

CTDI Products

Features & Capabilities

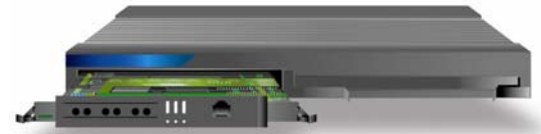
- TDM, Frame Relay
- Three T1 Network ports
- Automatic Protection Switching
- Mini-DACS - Assign DS0s to any interface independent of time slots
- Redundant power with circuit breakers
- Compact design allows two units in one rack
- 10/100 Base-T for management and/or IP routing
- SNMP Management with email notification
- WANSight™ – Web-server interface for remote access with password lockout
- ServiceAware™ technology for maximizing available WAN bandwidth
- Service Level Agreement (SLA) verification
- Resource Management up to Layer 3
- Real-time measurement of bandwidth utilization

WANSuite 7105 T1/FT1 CSU/DSU

Intelligent and Cost Effective

The WANSuite® series consists of intelligent WAN access devices, ranging from low-cost CSU/DSUs to fully Integrated Access Devices (IAD).

The WANSuite 7105 is a highly intelligent, software-based T1/F1 CSU/DSU with a network port, an asynchronous supervisory port; and a 10/100 Base-T Ethernet interface. The WANSuite 7105 is a stand-alone or rack mountable triple T1 integrated access device (IAD). Based on the Motorola MPC860 processor which runs at 40 MHz, the WANSuite 7105 delivers up to 50 MIPS of CPU power, providing increased performance at a significant cost savings.



Supports Convergence and Migration to Emerging Network Services

The WANSuite platform provides a migration path that protects customers' investments as they transition to emerging network services. Boasting triple T1 network ports, two data ports, and an Ethernet port, the WANSuite 7105 meets various networking needs. All WANSuite 7105 network ports are lightning protected, software configurable as a DSX or T1 port, and can run TDM or packet data.

The Solution for Wireless Providers

The 7105 can be used for private leased line or Frame Relay networks, T1 or Fractional T1 connections. It is a shelf-based card that fits into any AS2000 chassis. Ideal for wireless providers implementing a network-based e991 Phase 2 solution or planning wireless network overlay, each unit offers one network port, two drop and insert ports, two serial data ports, and one Ethernet port. The card's built-in mini-DACS simplifies installation whether running in a daisy-chain configuration or simply splitting bandwidth between wireless equipment. The 1RU footprint allows for base station integration even in the tightest of spaces. The WANSuite 7105 can groom data from any of its interfaces onto a single T1 via its built-in Mini-DACS. Integrated Automatic Protection Switching (APS) provides immediate facility back-up to protect the most critical network locations and can be configured for use with a single service provider or as a back-up using an alternate carrier. With the WANSuite 7105 utilization can also be measured on each interface to ensure the most effective use of bandwidth. Bandwidth allocation/migration can be remotely controlled via an easy-to-use Web browser interface or an SNMP MIB browser.

A Future Proof Investment

The WANSuite 7105 provides the flexibility needed to support TDM applications today and packet needs of tomorrow. It gathers network statistics for Layer 1, Layer 2, and Layer 3, auto discovers DLCIs, offers LMI sourcing to maintain the frame circuit in event of equipment failure, and provides the statistics needed to enforce Service Level Agreements (SLAs). It also supports SNMPv.2 and remote management with a simple-to-use Web browser interface.

Simplified Management and Reporting

The WANSuite platform offers simplified, cost effective, end-to-end network management capabilities and application readiness. The WANSuite platform provides service providers and enterprise customers the ability to verify SLAs, isolate performance problems, determine appropriate bandwidth needs, and monitor network trends to aid in future capacity planning. Also, the WANSuite 7105 provides visibility into the network via its Web-based application and supports "Virtual Truck Rolls," allowing network managers to troubleshoot their networks remotely and reduce costly on-site visits.



