

### *T*sig™

### **TSG3200-TE**

16 to 64 Signaling/SIGTRAN Gateway





The TSG3200 is a high-capacity, 2U Signaling/SIGTRAN gateway and converter. The TSG3200-TE can have from 16 to 64 T1/E1 ports (via a patch panel). These ports can be hardware ready, such that additional T1/E1 can be added via an easy software upgrade.

### **Product Characteristics:**

- ✓ 2U Signaling/SIGTRAN gateway & converter
- √ 16 to 64 T1/E1s
- ✓ Software upgradable by 16 T1/E1 increments
- ✓ Redundant AC or DC power supplies
- √ 1+1 Support

### **Ordering information**

Part #	Description
TSG3200-TE16	16 x T1/E1
TSG3200-TE32	32 x T1/E1
TSG3200-TE48	48 x T1/E1
TSG3200-TF64	64 x T1/F1

Each configuration is available in redundant AC or DC power.

### TelcoBridges Inc.

91 de la Barre, suite 01 Boucherville, QC J4B 2X6, CANADA

**Sales** +1.450.655.8993 **TB Support** +1.866.438.4703

### info@telcobridges.com

www.telcobridges.com



### **Interfaces**

#### **PSTN**

16 to 64 T1/E1 (simple field upgrade) Independently configurable per port SCSI connectors to RJ48C patch panel

### IP Signalling

Dual 100/1000Base-T, used separately or in bonding RJ45 connectors on rear of unit

### Management

Single 100/1000Base-T for OAMP+T 1 RJ45 serial port with RS-232C adapter Supports virtual IP

### Signaling

Simultaneously supports any combination or all of the following signaling protocols:

### **SIGTRAN**

M2PA, M2UA, M3UA, (IPSP, ASP, SG), IUA SCTP (raw IP and UDP) SS7 termination and/or relay supported Up to 64 M2UA / M2PA links Up to 20 M3UA peer server processes

### SS7

Up to 64 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, Brazil, SPIROU, Japan NTT SCCP routing and global title transition

### 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 R1 (E&M, loop start user / network side) MFC R2 (standard ITU, Brazil, Mexico) Customizable protocol script files

# **TMG-CONTROL** (Embedded gateway control and management software)

### **Embedded Call Control**

Call routing based on: trunk group, calling/called numbers digit manipulation, call cause code mapping Advance call routing: Priority, load sharing, route retry, Nature of Address (NOA) manipulation Programmable call routing: Access and manipulation of call parameters
RADIUS AAA (supports multiple RADIUS servers)
NPA-NXX routing (over 100,000 table entries)

### H.248 (MEGACO) Call Control

ITU-T H.248 versions 1 and 2 UDP, SCTP, IPSec transport DTMF and fax tone detection Call progress, DTMF and COT tone generation Call quality and inactivity alerts H.248 control port redundancy (supports virtual IP)

### Session management and billing

CDR generation (RADIUS AAA and text file)
Integrated lawful intercept (ETSI ES 201 671 v.2.1.1)



### **OAMP+T** (Web-based Interface)

### Operation & Administration

Status, configuration and management GUI Configuration change audit logging Access and user management SNMP V2, V3 GET, TRAPs and alarms

### Maintenance

Automated system upgrade System backup, restore and copy Extensive system status display Multiple software version archive

### Provisioning

Dynamic configuration changes Configuration validation Multiple configuration archive

### Troubleshooting (TB Analytics)

Call Trace
Test Call
TB Sigtrace – Live Signaling Capture
System Snapshot

## **Electrical characteristics** (Power Input)

90 to 260 VAC, 47 to 63 Hz, -40 to -60 VDC Redundant power supply option with dual power inputs Maximum 136W power consumption

## Physical characteristics (Dimensions & Weight)

2U, 19" rack mount, 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% rel. hum. non-condensing Storage temperature: -10 to +75 °C, 95% rel. hum. non-condensing Designed to meet NEBS Level 3, RoHS compliant