

SIGNALPATH™ 201 SIGNALING GATEWAY

The SignalPath™ 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.



EXTENSIVE PROTOCOL SUPPORT

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

- R1, R2, DTMF
- SS7 (ANSI), C7 (ITU-T)
- 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 troubleshooting 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 interfaces 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 RJ48 connections
- Up to 4 E1 or T1 trunks
- Up to 124 DS0s per chassis
- Dynamic bi-directional μ -Law/A-Law T1/E1 conversion
- 19 in. (48.26 cm) rack-mountable chassis
- Option of either -48 VDC or 120/240 VAC power input

STANDARDS CONFORMANCE

R1	Q.310–Q.331
R2	Q.400–Q.490
DTMF	BellCore TR-TSV-002275, Subsection 6.13
SS7	BellCore TR-NWT-00246, ANSI T1.111a, T1.112, T1.113a, T1.114, T1.116, T1.234–T1.236
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
ISDN-ETSI	ETSI 300-102, Q.931, Q.921
ISDN-NI2	BellCore TR-NWT-001268, TR-NWT-002343; Q.931, Q.921

AGENCY COMPLIANCE

Safety	EN 60950, European Safety (CE Mark) UL 1950 3rd Edition, U.S. Safety FCC Part 15, Sub-part J, Class A
Immunity	EN 50082-1: 1997
Emissions & Immunity	EN 55022 (Europe)

HARDWARE SPECIFICATIONS**Physical**

<i>Height</i>	1.75 in. (4.45 cm)
<i>Width</i>	19 in. (48.26 cm)
<i>Depth</i>	10 in. (25.4 cm)

Input

<i>Power</i>	-42 to -56 VDC 100 to 240 VAC, 50 to 60 Hz
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Environmental

<i>Temperature</i>	32° to 122° F (0° to 50° C)
<i>Humidity</i>	Up to 95% non-condensing
<i>Altitude</i>	Up to 10,000 ft. (3,048 m)

SYSTEM CAPACITY

Aggregate Cards	One per chassis
Interfaces	Up to four E1 or T1 trunks (or eight full duplex trunks) per chassis
Channels	Up to 31 per trunk; up to 248 per chassis
SS7/C7 Signaling Links	Four per chassis

INTERFACE SPECIFICATIONS

Framing	E1: G.732 or G.704 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.704, G.732, G.823 T1: ATT Pub. 62411