

**Ttrans™**

# TMGIP3200

370 to 2121 VoIP Transcoding Gateway



The TelcoBridges Ttrans™ TMGIP is our mid-level VoIP transcoding gateway.

Recognized for its high-capacity and high-performance, the TMGIP is a 370 to 2121 simultaneous G.711 to complex codec VoIP transcoding sessions gateway that offers the industry's highest density in a single box (2U) solution.

### Product Characteristics:

- ✓ up to 2121 sessions of G.711 <-> G.726,
- ✓ up to 1697 sessions of G.711 <-> G.729,
- ✓ up to 1483 sessions of G.711 <-> G.723,
- ✓ up to 1113 sessions of G.723 <-> G.729,
- ✓ 370 to 2121 simultaneous G.711 to complex codec VoIP transcoding sessions,
- ✓ Simple field upgrade with TMGIP3200-UPG,
- ✓ Redundant AC or DC power supplies,
- ✓ 2U VoIP gateway.

### Ordering information

Part #	Transcoding Sessions		(1 session = 2 channels)	
	G.711 to G.726	G.711 to G.729	G.711 to G.723	G.723 to G.729
TMGIP3200-4	530	424	370	278
TMGIP3200-8	1061	849	742	557
TMGIP3200-12	1591	1273	1113	835
TMGIP3200-16	2121	1697	1483	1113
TMGIP3200-UPG	+~530	+~424	+~370	+~278

Each configuration is available in redundant AC or DC power.

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## Capacity and Voice Processing

1060 to 4242 complex VoIP transcoding channels  
(simple field upgrade)

### VoIP interfaces

Dual 100/1000Base-T  
RJ45 connectors on rear of unit

### Vocoding

Standard codec: G.711 (A-Law and  $\mu$ -Law)  
Complex codecs: G.723.1, G.726, G.729ab  
Other codecs: G.722.2 (AMR-WB), AMR, G.728,  
G.729eg, iLBC, clear mode (RFC 4040)

### DTMF Relay

RFC 2833, SIP INFO method, in-band

### Echo Cancellation

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

### Voice Processing

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

### Management Interfaces

100/1000Base-T for OAMP+T  
1 RJ45 serial port with RS-232C adapter  
Supports virtual IP

## Signaling

### 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, 5806  
SIP-I/SIP-T

## TMG-CONTROL

### Standalone Call Control

Call routing based on: trunk group, calling/called  
numbers, nature of address, ASR, time of day, load-  
based, cost based, TO:, From: Request URI, redirect  
numbers and other parameters  
NPA-NXX routing (100k+ table entries, Excel or CSV  
file upload)  
Route Retries  
Call transfer (REFER)

### H.248 (MEGACO) Call Control

ITU-T H.248 versions 1 and 2  
UDP, SCTP, IPSec transport  
DTMF and fax detection  
DTMF, announcements and call progress tone  
generation  
Call quality and inactivity alerts

### Session management and billing

SIP peer availability polling  
RTP inactivity monitoring  
CDR generation (RADIUS and text file)

## OAMP+T (Web-based Interface)

### Operation & Administration

Status, configuration and management GUI  
Configuration change audit logging  
Access and user management  
SNMP V2, V3 GET, TRAPs and alarms

### Maintenance

Automated system upgrade  
System backup, restore and copy  
Extensive system status display  
Multiple software version archive

### Provisioning

Dynamic configuration changes  
Configuration validation  
Multiple configuration archive

### Troubleshooting (TB Analytics)

Call Trace  
Test Call  
TB Sigtrace – Live Signaling Capture  
System Snapshot

## Electrical characteristics (Power Input)

90 to 260 VAC, 47 to 63 Hz, -40 to -60 VDC  
Redundant power supply option with dual power inputs  
Maximum 138W power consumption

## Physical characteristics (Dimensions & Weight)

2U, 19" rack mount, 3.5" (88.9mm) H x 17.4" (442mm) W x 16" (406mm) D  
20lbs (9.1kg)

## Regulatory compliance (UL/CSA 60950, CSA C22.2)

### EMC

FCC Part 15:2009, Subpart B, CE Mark  
(EN55022:2006, Class A, EM60950, EN61000, ETS 300 386)

## Environmental

Operating temperature: 0 to +55 °C, 95% rel. hum. non-condensing  
Storage temperature: -10 to +75 °C, 95% rel. hum. non-condensing  
Designed to meet NEBS Level 3, RoHS compliant