

TELEPRIME ORDERING INFORMATION

Part #	Description

The TelcoBridges **Tmedia™ TMG7800**; high availability says it all. This **multi-unit VoIP gateway** solution is **scalable** and is **100% redundant** ensuring an infallible, **carrier-grade** network.

Characteristics of the TMG7800:

- ✓ 4 to 39U VoIP gateway
- ✓ 256 to 32,768 VoIP channels
- ✓ 8 to 1024 T1/E1 or 1 to 48 DS3 or 1 to 16 OC3/STM1
- ✓ Redundant AC or DC power supplies

For more information on the Tmedia TMG7800 visit www.teleprime.com.



Tmedia TMG7800 can consist of *1 to 2 TMG7800-CTRL* (depending on the need for redundancy), which control *up to 16 TMG7800 units*.

Tmedia **TMG7800-CTRL**, front view



Tmedia **TMG7800** unit, front view



Capacity and voice processing

256 to 32,768 VoIP channels (hardware & software upgradeable)

PSTN interfaces

8 to 1024 T1/E1 (hardware and software upgradeable) or
1 to 48 DS3 (hardware and software upgradeable) or
1 to 16 OC3/STM1 (with Automatic Protection Switching – APS)
Dual RJ48C for BITS or T1/E1 for signalling on each DS3 & OC3/STM1 unit

VoIP interfaces

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

Vocoding

Universal codecs: G.711, G.723.1, G.726, G.729ab, T.38
Other codecs: G.722.2 (AMR-WB), G.728, G.729eg, iLBC, clear mode (RFC 4040)

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

Multiple 100/1000 Base-T for OAMP

Signalling

Simultaneous signalling support:

SIP

Supported RFCs: 2327, 2976, 3261, 3262, 3263, 3264, 3311*, 3323*, 3325*,
3398, 3515*, 3578*, 3764, 3891, 4028 (*: 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, Telcordia 97,
ETSIv2, ETSIv3, China, Singapore, UK Brazil

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)
Customizable protocol script files

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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
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, 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

Operation & Administration

Web-based system status and operations
SNMP v2 GET, TRAPs and alarms
Dynamic configuration changes

Maintenance

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

Provisioning

Web-based interface for configuration
Dynamic activation

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 with dual power inputs

Physical characteristics (Dimensions & Weight)

39U rack composed of up to 16 2U VoIP gateway units
Each 2U unit is 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
NEBS Level 3 compliant
RoHS compliant