

SignalPath™ 201

SP201 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.



To order, Call 1-847-252-7100

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)
- ◆ 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 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 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 conversion
- ◆ 19 in. (48.26 cm) rack-mountable chassis

TECHNICAL SPECIFICATIONS

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 |
| 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) UL 1950 3rd Edition, U.S. Safety |
| Emissions | EN 55022, Class A FCC Part 15, Sub-part B, Class A |
| Immunity | EN55024: 1998 |
| Belcore Emissions & Immunity | GR-1089-CORE, Section 3 |

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 |
|--------------|---|

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 | Four per chassis |
| Signaling Links | |

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 |



Specifications are subject to change without notice. Other protocols or variants may be under development or could be considered for development based on customer requirements.