated lawful intercept (ETSI ES 201 671 v.2.1.1)

OAMP+T

Operations & Administration

Provisioning, management and status GUI

CLI and configuration file machine-to-machine interface (RESTful)

Configuration change audit logging

Access, user and privilege management

SNMP V2, V3 GET, TRAPs (alarms)

Extensive SNMP call statistics MIBs

Management

2 Ethernet ports 100/1000Base-T

1 USB Type B serial port

1 RJ45 RS232 serial port

GUI-based and CLI system upgrade

GUI-based configuration copy, backup and restore

Storage for multiple software versions

Storage for multiple configuration files

Extensive system status display

Provisioning

Non-service affecting configuration changes

Offline configuration validation

Multiple configuration files archive

Northbound API (RESTful) for automated provisioning

Network Analytics (*TB* Analytics)

Live call trace with protocol information and ladder diagrams

Live test call with media playback and recording

TB Sigtrace – Protocol signaling capture into pcap files

Media call recording (scriptable for calling and called numbers)

Maintenance

Replaceable fan filters

Electrical Characteristics

90 to 260 VAC, 47 to 63 Hz or -36 to -72 VDC

Hot-swap redundant power supply (AC or DC)

Maximum 70W power consumption

Regulatory Compliance

Safety

CAN.CSA C22.2

EN 60950-1:2005

EN 60950-1:2006

EMC

FCC Part 15:2013, Subpart B,

CE Mark (EN55022:2010, Class A, EN61000, ETSI EN 300 386)

Dimensions & Weight

1U, 19" rackmount

1.75" (44.5 mm)H x 16.9" (429 mm)W x 16" (406 mm)D

14 lbs (6.4 kg)

Environmental

Operating temperature:

    0 to +70 °C, 95% rel. hum. non-condensing

Storage temperature:

    -10 to +85 °C, 95% rel. hum. non-condensing

Designed to meet NEBS Level 3

RoHS compliant