CTDI Products

WANsuite 7105 Technical Specifications

Serial Interface

- DTE Port: Two software-selectable V.35, EIA-530, or RS-232
- Data Rate: Nx56/64, where N = 1 to 24
- Sync: 1200, 2400, 4800, 9600, 19200, 56000, 64000 bps; Async: 300, 600, 1200, 2400, 4800 9600, 19200, 38400, 57600, 115200 bps
- Bundling: Contiguous, Alternating, and Random
- Protocol: TDM, Frame Relay
- Connection: DB-25 female
- Ethernet: 10/100 Base-T auto-sensing for IP routing and/or management
- Protocol: TCP/IP, RIP1, RIP2, OSPF

Network Interface (Three Network Ports)

- Line Rate: 1.544 Mbps (± 50 bps)
- Data Rate: Nx56/64 kbps to 1.536 Mbps, where N=1 to 24 DS0s
- Line Code: AMI or B8ZS
- Line Framing: D4 or ESF
- Protocol: TDM, Frame Relay
- Connection: RJ-48C, 100 ohms ± 5%
- Input Level: DS1, +1 to -27 dB (ALBO on Net2 and Net3)
- Output Signal: 3.0 V
- Mode: Long-haul (T1), short-haul (DSX)
- DSX-1 Level: 0-110, 111-220, 221-330, 331-440, 441- 550, 551-660, >661 ft
- Line Build Out: 0, -7.5, -15, -22.5 dB
- Line Protection: 1000 V protection, fused input and output per GR 1089
- Jitter Control: per TR 624111 and T1.403

Management Interface

- Supervisory Connection: DB-9 female, VT100, Async PPP, PAP, CHAP, Async RS-232
- Data Rate: 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200 bps
- SNMP Connection: In-band via Ethernet or Network ports; using Web-browser or Telnet; out-of-band via Supervisory port; dial-in via external modem

Diagnostics

- Performance: Built-in reports sampled every second, accumulated in 15-min increments with up to thirty 24-hr summaries
- Email notification
- Originate Ping
- Network Loops: Line, Payload, or Maintenance
- DTE Port Loops: V.54 and Local
- BERT: Marks, QRSS, 511, 2047, 215, and Spaces
- Test Jacks: Network In, Equipment Out, Equipment Monitor
- Equipment In, Network Out, Network Monitor

Timing

- Network 1, Network 2, Network 3, Internal, Serial 1, Serial 2

Mechanical

- Mounting: Rack-mount in AS2000 Shelf
- Dimensions: 8.2 in. (20.83 cm) W, 0.94 in. (2.39 cm) H, 9.94 in. (25.25 cm) D
- Weight: 15.2 oz (430.91 g)
- Shelf Option: Dual-line, Quint-line, Multi-line (AS2000 DLS, AS2000 QLS and AS2000 MLS)

Frame Relay Statistics Collected in 96 15-Minute Intervals

- Tx/Rx frames and octets
- Tx/Rx management frames and octets
- Rx frames with FECN, BECN
- Rx invalid frames
- Tx/Rx status inquiry frames
- Tx/Rx status response frames
- Rx invalid LMI frames
- Peak/Average throughput
- Rx frames with DE bit set
- Tx excess CIR and Be

ServiceAware™ Technology

- Layer 3 Statistics and Up: IP, PPP, TCP, UDP, FTP, TFTP, SNMP, RIP1, RIP2, BootP, SMTP, HTTP, ICMP, OSPF, L2TP, H.323
- Peak and Average Throughput on Up to 10 Users Definable
- Filters: DLCI, IP address, or IP port number
- Top talkers

Verify Service Level Agreements (FRF.13)

- Frame delivery ratio
- Data delivery ratio
- Round trip delay
- Service availability in seconds

Power

- WANsuite 7105: refer to AS2000 DLS, AS2000 MLS and AS2000 QLS

Environmental

- Operating Temperature: 0 to 50 °C (32 to 122 °F)
- Storage Temperature: -20 to 65 °C (-4 to 149 °F)
- Humidity: 95% maximum, non-condensing

Regulatory - Compliance & Agency Approval

- This product complies with or has obtained Regulatory Agency approval at least against the following standards:
 - EMC - Emission - Class A: FCC Part 15
 - Safety: UL 1950 3rd Edition, CSA C22.2 No 950:95
 - Telecom: FCC Part 68, IC CS-03 Issue 8

Warranty and Support

- One (1) year warranty

