Tdev™ TMP800 Series
COMPUTER TELEPHONY PLATFORM

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 and up to 256 universal VoIP channels. As service uptake increases, the capabilities of the 1U form factor TMP800 can be extended for VoIP and software license upgrades for TDM.

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 capacity additions as well as the ability to expand from 1 to 8 T1/E1/J1 ports through software license upgrades.

Performance: The TMP800 features a non-blocking architecture providing full availability of call channels and other system resources.

For more information on how the Tdev TMP800 can help transform your offerings, please visit www.telcobridges.com.

> Tmedia **TMP800**

Tdev™ TMP800 Series
COMPUTER TELEPHONY PLATFORM

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 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
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,, 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

MANAGEMENT INTERFACES

1 RJ 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

TelcoBridges Inc., 91 De La Barre, Boucherville, Quebec, Canada, J4B 2X6 Tel.: +1 450 655 8993 Fax: +1 450 655 9511 www.telcobridges.com