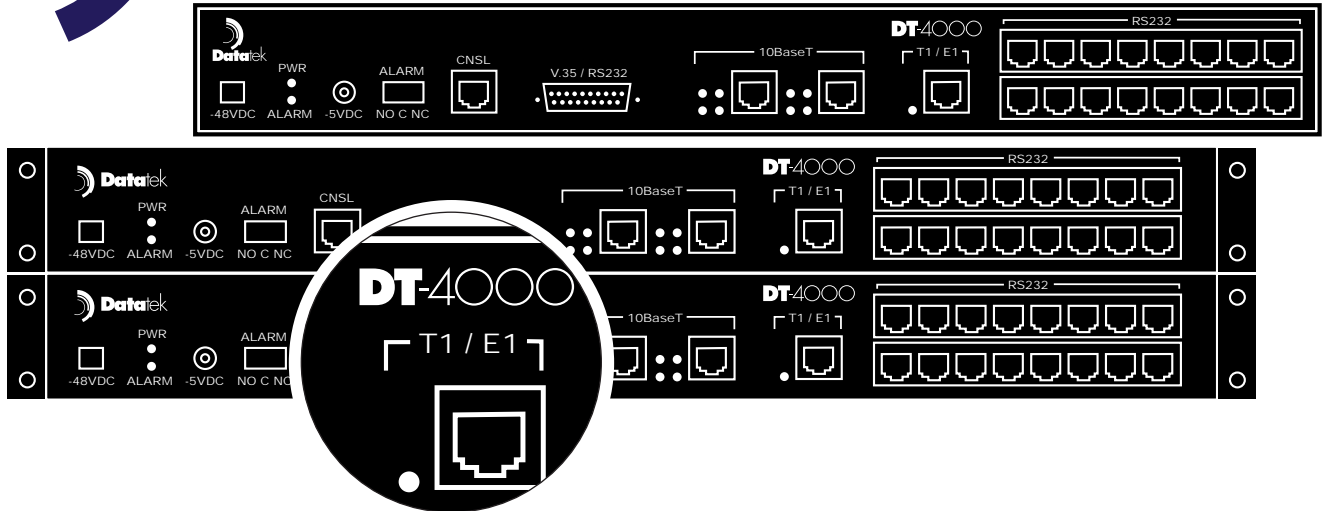


DT-4000

Multi-Access Device Existing in Both BNS and IP Infrastructures Simultaneously



As you transition to a new network infrastructure how can you gain better control over the many legacy network elements that may be incompatible with this new infrastructure? Application and network redesign, interoperability testing and configuration of new network elements will be interruptive and costly. A part of your solution is built into the DT-4000.

The DT-4000 is a multi-access product that can exist in both a BNS-2000/BNS-2000 VCS infrastructure and an IP infrastructure simultaneously. It allows for an incremental transition from your existing network to an IP-based backbone. Thereafter, the DT-4000 acts independently of your BNS-2000/BNS-2000 VCS network.

The DT-4000 approach enables you to have a lower cost and low impact transition as your networks evolve.

What is a DT-4000?

The DT-4000 is a multi-access device that can be used as a drop-in replacement for the SAM in any BNS-2000/BNS-2000 VCS network without any IP interconnection. It has 16 async/sync ports with speeds up to 115 Kbps synchronous and 56 Kbps asynchronous. It has a built in IP-GATE and can be used to securely transport IP traffic to a remote LAN off the BNS-2000/BNS-2000 VCS network. The built in IP-DSU function can also be used for IP network access without any BNS-2000/BNS-2000 VCS network connection.

