

Tellabs® 5320L/S Digital Cross-Connect System

- Overview:** The Tellabs 5320L/S digital cross-connect enables wireless and wireline carriers to optimize their network efficiency by performing DS-0-level bandwidth management. The Tellabs 5320L/S digital cross-connect is a carrier-class, highly scalable DS-0-grooming solution that enables carriers to maximize the fill rate on their T-1 facilities and remotely manage their network, resulting in dramatic reductions in capital and operating costs.

The Tellabs 5320L/S digital cross-connect provides carriers the opportunity to modernize their network by migrating critical traffic from legacy narrowband DCS systems, resulting in tangible operational and capital savings.

- Features and Benefits:**

Facilitate New Service Deployment

The Tellabs 5320L/S digital cross-connect (DCS) is the most feature-rich narrowband DCS in the market today.

In wireless networks, it enables pre-switch T-1 consolidation as well as support for new location-based services such as E911 signaling channel monitoring, navigational services, and vehicle tracking.

In wireline networks, it performs bandwidth management for fractional T-1 and private line T-1 services, A-law to μ -law conversion for gateway applications, and facilitates delivery of specialized services such as voice conferencing, ATM banking, and lottery networks.

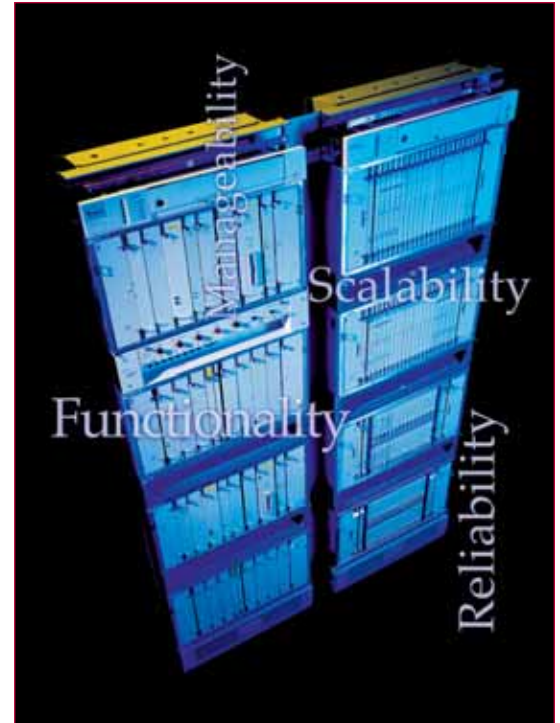
Realize Tremendous Capex Savings

The Tellabs 5320L/S DCS enables carriers to maximize the efficiency of their TDM-based networks by providing the key DS-0 groom and fill function. In wireless and wireline networks, this minimizes the cost associated with voice switch ports.

The Tellabs 5320L/S DCS's GR-303 Voice Circuit Concentration Feature supports a dynamic groom and fill function for CLEC and RBOC carriers, resulting in potential CapEx savings of up to 30 to 40 percent versus current modes of operation.

Optimize Resource Utilization

The Tellabs 5320L/S DCS remote administrative features enable centralized control of your network and minimize truck rolls:



- Complete Test Access support (Monitors, Splits, and Loops)
- NEND and FEND Facility Monitoring collection support
- System and module commanded diagnostics
- Remote Software Downloads via FTP for both Feature Packages and Patches

Modernize Your Network

The Tellabs 5320L/S DCS is a state of the art, carrier-class device that continues to realize meaningful investment into ongoing research and development.

The Tellabs 5320L/S digital cross-connect's industry unique DCS Cut feature enables carriers to gracefully and methodically migrate traffic from legacy narrowband DCS systems that are manufacturer discontinued or capped from future development. Legacy narrowband DCS system replacement (with or without the use of Tellabs expert Traffic Management Services) enables carriers to protect their reputation from costly service outages, eliminates tandem tie trunks, and reclaims valuable floorspace.

