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**

Pulse Supply
909 Ridgebrook Road
Sparks, MD 21152
USA

Tel: +1.410.583.1701

**sales@pulsesupply.com
www.pulsesupply.com**

*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

Tctrl (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

<u>Operations & Administration</u>
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

<u>Management</u>
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

<u>Provisioning</u>
Non-service affecting configuration changes
Offline configuration validation
Multiple configuration files archive
Northbound API (RESTful) for automated provisioning

<u>Network Analytics (*TB* Analytics)</u>
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)

<u>Maintenance</u>
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

<u>Safety</u>
CAN.CSA C22.2
EN 60950-1:2005
EN 60950-1:2006

<u>EMC</u>
FCC Part 15:2013, Subpart B,
CE Mark (EN55022:2010, Class A, EN61000, ETSI EN
300 386)

<u>HS Code</u>
85176200

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

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