

The TelcoBridges Tmedia™ TMG800 is an extensible media gateway that meets the needs of service providers looking to cost-effectively expand the edge of their network footprint to meet the need for converged network services.

AVAILABLE CONFIGURATIONS

TMG810 – 1 x T1/E1/J1
TMG812 – 2 x T1/E1/J1
TMG814 – 4 x T1/E1/J1
TMG816 – 6 x T1/E1/J1
TMG818 – 8 x T1/E1/J1

Each configuration is available with AC or DC power.

Starting from a single network interface, the TMG800 provides capacity of up to 8 T1/E1/J1 interfaces (up to 256 universal VoIP channels). As service uptake increases, the hardware capabilities of the 1U form factor TMG800 can be extended with software license upgrades.

Leveraging its integrated media gateway controller or in conjunction with an H.248-compliant softswitch, the TMG800 offers a low footprint approach to extending services such as media gateway, TDM switching, VOIP hairpinning, and transcoding, among others, to the network edge.

FEATURES & BENEFITS

Field-upgradeable: Through VoIP Plug-In addition and/or T1/E1/J1 port expansion from 1 to 8 through software license upgrades.

Flexibility: A network agnostic platform, the TMG800 supports 'any-to-any' call routing as well as support for all major wireless, TDM and IP voice protocols.

Performance: The TMG800 features a non-blocking architecture providing full availability of call channels and other system resources (IVR, VOIP).

The Tmedia TMG800 is the leading carrier-grade media gateway for service providers and system integrators looking to cost-effectively extend the network edge.

For more information on how the Tmedia TMG800 can help transform your offerings, please visit www.telcobridges.com.

> Tmedia TMG800



TMG800 SPECIFICATIONS

NETWORK INTERFACES

Telephony

1 to 8 T1/E1/J1 TDM ports (software upgradeable)

Capacity

TDM: 24 to 256 channels

VoIP: 24 to 256 universal ports (G.711, G.723.1, G.726, G.729ab, T.38), many other codecs at different channel densities

WAN IP

Dual 100/1000 Base-T for VoIP traffic

LAN

Single 100/1000 Base-T for OAM&P

MEDIA PROCESSING

PCM Coding A-law to μ -law encoding and conversion

Universal Codecs G.711, G723.1, G.726, G.729ab, T.38 (256 channels)

DTMF Relay RFC2833, SIP INFO method, in-band
> DTMF detection, generation, suppression

Echo Cancellation G.168 – 128ms tail length on all channels simultaneously

Fax Support T.38 fax relay, Group 3, Fax/modem bypass,
G.711 fax fallback

Optional Codecs* AMR, AMR-WB (G.722.2), GSM-FR/GSM-EFR,
EVRC/QCELP, G.728, G729eg, iLBC

>Independent dynamic codec selection per channel

APPLICATION SOFTWARE

TB Media Gateway™ application

> TDM-to-TDM switching, TDM-to-IP-to-TDM gateway, IP-to-IP hairpinning
> Transcoding, trunking, call routing, fax relay and other functions
> Call Detail Records (CDR): user-definable text files and RADIUS
> High availability

CALL ROUTING FEATURES

> Fully scriptable, Ruby-based call routing engine
> CLI (ANI)-based routing and translation
> DID (DNIS)-based routing and translation
> Least cost routing (with time of day/week/year scheduling and other criteria)
> Routing based on Nature of Address (NOA), Numbering Plan Indicator (NPI), and others
> Pre-and post-routing digit translation

REGULATORY COMPLIANCE

EMC FCC Part 15, EN55022, EN61000, ENV50204
NEBS Designed to meet Level 3
Safety CE, UL60950, CSA C22.2 No.60950-1-03

SIGNALING

ISDN PRI (14+ variants), National ISDN-2, Euro ISDN, DMS100, DMS250, 4ESS, 5ESS, Japan INS-NET1500

SIP: RFC 3261 User Agent, SIP Authentication

CAS R2: scriptable state machine enables user-generated variants

SS7*: (20+ variants) MTP2, MTP3, SCCP, and ISUP

> Up to 64 SS7 links, up to 256 CICs, High-speed Signaling Links (HSL), redundant SS7 links, single or multiple point codes per device

SIGTRAN: SCTP, M2PA, M2UA, M3UA

H.248: ITU-T H.248.1

QUALITY OF SERVICE (VoIP)

Dynamic jitter buffer (adaptive and fixed), packet loss concealment, Silence Suppression; Denial of Service (DoS) protection for VoIP media

MANAGEMENT INTERFACES

1 DB-9 serial console port with RS-232C adapter

1 100/1000base-T management interface (OAM&P)

MANAGEMENT & CONTROL

TelcoBridges Element Management System

> Live configuration and software upgrades via HTTP
> Monitoring via HTTP

HARDWARE SPECIFICATIONS

Physical Interfaces

PSTN: 1 to 8 T1/E1/J1 via RJ-48

IP: Dual 100/1000 Base-T Ethernet VoIP ports

OAM & Control: 100/1000 Base-T Ethernet port

Dimensions

1U with single power supply

> 1.75" H (44,5 mm) x 17.4" W (442 mm) x 11" D (279 mm)

Weight: 10 lbs (4.54 kg)

Environmental

AC Power: 90 to 260 Volts AC, 47/63 Hz

DC Power: -40 to -60 Volts DC

Power Consumption: 45 W fully loaded

Operating temperature range: 0 to +55 °C, 95% rel. hum. non-condensing

Storage temperature range: -10 to +75 °C, 95% rel. hum. non-condensing

* Additional licenses required.



DC power option shown; AC power option also available