Access Navigator/DCS Service Manager

Release 1.8

Part Number: 930-0202

Key Benefits :

- Provides up to 32 DS1s (768 DS0s) per system
- Installs in small 1.5 RU footprint
- Supports low 65 W power consumption
- Offers carrier-quality redundant CPU logic, BITS clocking, and power inputs
- Compatible with Lucent, Nortel, and Siemens Class 5 switches (supports CLASS℠ features)
- Allows enhanced alarm capabilities, remote management options, performance statistics, T1 BERT testing
- Enables pass-through management of remote Access Bank® II and Adit® 600

Optimize T1 access facilities and maximize switching capacity

In today's competitive telecommunications environment, extending capital budgets and lowering operating costs are the keys to survival. Service providers can enhance their profitability by reducing recurring transport costs and making optimal use of their existing equipment infrastructure. Increasingly, they are meeting these objectives using the Access Navigator®/DCS from Carrier Access.

The Access Navigator is a cost-effective 1/0 Digital Cross-connect System (DCS) for grooming and concentrating voice and data traffic. Because of its small footprint and low power requirements, the Access Navigator can be used in applications where traditional large and expensive DCS platforms would be impractical. This versatility opens up a wide range of applications that can benefit from cross-connect functionality – from the network core to the network edge, and into the customer premises.

The Access Navigator can help service providers optimize their existing architectures and expand revenue-generating opportunities, including:

- Reduction of recurring T1 backhaul expenses (remote to central office)
- T1 1/0 grooming for cell site daisy-chaining (wireless)
- Class 5 switch port optimization (central office)
- DCS augmentation or replacement (central office)
- DLC T1/fractional T1 offload (remote)
- Maximized router port utilization (network)
- Cost and rack space constrained 1/0 cross-connect applications (collocations, POPs, CEVs, etc.)

Technical Specifications for the Access Navigator/DCS Service Manager

Digital Cross-connect System (DCS) Service Manager Components:

- 8 Quad T1 framer cards (4 to 32 T1s per system)
- 2 redundant controller cards
- DCS software preloaded into flash memory
- Chassis with redundant power inputs

DS1 Network/Tributary Interface:

- Quad DS1s per line card, hot-swappable
- Line rate: 1.544 Mbps ±32 ppm
- Line code: B8ZS and AMI
- Framing: D4 (SF) and ESF
- DS1 receive sensitivity: -28 dBdsx to +3 dBdsx
- Line build-outs: DSX-1 (0-550 ft) CSU (0 dB, -7.5 dB, -15 dB, -22.5 dB)
- ANSI T1.403 Sec 6 & 7 (jitter, pulse mask transmission, receive sensitivity, framing formats) and T1.107a
- Built-in CSU with loopback and BERT for DS1 testing
- AT&T 62411 (Stratum 4 Enhanced T1 CPE)

Clocking:

- Primary and secondary DS1 sources
- External BITS clock
- Internal Stratum 4 clock
- Automatic system clock switching and holdover

Management:

- RS-232/V.24 async craft port
- 10Base-T Ethernet port
- SNMP (RFC 1406 Telcordia™ standard DS1 MIBS)
- CLI from both local async port and remote Telnet sessions
- Software download via TFTP or XModem

Alarms:

- Critical, major and minor alarm levels
- DS1 alarms for LOS, LOF, Receive AIS, and Receive RAI
- Output signal: relay contact closures and LED indication
- Alarm inputs from dry contact closures

Power:

- Dual -48 VDC power inputs: -42 to -60 VDC @ 1.5 A
- Power dissipation: 65 W fully equipped
- Solid-state (fuseless) overvoltage and overcurrent protection

Regulatory Approvals:

- USA
  - UL 1950, 3rd Edition
  - FCC Part 15, Class A
  - FCC Part 68
  - NEBS Level-3 for Type 2 and 4 equipment
    - GR-63-CORE
    - GR-1089-CORE
- Canada
  - CSA C22.2 No. 60950-00
  - ICES-003, Class A
  - CS-03

Physical:

- 2.63 in (H) x 17 in (W) x 13.5 in (D)
- 6.68 cm (H) x 43.18 cm (W) x 34.29 cm (D)
- Weight: 10 lb (4.54 kg)
- Mounts in both 19-in (48.26 cm) and 23-in (58.42 cm) racks

Environment:

- Operating temperature: 23 °F to 113 °F (-5 °C to 45 °C)
- Solid-state over-temperature protection
- Humidity: 0% to 95% (non-condensing)
- Altitude: 0 to 10,000 ft (0 to 3,048 m)

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