***T*sig™**

TSG3200-RJ

8 to 16 Signaling/SIGTRAN Gateway

The TSG3200 is a high-capacity, 2U Signaling/SIGTRAN gateway and converter. The TSG3200-RJ can have from 8 to 16 T1/E1 ports. These ports are hardware ready, such that additional T1/E1 can be added via an easy software upgrade.

Product Characteristics:

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

Ordering information

Part #	*Description*
TSG3200-RJ8	8 x TE/E1
TSG3200-RJ9	9 x TE/E1
TSG3200-RJ10	10 x TE/E1
TSG3200-RJ11	11 x TE/E1
TSG3200-RJ12	12 x TE/E1
TSG3200-RJ13	13 x TE/E1
TSG3200-RJ14	14 x TE/E1
TSG3200-RJ15	15 x TE/E1
TSG3200-RJ16	16 x TE/E1

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

8 to 16 (simple field upgrade)
Independently configurable per port
RJ48C connectors on rear of unit

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 130W 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