

Intraplex® CrossConnect Systems and Servers

T1/E1 CrossConnect Routing/Switching System

The Intraplex® CrossConnect system and CrossConnect server provide routing and switching capabilities for up to six T1 or E1 circuits, as well as automatic backup switching for STL links. The CrossConnect Server also accepts a wide variety of plug-in modules for integrated drop and insert of voice, data and program audio. Station operators can dynamically route services among multiple studio and transmitter locations, sharing programming and administrative resources among geographically separated facilities. CrossConnect Servers reduce transport link requirements, providing cost savings in both point-to-point and point-to-multi-point networks.

Broadcasters can mix and match program audio, voice and data feeds among multiple studio and transmitter locations and save on programming, talent and administrative costs by sharing transmission resources among stations.

Intraplex CrossConnect Systems and Servers can help ensure the most efficient use of the available transmission capacity and reduce costs. CrossConnect Systems and Servers give users complete flexibility to combine, interconnect, and multicast traffic among up to six T1 or E1 lines.

Product Features

- Interface with as many as six T1 or E1 lines
- Cross Connect Servers accept channel cards, providing local voice, data and audio interfaces for up to 48 time slots (T1) or 62 time slots (E1)



- Programmable automatic T1/E1 line protection switching for studio-to-transmitter (STL) links
- Individual time slot routing among all T1/E1 ports
- Automatic protection switching on any of the T1/E1 ports
- Eight time-slot grooming maps
- Multicast encoded audio feeds from a studio to multiple transmitter sites
- IntraGuide® software and optional SCM-IP SNMP proxy provide flexible, intuitive network configuration and management options

Product Details

Intraplex CrossConnect Systems and Servers

DCS-9500

6 Port T1 CrossConnect System, 1RU package, protection switching and multicasting capability.

DCS-9530

6 Port T1 CrossConnect System, 3RU package, protection switching and multicasting capability with future migration to DCS-9560.

DCS-9560

6 Port T1 CrossConnect Server, 3RU package, up to 24 DS0 terminations (capacity of one T1 line), includes the functions of the DCS-9500, accepts Intraplex plug-in channel modules for integrated voice, data, video and program audio applications.

DCS-9500E

6 Port E1 CrossConnect System, 1RU package, protection switching and multicasting capability.

DCS-9530E

6 Port E1 CrossConnect System, 1RU package, protection switching and multicasting capability with future migration to DCS-9560E.

DCS-9560E

6 Port E1 CrossConnect Server, 3RU package, up to 31 DS0 terminations (capacity of one E1 line), includes the functions of the DCS-9500E, accepts Intraplex plug-in channel modules for integrated voice, data, video and program audio applications.

DCS-9565E

6 Port E1 CrossConnect Server, 3RU package, up to 62 DS0 terminations, includes the functions of the DCS-9500E, accepts Intraplex plug-in channel modules for integrated voice, data, video and program audio applications.



Specifications

Specifications and designs are subject to change without notice

T1 Inputs/Outputs	Electrical Interface 6 DSX-1 interface ports per ANSI T1.102-1993
Output Timing	Internal, 1.544 Mb/s ±30 PPM External, RS-422 input Any of the 6 T1 inputs
Frame Formats	Extended superframe (ESF) D4/superframe (SF)
Line Codes	Bipolar with 8 zero substitution (B8ZS) Alternate mark inversion (AMI)
Line Build Out (LBO)	Up to 655 ft from standard DSX or CSU LBO 0, -7.5. or -15 dB
Connector	100 ohms RJ-48C
E1 Inputs/Outputs	
Electrical Interface	6 E1 interface ports per ITU-T G.703, G.704, G.706
Output Timing	Internal, 2.048 Mb/s 30 ppm External, RS-422 input Any of the 6 E1 inputs
Frame Formats	Channel associated signaling (CAS) Common channel signaling (CCS)
Line Codes	High-density bipolar 3 (HDB3) Alternate mark inversion (AMI)
Input Connector	75 ohms BNC (standard) 120 ohms DB-15 (optional)
Throughput Delay	1 to 3 T1/E1 frames 125 to 375 µS 2 frames average 250 µS
DS0 Interfaces (Crossconnect Server)	
Optional 4 W VF, 2 W VF, sync, async and variable rate data, secure voice and high fidelity audio interfaces using plug-in channel modules	
Time Slot Mapping	
Maps Supported	8:2 normal service maps and 6 alternate service maps configurable to switch based on T1 or E1 port failure (BER, LOS, AIS, LOF), external contact closure inputs or ASCII command
Switch Time	Protection switching delay programmable down to 1 ms
Status and Diagnostics	
LED Indicators	Shelf power, normal, alert, alarm DCS port status, alert, alarm
Contact Closures	Shelf alert, Alarm DCS alert, alarm, active map indicators
Diagnostics	T1, E1 and timeslot loopback
Remote Access and Control	
- Command line user interface using ISiCL command language via RS-232C & RS-485 asynchronous connection.	
- Compatible with IntraGuide PC-based graphical user interface (GUI) control software for configuration, status verification and off-line copying and editing of cross-connect maps.	
- SNMP management interface available using optional SCMIP SNMP proxy module.	



Physical and Environmental	
Power Requirements	3RU: Universal AC standard Optional -48 VDC or ±24 VDC Optional hot-standby redundant supply 1RU: Universal AC
Nominal Power Consumption	DCS-9500/9530: 5 W DCS-9560: 8 W DCS-9565: 11 W
Temperature	0° to 50° C operating
Humidity	0% to 90% non-condensing
Dimensions	(H x W x D) 3RU: 5.25 x 19 x 14.5 in. (13.4 x 48.3 x 37 cm) EIA rack mountable 1RU: 1.75 x 19 x 14.5 19 in. (4.4 x 48.3 x 37 cm) EIA rack mountable
Regulatory Compliance	CE Approved UL 1950 FCC Part 15, FCC Part 68 CS-03

