# **ENCORE NETWORKS**

To order, call 1-213-825-1020 or email: sales@teleprime.com

# SP201<sup>™</sup> Signaling Gateway

An advanced signaling protocol converter designed to facilitate interoperability between incompatible communication networks. The SignalPath<sup>™</sup> 201 (SP201) is an advanced signaling protocol converter designed to facilitate interoperability between incompatible communication networks. The SP201 enables a seamless interface between in-band and out-of-band networks, and between out-of-band networks and other out-of-band networks.

Different types of communication protocols, both in-band and out-of-band, exist globally. One country could have up to six or seven different protocols simultaneously in use within its networks. The SP201 breaks down the communication barriers presented by these different protocols and enables the flow of information across any network.

Not only can you increase your potential to connect to a larger portion of the world market, but you can also eliminate charges you may be currently paying to one or more companies for network connections. This means more revenue in your corporate pocket.

# SP201 Signaling Gateway



# **EXTENSIVE PROTOCOL SUPPORT**

The following protocols are available, as well as a wide variety of custom variants:

- R1, R2, DTMF, C5
- ► SS7 (ANSI), C7 (ITU-T)
- ETSI PRI ISDN, NI2 ISDN
- Custom protocol variants

### SUPERIOR MAINTENANCE AND DIAGNOSTICS

- Multiple maintenance features enable quick and cost-effective resolution of network problems.
- ► Trace functionality is available to aid in trouble- shooting configuration and network problems.
- ► Visual and dry contact alarms allow for remote and local monitoring.

# **COMPACT CHASSIS DESIGN**

- ► The SP201 features a compact 1U height designed for budgeted space, with a capacity of up to 4 E1 or T1 trunks for the customer with low-end requirements.
- Chassis-based, the SP201 is designed specifically for today's high standards in the communications environment.

# **OTHER PRODUCT FEATURES**

- Standard connections (RJ48, BNC)
- Up to 4 E1 or T1 trunks (full duplex, 8 ports)
- Up to 120 DS0s per chassis
- Dynamic bi-directional µ-Law/A-Law T1/E1





# **TECHNICAL SPECIFICATIONS**

#### **STANDARDS CONFORMANCE**

Q.310–Q.331 C5 Q.140-Q.180 **R1 R2** Q.400-Q.490 DTMF BellCore TR-TSV-002275, Subsection 6.13 BellCore TR-NWT-00246, ANSI T1.111a, T1.112, T1.113a, T1.114, T1.116, T1.234–T1.236 SS7 C7 ITU-T White Book: Q.767, Q.701–Q.704, Q.705, Q.708, Q.709, Q.780–Q.782, Q.784, Q.788 ETSI ISDN ETSI 300-102, Q.931, Q.921 NI2 ISDN BellCore TR-NWT-001268, TR-NWT-002343; Q.931, Q.921

#### AGENCY COMPLIANCE

Safety:EN 60950, European Safety (CE Mark)<br/>UL 1950 3rd Edition, U.S. SafetyEmissions:EN 55022, Class A FCC Part 15, Sub-part B, Class A<br/>EN55024: 1998Belcore Emissions & Immunity:GR-1089-CORE, Section 3

#### HARDWARE SPECIFICATIONS

Height:	1.75 in. (4.45 cm)
Width:	19 in. (48.26 cm)
Depth:	10 in. (25.4 cm)
Power:	42 to -56 VDC or
	100 to 240 VAC, 50 to 60 Hz
Temperature:	32° to 122° F (0° to 50° C)
Humidity:	Up to 95% non-condensing
Altitude:	Up to 10,000 ft. (3,048 m)

#### SYSTEM CAPACITY

Aggregate Cards:One per chassisInterfaces:Up to 4 E1 or T1 trunks (or 8 full duplex trunks) per chassisChannels:Up to 31 per trunk; up to 248 per chassisSS7/C7 links:Four per chassisDestination Point Codes:One per trunk. Up to 4 per chassis

#### **INTERFACE SPECIFICATIONS**

Framing:	E1: G.732 or G.706
	T1: D4SF or D4ESF
Bit Rate:	E1: 2,048 Mbps
	T1: 1.544 Mbps
Clocking:	E1: ± 30 ppm internal
	E1: ± 100 ppm external
	T1: ± 30 ppm internal
	T1: ± 150 ppm external
Impedance:	E1: 120 ohm balanced
	E1: 75 ohm unbalanced
	T1: 100 ohm balanced
Coding:	E1: AMI or HDB3
	T1: AMI or B8ZS
Alarms:	E1: Loss of carrier signal, multi-frame carrier signal, sync; alarm indication signal (AIS);
	receipt of remote alarm; receipt of multi-frame remote alarm
	T1: Loss of carrier signal; loss of frame; receipt of alarm indication signal (AIS); receipt
	of remote alarm
Diagnostics:	E1/T1: signaling state report, digit report
Performance:	E1: G.703, G.706, G.732, G.823 T1: ATT Pub. 62411





Specifications are subject to change without notice

