

## TSG800 SS7/Signaling Gateway - 1 to 16 T1/E1



The TelcoBridges **Tsig TSG800** is a carrier-grade SS7/SIGTRAN gateway.

Software upgradeable from 1 to 16 T1/E1, the TSG800 is the most cost-effective SS7/Signaling gateway solution for service providers that is currently available on the market.

### Product Characteristics:

- ✓ 1U SS7/SIGTRAN gateway
- ✓ 1 to 16 T1/E1
- ✓ SIGTRAN, SS7, Global Title Translation
- ✓ Software upgradeable by single T1/E1 increments
- ✓ Dual feed redundant power supplies (AC or DC)
- ✓ Tsig 1+1 solution option

## Tsig™ TSG800 Data Sheet

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Tsig TSG800 1U SS7/SIGTRAN gateway, front and rear view (dual AC power input shown)

## Interfaces

### PSTN

1 to 16 T1/E1 (software upgradeable)  
 Configurable per port for T1 or E1  
 RJ48C connectors on rear of unit  
 Port status LEDs

### IP

6 Ethernet ports 100/1000Base-T  
 RJ45 connectors on rear of unit  
 Up to 16 different IP addresses  
 Ethernet port bonding and 802.1q VLAN support

## High Availability & Redundancy

Power supply redundancy  
 IP port redundancy  
 Self-recovery software  
 MTP2/SS7 link redundancy

### Tsig 1+1 solution (optional)

The Tsig 1+1 solution extends the high-availability and redundancy features of the TSG800

SS7/SIGTRAN gateway redundancy (active/standby)  
 Full capacity protection (TDM and IP)  
 Configuration database redundancy  
 Seamless software upgrade  
 Fault tolerant software  
 M3UA/MTP3/ISUP redundancy

### Tsig 1+1 solution consists of:

1 active Tsig unit and 1 standby Tsig unit  
 1 or 2 Tsig 1+1 Patch Panel(s)  
 1+1 Patch Panels are passive (no power required)

## Signaling

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

### SS7

Up to 64 MTP2 links (56, 64, n x 56/64 kbps) or 2 x HSL  
 Multiple redundant MTP2 links  
 Up to 64 originating point codes and 256 linksets  
 Up to 256 destination point codes  
 MTP2 variants: ITU 88, ITU 92, ANSI 88, ANSI 92, NTT, TTC  
 MTP3 variants: ANSI, ANSI92, ITU, CHINA  
 SCCP routing and global title translation based on called party/calling party global title, SSN and TCAP opcode

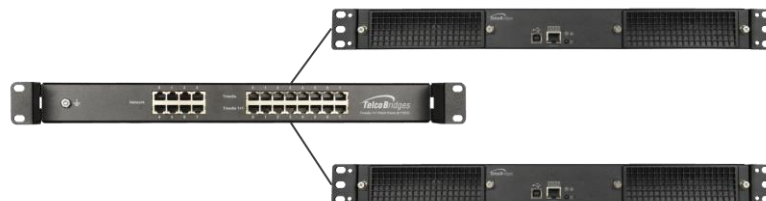
### SIGTRAN

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 64 M3UA peer server processes  
 Transparent SS7 link transport over IP

## OAMP+T (Web-Based Interface)

### Operations & Administration

Configuration, management and status GUI  
 CLI and configuration file machine-to-machine interface  
 Configuration change audit logging  
 Access, user and privilege management  
 SNMP V2, V3 GET, TRAPs (alarms)  
 Extensive SNMP call statistics MIBs



Tsig 1+1 solution schematic

## Management

- 2 Ethernet ports 100/1000Base-T
- 1 USB Type B serial port
- GUI-based system upgrade
- GUI-based configuration copy, backup and restore
- Storage for multiple software versions
- Storage for multiple configuration files
- Extensive system status display

## Provisioning

- Non-service affecting configuration changes
- Offline configuration validation
- Multiple configuration files archive
- Machine-to-machine configuration interface

## Troubleshooting (TB Analytics)

- TB Sigtrace – Protocol signaling capture into pcap files
- Media call recording (scriptable for calling and called numbers)

## Maintenance

- Replaceable fan filters

## Dimensions & Weight

1U, 19" rackmount  
 1.75" (44.5 mm) H x 16.9" (429 mm) W x 16" (406 mm) D  
 14 lbs (6.4 kg)

### 1+1 patch panel (8 T1/E1)

1U, 19" rack mount  
 1.75" (44.5 mm) H x 16.9" (429 mm) W x 5.25" (133 mm) D  
 3.4 lbs (1.6 kg)

## Electrical Characteristics

- 90 to 260 VAC, 47 to 63 Hz or -36 to -72 VDC
- Dual feed redundant power supplies (AC or DC)
- Maximum 70W power consumption

## Regulatory Compliance

### Safety

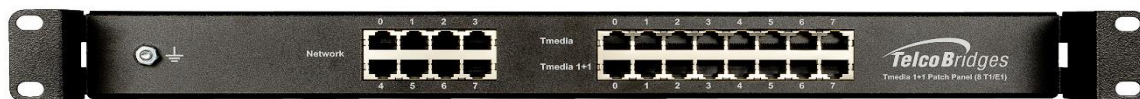
- CAN.CSA C22.2
- EN 60950-1:2005
- EN 60950-1:2006

### EMC

- FCC Part 15:2013, Subpart B,
- CE Mark (EN55022:2010, Class A, EN61000, ETSI EN 300 386)

### Environmental

- Operating temperature:  
 0 to +70 °C, 95% rel. hum. non-condensing
- Storage temperature:  
 -10 to +85 °C, 95% rel. hum. non-condensing
- Designed to meet NEBS Level 3
- RoHS compliant



Tsig TSG800 1+1 Patch Panel, (front view)

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