Built-In Flexibility

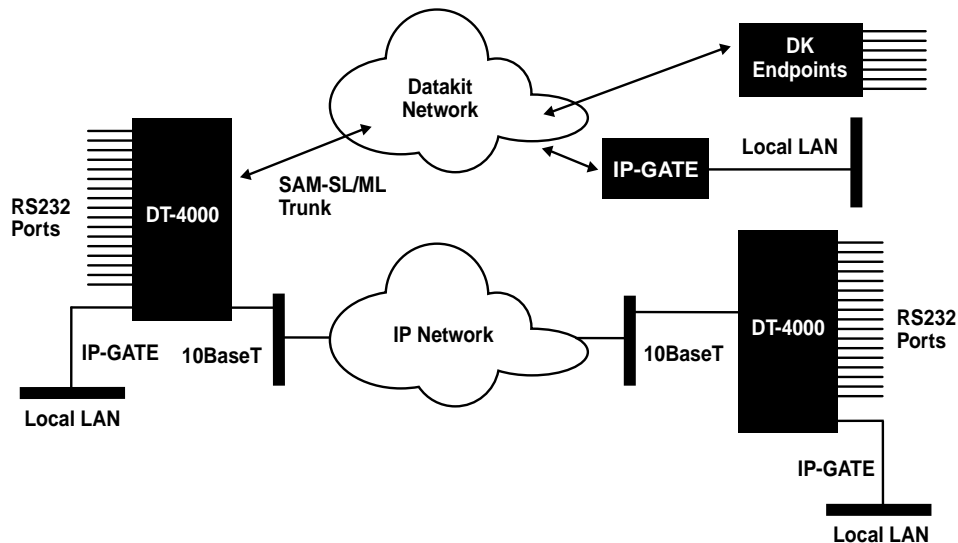
The compact DT-4000 is available in both stand-alone and rack-mount versions to fit your space and configuration requirements. It is available as either a 115V/220V AC or 48V DC powered unit.

Field Software Upgrade

Field software updates, which can occur from a remote location, take place while the DT-4000 is in service and transporting data. As new features and enhancements come out, you can upgrade the DT-4000 software just by upgrading to a new software release using an industry standard Telnet application or serial RS232-C connection to the DT-4000.

DT-4000

The following diagram depicts how each virtual path on the IP Gateway may be configured independently of each other.



Interface Support

Interface	Qty	Usage
10BaseT	2	The first 10BaseT port is a trunk port that is used for interfacing with an IP-based network. It simultaneously supports IP-DSU style DDS BNS-2000/BNS-2000 VCS trunks and TCP/IP peer level protocols. The second 10BaseT port is known as the IP-GATE port and is used exclusively for that purpose.
Serial	1	The DB25, RS530 serial port may be software configured as a V.35 DTE or RS232-C DTE. It is used to interface to BNS-2000/BNS-2000 VCS SAMSL/SAMML style trunks, Frame Relay WANs or the BNS-2000/BNS-2000 VCS Universal Trunk.
T1/E1	1	This port is software configured for T1 or E1 rates
RS-232	16	Support of both asynchronous and synchronous protocols. Asynchronous speeds to 115 Kbps. Synchronous speeds to 56 Kbps with NRZ & NRZI support. The RJ45 connectors require standard BNS-2000/BNS-2000 VCS SAM64/504 adapters.
Console	1	The Console is used for initial configuration and for StarKeeper® II NMS monitoring on an on-going basis. It is configured as 19200 bps, 8 bits, and no parity.

DT-4000 Remote Access and Concentration

The above configuration is one option in many. However, it does depict some of the interesting interface capabilities of the DT-4000.

The DT-4000 on the left communicates with the BNS-2000/BNS-2000 VCS network via a serial SAMSL/SAMML trunk. It also communicates with IP network end-points via a 10BaseT interface. It can also communicate with any TCP based IP end-point.

Note: Both the IP-DSU trunking and standard TCP communications are simultaneously taking place on the 10BaseT interface.

Other protocols on the 10BaseT such, as SNMP, Telnet, ARP, etc. are not shown for simplicity of the diagram.

Smart Network Management

The DT-4000 is manageable via StarKeeper® II NMS, SNMP manager and local/remote console.

