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- Ethernet 10 Base-T port for network connections or management
- Multi-Protocol support for migration to higher speed services
- SNMP manageable
- Extensive call detail records for billing and diagnostics
- Hot swappable modules for ease of maintenance
- Protocols including X.42 with Spoofing, SCADA, Frame Relay, X.25, TCP/IP and XOT (RFC 1613)
- Remote line monitor with protocol decode

## **IP Connectivity for Legacy Protocols**

The diverse communication needs of companies today requires a technology that can effectively integrate multiple applications running on a variety of platforms, at various speeds and protocols in one consolidated solution. Providing a migration path to the data convergence of IP based networks is also of strategic importance.

Designed to solve this problem, the PACIII TURBO provides a modular, scalable communications platform that can operate simultaneously as a multi-protocol concentrator, PAD, FRAD and switch. Network connectivity is provided over IP, Frame Relay or X.25 public, private or hybrid networks, at speeds up to 2 Mbps for serial connections and 10 Mbps Ethernet for IP connections. Depending upon network requirements the TURBO products can be configured with integrated ISDN, wireless modem, analog modem, or CSU/DSU modules.

The PAC III TURBO addresses Carrier and Corporate needs at branch offices with high port capacity and demanding performance requirements. It can be used at regional sites for concentration and provides optimal performance in a star topology where several remote branches are concentrated into a central office.

The subscriber ports can be configured with a combination of Async, high-speed and low-speed serial port modules. A fully configured chassis provides a maximum capacity of 252; 240 Telex ports and 12 Low speed ports, or 72 Low-speed ports (300 –38.4 Kbps Async/300 to 128 Kbps Sync), or 36 High-speed ports (512 Kbps). Chassis capacity is dependent on the mix of CPU cards (Telex/Low-speed/High-speed). Protocol support can be mixed and matched, drawing from an extensive library of legacy protocols including point of sale, SNA/SDLC/Bisync, Telemetry, SCADA, Lottery X.42, and many others.. Call detail records can be enabled for certain protocol types and forwarded to remote sites through the network connection or the Ethernet interface.

Local and/or remote management is performed through a logical supervisory port in a menu driven, an external management system, and SNMP. Traps and alarms provide the network operator notice of real time problems and events in advance of the users.

The PACIII TURBO has optional power redundancy and is designed so that failure of a single module does not interrupt the operation of other modules, providing assurance of continued operation.



Communication solutions from

**NSGDatacom** 

extend. evolve. innovate.

# **\_TURBO** PAC III TURBO

# **Product Features**

### **IP** Features

- 10BaseT TCP/IP Ethernet interface
- RFC1490 IP over Frame Relay
- RFC1613 X.25 over IP
- IP routing
  - RIP-Version 1
  - Static addressing
  - X.121/Frame Relay/PPP to IP
  - address mapping
- Telnet
  - Telnet client
  - Telnet server with port mapping to any asynchronous port or broadcast service
- TFTP save/restore of NVRAM configuration database and simultaneous download of OS to each line card
- PPP Asynchronous dial-in
  - PAP and CHAP security
- SNMP
  - Traps
  - Get/Set functions and statistics for all ports and protocols using enterprise MIB
- Statistics
  - TCP/IP/ARP
- Logging

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- TCP logging of primary and alternate destination
- Async and X.25 logging
- SNMP activity logging •
- Remote diagnostics
  - Live data monitor for any port
  - Level 2/level 3 decode
- Hex or character display

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## **Protocol Support**

- X.25 Switching
- X.25 Broadcast
- Multi-drop X.25 • X.3/X.28/X.29
- SNA/SDLC and QLLC
- SyPAD (synchronous protocol transparent)
- Frame Relay (FRAD)
- RFC1490
- X.25, IP & Transparent over RFC1490
- SCADA
- NEC
- IPARS
- NCR 270 TPAD
- Olivetti 349 BI
- · Bisynchronous 3270 and 2780/3780
- Burroughs Poll Select
- HDLC LAPB PAD
- X.32 /V.25 bis
- X.42
- X.75
- TCP/IP
- SLIP/PPP
- SNMP

## **Special Features**

- Broadcast capability
- Billing facilities
- Call forward table and user MMI (machine interface)
- · Asynchronous clocking of synchronous protocols. Use inexpensive Async modems in X.25 and multidrop X.25 applications
- Data Line monitor
- CUG (Closed User Group)
- ALS (Alarms, Logging, Statistics)
- Menu Driven help Text

# NSGDatacom

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## Line Module

• Telex CPU-24 ports per module

### Low Speed CPU

Dial-up management

• 12 ports per module-speeds 300 Bps—38.4 Kbps Async to 128 Kbps Sync, 115.2 Kbps Async, PPP

#### High Speed

- 6 ports per module—speeds 1200 to 512Kbps
- T1/E1 data rate supported on up to two ports
- Common Features
  - V.24/RSO232 (default)
  - Sync/Async operation
  - V.35/X.21 option
  - Max. 6 modules per unit
  - DB25 male connectors
  - 1 X RJ45 10BaseT Ethernet TCP/IP port (on system card)

### General

- · Bus: High bandwidth low latency midplane
- Main memory: DRAM, NVRAM, FLASH
- Size:
  - 19" Rack Mountable
  - 10.5" H x 19" W x 16" D
- Power:
  - · Single or dual redundant
  - 90-260V AC, 47-63Hz or 48V DC
  - 2 amp fuse
- 150 Watts for fully loaded system
- Heat Output:
  - 750 BTU/hr. fully loaded system

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Legacy Terminal Support Frame Relay PAC III PicoTUBBOs Ethernet IP X 42 X 25 or X 75 IP X.25 Etherne Legacy Host IP-based Management