

# Passport 4120

## Flexible, cost-effective data access for enterprises

Passport 4120 is a flexible data networking platform that delivers a comprehensive range of LAN and legacy data services in the small branch. It was developed by Nortel (Northern Telecom) to optimise the consolidation of legacy and LAN data at the access layer of a Passport, DPN-100 or mixed network, and to extend the networking values of Passport and DPN-100 to the small branch. Passport 4120 provides:

- Capital and operational cost reduction
- An end-to-end LAN and legacy data access solution for Nortel networks
- Flexible, scaleable network expansion
- Support for a range of legacy/LAN protocols
- Integrated network management

Passport 4120 provides the enterprise with the key to a cost-effective, end-to-end networking solution for branch data requirements.

### Cost-Effective Networking

Passport 4120 reduces life-cycle costs through both facility and operational cost savings. It eliminates the need for separate

branch equipment to support multiple protocols, and eliminates multiple links by consolidating a broad variety of legacy and LAN data traffic types. Two high-speed ports support leased lines and frame relay links at speeds up to 512 Kbit/s, allowing the most cost-effective option for WAN traffic to be chosen. In addition, centralised network management reduces the requirement for costly, skilled personnel at branch sites. Eliminating the need for redundant equipment and extra facilities, the built-in dial back-up and bandwidth-on-demand (BWoD) features of the Passport 4120 also provide significant cost savings and engineering flexibility.

### An End-to-End Solution

Passport 4120 is ideal for small branch offices requiring LAN and legacy data services. It is an integral part of an end-to-end network solution, providing LAN and legacy services for a Passport network through support of the Passport Access Network Link (PANL) protocol, whilst also interworking with DPN-100 through the Universal Trunk Protocol (UTP). In Passport-only networks, no Call Services Resource Module (CSR) is required. Passport 4120 interworks with the Passport 6400, 7400 and 4400 series, DPN-100, MAS and third-party IP routers.

### Flexible and Scaleable

Designed to be compact and flexible, Passport 4120 offers two high-speed ports, four V.24-compatible ports operating at speeds up to 38.4 Kbit/s, and two expansion slots for additional interface modules. These optional modules include an Ethernet Module for IP routing, a Token Ring Module, a Euro-ISDN BRI Module and a 2-port Data Expansion Module for additional fanout.

The ISDN Module delivers one basic rate S/T interface for UTP or PANL netlinks, supporting dial backup. The ISDN Module also provides bandwidth-on-demand functionality in UTP networks, providing the branch with greater flexibility in meeting its needs.

### Rich Suite of Legacy/LAN Protocol Support

Protecting existing investments in end systems, Passport 4120 supports a rich suite of legacy data types. These include async (X.3/X.28/X.29), X.25 (including X.25 gateway), X.32, frame relay, SNA/SDLC, token ring SNA/T2.1 router, token ring intelligent source routing bridge (ISRB) and an ISRB frame relay gateway (IFRG). Passport 4120 also supports HTDS, BTDS, Point-to-Point Protocol (PPP), Point-Of-Sale (POS) protocols and RFC 1490 encapsulation of IP.

### Integrated Network Management

Passport 4120 is fully integrated with Nortel's network management systems. Access is local or remote, with graphical and command line interfaces. Network management functionality includes full event and alarm management, with real-time diagnostic tools. It also includes configuration management consisting of graphical, forms-based component provisioning, service data backup and restore, software distribution, and network-wide service checking. Real-time performance monitoring, traffic measurements and other performance data can be polled from Passport 4120.



PASSPORT

SHEET

PORT 4120

4120



# Passport 4120

## Specifications

### LAN Interconnection

- Ethernet with TCP/IP routing
- Token Ring ISRB
- ISRB Frame Relay Gateway (IFRG)

### ITU-T Protocol Support

- X.25, X.25 Gateway
- X.3/X.28/X.29
- X.32

### SNA Routing Services

- SDLC
- token ring SNA/ISRB with T2.1 router and broadcast server
- SNA over async (SOA)

### Other Protocols

- HDLC Transparent Data Service (HTDS)
- Bit-Transparent Data Service (BTDS)
- Point-to-Point Protocol (PPP)
- Point Of Sale (POS)

### Frame Relay

- fully standards-compliant UNI and NNI
- comprehensive congestion avoidance
- complete Quality of Service statistics
- RFC 1490 encapsulation of IP

### Physical Interfaces

- V.36 (interworking with V.35, X.21 or V.24 facilities)
- V.24/RS-232-D
- RJ-45 (Teladapt) operator port
- 4 or 16 Mbit/s Token Ring Module
- 2-port V.24 or X.21 Data Expansion Module
- Ethernet 10Base-T port or an IEEE 802.3 AUI ethernet LAN connection using Ethernet Version II framing
- Euro-ISDN BRI Module

### Network Connectivity

- multiple dedicated, dial-up and bandwidth-on-demand UTP network links
- multiple dedicated and dial-up PANL network links
- ISDN BRI
- frame relay
- X.25
- DPN Padlink (X.25 gateway netlink)

### Ports, Speeds, Trunks

- six built-in access ports (DTE or DCE selectable) including two WAN ports operating at up to 512 Kbit/s and four ports operating at up to 38.4 Kbit/s
- one RJ-45 (Teladapt) local operator port operating at 9.6 Kbit/s
- up to two additional plug-in modules supporting Ethernet, ISDN, 2 additional data ports, or token ring

### ITU-T Network-wide Features and Options (in DPN-100 networks)

- Including Closed User Groups, Network User Identification, hunt groups, call redirection, multiple class-of-service priorities, and access gateways

### Addressing Features and Options (in DPN-100 networks)

- Including X.121 and E.164 addressing, shared DNIC routing, PNIC routing and RPOA

### Access Service Features and Options

- Including SVCs, PVCs, direct calls, and fast select

### Network Management supported via Nortel Network Management Systems, including

- NMS Advisor, NMS Architect
- IBM NetView umbrella management via MagellanView
- APIs for integration into other applications
- alarms, statistics, accounting records, log data

### Packaging

- dimensions (h x w x d) 92 x 405 x 337 mm (3.75" x 16" x 13.3")
- desktop or rack mountable

### Environmental Specifications

- Temperature:  
Operating: 0 C to 40 C  
Storage: -40°C to 70°C
- Power supply voltage 100 to 250 VAC, 47 to 63 Hz (auto-ranging external power supply)

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Passport's quality system is certified to ISO 9001.

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