Best in Class Features & Functionality

- Industry leading port density
- Carrier class reliability due to robust, redundant architecture and integrated system defensiveness (i.e., no single points of failure in product design)
- Investment protection due to Tellabs' commitment to ongoing product investment
- Support for in-service, hitless matrix expansions from the smallest to the largest system

■ Specifications:

Physical Interface Specifications

- DS-1 Interface
 - 8 ports per module
 - 224 ports per shelf / 896 ports per rack
 - 1:7 module protection
 - Jitter performance: Per TR-TSY-000499
- STS-1(EC-1) Interface
 - 1 port per module, BNC connectors
 - 16 ports per shelf / 64 ports per rack
 - 1:8 module protection
 - VT1.5 format support: both asynchronous and byte-synchronous mappings
 - Supports 56kbps, 64kbps, intact T-1, and intact VT1.5 cross-connections
 - Jitter performance: per GR-253-CORE
- DS-3 / G.747 DS-3 Interface
 - 1 port per module, BNC connectors
 - 16 ports per shelf / 64 ports per rack
 - 1:8 module protection
 - DS-3 formats: M13, G.747 for simultaneous transport of T-1 and E-1 payloads per each T-2
 - Supports 56kbps, 64kbps, intact T-1, and intact E-1 cross-connections
 - Integrated signaling conversion in G.747 card
 - Jitter performance: per GR-499-CORE
- E-1 Interface
 - 21 ports per module, 64-pin TELCO connector
 - 252 ports per shelf / 1008 ports per rack
 - 1:6 module protection
 - E-1 format: CCS, CAS, including Clear CAS
 - Integrated signaling conversion within card
 - Supports 64 kbps and intact E-1 cross-connections
 - Jitter performance: per ITU-T G.823
- Universal Services Module
 - 21 DS-1 equivalents per module
 - Simultaneous support for MJU, SRDM, Voice Conferencing or Data Bridging on card
 - 1:1 module protection
 - Supports sub-rate test access

sizes (from 1792 DS-1 eqs. through 7168 DS-1 eqs.)

- All services and features supported from subrates to high speed DS-3 and STS1-E
 - Broadcasting
 - Intact T-1/E-1 cross-connects
 - Voice conferencing/data bridging
 - nx DS-0 cross-connects

- MJU anti-streaming support
- Integrated error correction on MJU / SRDM
- Alternate host feature on conference bridges
- Circuit Concentration Module
 - RDT functionality per Telcordia GR-303
 - 1:8 module protection
 - CRV addressing from 1-2048
 - Concentration ratios from 1:1 to 16:1
 - Up to 16 Interface Groups per system
 - Interoperability with Lucent 5E and Nortel DMS 500 switches

Available System Matrix Sizes

- Tellabs 5320LS – 1792 DS-1 equivalents
- Tellabs 5320L half-capacity - 3584 DS-1 equivalents
- Tellabs 5320L full-capacity – 7168 DS-1 equivalents

Note: all three system sizes run the same software

Facility Monitoring Specifications

- ANSI T1.403 (both NEND and FEND)
- ANSI T1.231
- GR-820
- ITU-T G.826
- Performance Monitoring/Alarm Suspension (PASUSP) also supported by system

DC Power Requirements

- Dual independent feeds
- Input voltage: -48 VDC
- Operating range: -41.75 to -60.0 VDC

Synchronization

- Internal stratum 3E clock
- Primary and redundant BITS references, either terminated or bridged connections, T-1, DDS Composite Clock, E1, and LORANC signals

Physical Specifications

- Shelf Size: 14" h x 25.74" w x 12" d (4 shelves supported per 7-ft rack)
- Mounting options: 23" rack

Environmental

- Operating temperature: 5 to +40° C
- Storage temperature: -40 to +70° C
- System is purely convection cooled

OS Interfaces and Alarms

- PDS Snyder-based CLI
- OS interface: up to eight Asynchronous RS-232 craft connections, two 10-Base-T LAN connections each supporting up to 16 telnet sessions, two synchronous X.25 ports each supporting up to 16 Virtual Circuits (either SVCs or PVCs)
- Front panel alarm and status LEDs
- External alarms: support for both visible and audible alarms with up to 2 (redundant) outputs for each type

Agency Certifications

- NEBS: GR-63-CORE, SR-3850 and SR-332, GR-1089-CORE (Level 3)
- Safety: UL 60950-1, CSA C22.2 No. 950-95
- EMI: FCC Part 15, Class A

Telcordia OSMINE Support

- TIRKS
- Transport
- NMA



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