

The TelcoBridges™ Tdev TMP800 is a small-footprint computer telephony platform that meets the needs of service providers looking to cost-effectively trial new value-added services. The TMP800 provides capacity of up to 8 T1/E1/J1 interfaces, up to 256 universal VoIP channels, and up to 512 IVR channels. As service uptake increases, the capabilities of the 1U form factor TMP800 can be extended with expansion cards for VoIP and software license upgrades for TDM and IVR.

#### AVAILABLE CONFIGURATIONS

TMP810 – 1 x T1/E1/J1  
TMP812 – 2 x T1/E1/J1  
TMP814 – 4 x T1/E1/J1  
TMP816 – 6 x T1/E1/J1  
TMP818 – 8 x T1/E1/J1

Each configuration is available with AC or DC power.

Whether sitting at the edge of a wireline, wireless or VOIP network, the TMP800 delivers seamless voice interoperability across TDM and IP networks. The TMP800 builds on those capabilities with an advanced application platform for delivering ring-back tones, unified communications, pre-paid/post-paid calling, hosted IP-PBX, conferencing, Fax over IP (T.38), voicemail, and other enhanced services to subscribers irrespective of access protocol or device.

Leveraging TelcoBridges Toolpack™ software toolkit, and a choice of host deployment platforms, the TMP800 provides the ability to rapidly develop and deploy applications that tie together real-time communications from the network with stored external data sources to provide unique subscriber-specific services.

Offering the industry-leading highest port density and the lowest operating cost—an average 66% less power consumption than competing products offering similar capacity—the fully field-upgradable Tdev TMP800 supports the drive by service providers to reduce the environmental impact of their network environmental impact of their network footprint and increase their profitability and green credentials.

#### FEATURES & BENEFITS

**Powerful:** By tying together real-time communications from the network with stored external data sources, the TMP800 provides an advanced application platform for delivering unique subscriber-specific services, such as unified communications, ring-back tones, and prepaid / postpaid calling.

**Flexibility:** Through VoIP plug-in hardware additions as well as the ability to expand from 1 to 8 T1/E1/J1 ports and/or from 32 to 512 IVR channels through software license upgrades.

**Performance:** The TMP800 features a non-blocking architecture providing full availability of call channels and other system resources (IVR, VOIP).

For more information on how the Tdev TMP800 can help transform your offerings, please visit [www.telcobridges.com](http://www.telcobridges.com).

#### > Tmedia TMP800



### TMP800 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

IVR: 24 to 512 channels

##### WAN IP

100/1000 Base-T for VoIP traffic

##### LAN

100/1000 Base-T for OAM&P and control

#### MEDIA PROCESSING

##### PCM Coding

A-law to  $\mu$ -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

##### 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 AND DEVELOPMENT SOFTWARE

##### TB Media Gateway™ application (w/source code)

> 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

> Call routing engine

>> Fully scriptable (based on Ruby scripting language)

>> 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

> High availability

##### Toolpack Application Development Environment

> Pre-developed C++ classes (call bridging, call routing, IVR, embedded web-based GUI, voicemail, ODBC database access/RADIUS for CDRs, etc.)

> Linux, Intel/SPARC Solaris, Windows OS environments

#### 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, TCAP and ISUP

> Up to 64 SS7 links, up to 256 CICs, HSL, redundant SS7, single or multiple point codes per device

SIGTRAN\*: SCTP, M2PA, M2UA, M3UA

H.248: ITU-T H.248.1

\* Additional licenses required.

#### QUALITY OF SERVICE (VoIP)

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

#### IVR FEATURES

DSP-based, 24 to 512 channels; upgradeable via software license

> Voice prompt playing

> DTMF detection, generation, suppression

> Voice Activity Detection (VAD), Comfort Noise Generation (CNG), Automatic Gain Control (AGC)

#### MANAGEMENT INTERFACES

1 RJ45F serial console port with RS-232C adapter

#### MANAGEMENT & CONTROL

> SNMP v2 GET of individual appliance configuration and statistics

> TelcoBridges Element Management System (Toolpack)

>> Live configuration and software upgrades via HTTP

>> Monitoring via HTTP

>> Configuration of multiple devices in the same system with a single interface

#### HARDWARE SPECIFICATIONS

##### Physical Interfaces

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

*IP*: One 100/1000 Base-T Ethernet VoIP port

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

##### Dimensions

> 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



DC power option shown here; AC power option also available