

PRODUCT DESCRIPTION

The TelcoBridges Tmedia 1+1 solutions answer service providers' needs for high availability and redundancy. Our Tmedia 1+1 solutions consist of three components:

- A standard Tmedia Unit
- A Tmedia +1 Unit
- And a Tmedia 1+1 patch panel

How the solution works...

When properly installed and configured, the standard Tmedia unit acts as the primary (active) VoIP gateway and the Tmedia +1 unit acts as the secondary (standby). The two devices communicate with each other via the VoIP ports and in the event of product malfunction; traffic is transferred from the active to the standby unit through the patch panel connection, without the need for human intervention.

Tmedia 1+1 solutions ensure redundancy in terms of: power redundancy, packet network redundancy and facility protection.

The Tmedia TMG3200-DS3+1 provides a highly available and redundant telecommunications system from 1 to 3 DS3. You can increase the capacity of your TMG3200-DS3+1 through a simple field upgrade available in increments of 1 DS3.

Characteristics of the TMG3200-DS3+1:

- ✓ 2U VoIP gateway
- ✓ 672 to 2016 VoIP channels
- ✓ 1 to 3 DS3
- ✓ Simple field upgrade available in increments of 1 DS3
- ✓ Redundant AC or DC power supplies

IMPORTANT: Tmedia 1+1 solutions are only available for NEW Tmedia products running TMG-CONTROL version 2.6. For more information with regard to TelcoBridges Tmedia 1+1 solution, please contact your certified TelcoBridges Reseller and/or your TelcoBridges Sales Representative.

Ordering information

Standard Tmedia TMG3200-DS3 Units

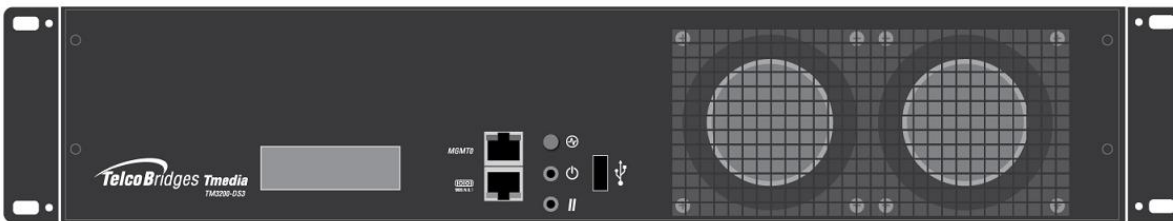
Part #	Description
TMG3200-DS3-1	1 x DS3
TMG3200-DS3-2	2 x DS3
TMG3200-DS3-3	3 x DS3

Tmedia TMG3200-DS3+1 Units

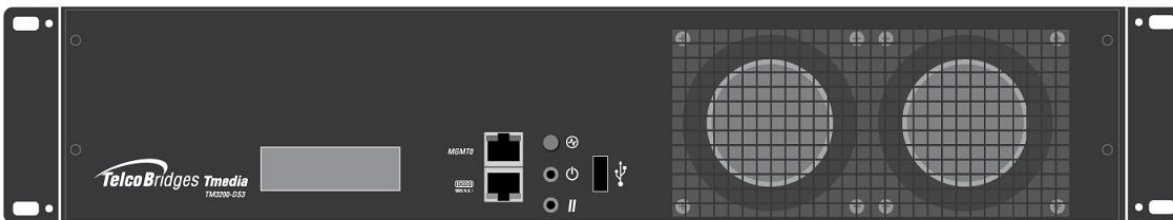
Part #	Description
TMG3200-DS3-1+1	1 x DS3
TMG3200-DS3-2+1	2 x DS3
TMG3200-DS3-3+1	3 x DS3

Each configuration is available in redundant AC or DC power.

ILLUSTRATIONS



Standard Tmedia TMG3200-DS3
2U VoIP / media gateway
Front view



Tmedia TMG3200-DS3 +1
2U VoIP / media gateway
Front view



1+1 Patch Panel for the Tmedia TMG3200-DS3 +1, 1U,
19" wide rackmount
Passive device

Capacity and voice processing

672 to 2,016 VoIP channels (simple field upgrade)

PSTN interfaces

1 to 3 DS3 (simple field upgrade)

BNC connectors on rear of unit

DualRJ48C for BITS or T1/E1 for signalling

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 (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

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 (support 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 (per unit)

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 per unit)

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