



Ordering information

Part #	Description
TMG3200-TE-16	16 x T1/E1
TMG3200-TE-32	32 x T1/E1
TMG3200-TE-48	48 x T1/E1
TMG3200-TE-64	64 x T1/E1

Each configuration is available in redundant AC or DC power.

PRODUCT DESCRIPTION

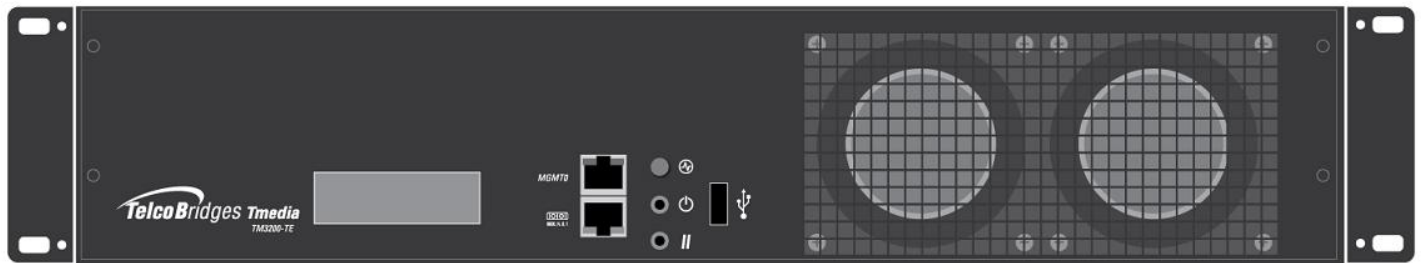
The TelcoBridges **Tmedia TMG3200** is our mid-level VoIP gateway.

Recognised for its high-capacity and high-performance, the TMG3200-TE is an 16 to 64 T1/E1 VoIP gateway that offers high-density in a single box (2U) solution.

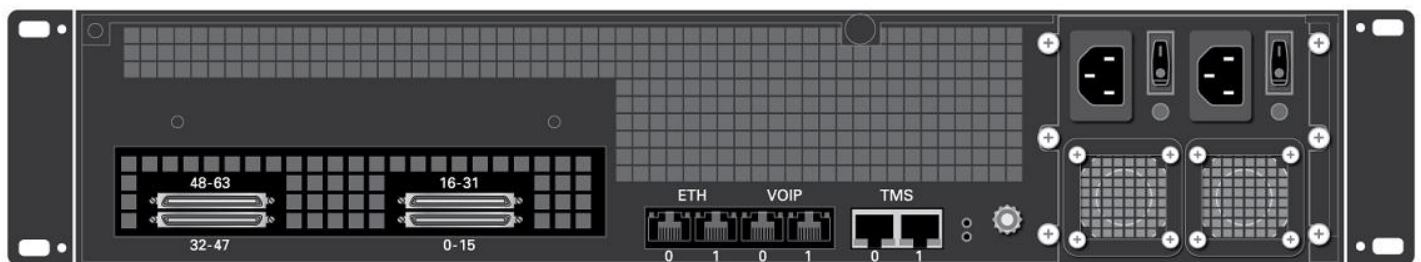
Characteristics of the TMG3200-TE:

- ✓ 2U VoIP gateway
- ✓ 512 to 2048 VoIP channels
- ✓ 16 to 64 T1/E1s
- ✓ Simple field upgrade by 16 T1/E1 and 512 VoIP channel increment
- ✓ Redundant AC or DC power supplies

ILLUSTRATIONS



Tmedia TMG3200-TE, 2U VoIP / media gateway **front view**



Tmedia TMG3200-TE, **rear view AC** (DC also available)

Tmedia TMG3200-TE VoIP / media gateway data sheet

Capacity and voice processing

512 to 2,048 VoIP channels (simple field upgrade)

PSTN interfaces

16 to 64 T1/E1 (simple field upgrade)
Independently configurable per port
SCSI connectors to RJ48C patch panel

VoIP interfaces

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

Vocoding

Universal codecs: G.711, G.723.1, G.726, G.729ab, T.38 V.17, clear mode (RFC 4040)
Other codecs: G.722.2 (AMR-WB), G.728, G.729eg, iLBC, AMR, EVRC, GSM-FR/EFR

Fax/Modem/Data

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

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

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

Signalling (Simultaneous signalling support)

SIP

Supported RFCs: 2327, 2976*, 3261, 3262, 3263, 3264*, 3311*, 3323*, 3325*, 3398, 3515, 3578*, 3764, 3891, 4028, 3581, 3665*, 3666 (*: partial compliance)

SIGTRAN

M2PA, M2UA, M3UA, IUA
SS7 termination and/or relay supported

SS7

Up to 64 x MTP2 links (56, 64, n x 56/64 kbps, HSL)
Multiple redundant MTP2 links
Up to 64 MTP3 originating point codes and linksets
ISUP variants: ITU 92, ITU 97, ANSI 88, ANSI 92, ANSI 95, Q.767, Telcordia 97, ETSIv2, ETSIv3, China, Singapore, UK

ISDN PRI

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

CAS

MFC R2 (standard ITU, Brazil, Mexico)
Customizable protocol script files

TMG-CONTROL

Standalone call control

Any to any call routing (TDM-VoIP, TDM-TDM, VoIP-VoIP with transcoding)
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 CVS file upload)
Route retries, calling/called digit manipulation, customizable call cause code mapping, call transfer (REFER, AT&T TR 50075)

H.248 (MEGACO) call control

ITU-T H.248 versions 1 and 2
UDP, SCTP, IPSec transport
DTMF and fax detection
DTMF, call progress tone generation, COT 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 text file)

OAMP+T

Operation & Administration

Web-based system status and operations
SNMP V2, V3 GET, TRAPs and alarms

Maintenance

Web-based interface for maintenance
Automated system upgrade
System backup, restore and copy

Provisioning

Web-based interface for configuration
Dynamic activation
Dynamic configuration changes

Troubleshooting

Per-call tracing (history and/or live)
Signalling capture tools
SSH command-line interface

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