

# PortMaster 2i

## Livingston ISDN Dial-In/Dial-Out Communications Server Versatile and Secure Network Connectivity.



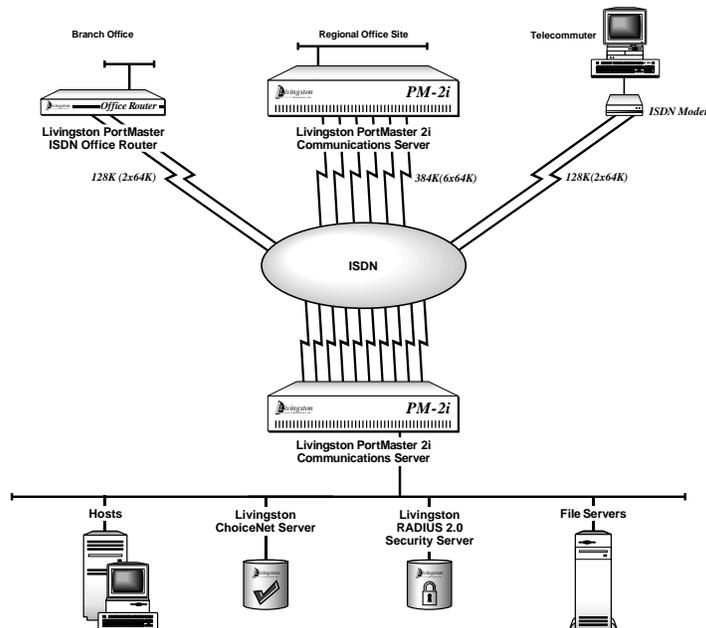
New ISDN communications server and routing hub

### Low-Cost ISDN Access for Small and Growing Companies

Now even small companies can provide high-speed dial-in access to network resources and the Internet to branch offices and employees working at home. The PortMaster™ 2i, a fixed-configuration ISDN (Integrated Services Digital Network) version of the popular PortMaster Communications Server, also serves as a multiprotocol (TCP/IP and Novell IPX) dial-up router for LAN-to-LAN or LAN-to-Internet communications. So now you can achieve speeds up to 640 Kbps using dial-up ISDN services. This high-speed access is particularly important for applications such as file transfers, database updates, or Web browsing.

The PortMaster 2i Communications Server comes with one asynchronous port (115.2K) and 5 BRI (basic rate interface) ports, each with two 64-Kbps B-channels for a total 10 64-Kbps data channels. Every channel can be used simultaneously to accept or place calls, or you can combine any number of channels, up to all 10, using Multilink PPP (MP) for higher bandwidth requirements. The PortMaster 2i runs Livingston's reliable ComOS™ operating system software, the most efficient remote access platform available. It also includes firewall security, Livingston-invented RADIUS (Remote Authentication Dial In User Service) protocol, and Livingston's ChoiceNet™ technology for centralized filter management. Configuration is easy with Livingston PMconsole™ graphical administration software.

Another  
piece of  
Livingston's  
total  
remote  
access  
solution.



**SPECIFICATIONS**

**GENERAL**

- Flash memory
- Local or network booting via tftp
- SNMP (MIB2)
- Reverse Telnet
- Ping utility
- Traceroute utility
- IPX SAP filtering
- Multi-line load balancing
- Domain name service or network information service
- Single or multiprotocol support selectable on each port
- Novell keep-alive spoofing
- PPP auto detect
- Session idle timers
- Clear channel TCP
- BOOTP

**SUPPORTED PROTOCOLS**

TCP, IP, IPX, SPX, SAP, RIP, SLIP, CSLIP, ICMP, UDP, ARP, telnet, rlogin, PPP (fully compliant: RFC 1331; RFC 1332; RFC 1334; RFC 1618; backward compatible: RFC 1171; RFC 1172), MP (RFC 1717), V.120

**ROUTING SUPPORT**

- Concurrent TCP/IP and Novell IPX routing
- On-demand dial-up routing
- Unnumbered WAN links for TCP/IP
- Static routes
- On-demand, continuous connection, and manual/scheduled dialing
- Auto detect dial-out authentication scripts
- Dynamic routing using RIP for IP and IPX
- RIP support on a per-interface basis
- Trusted router RIP filtering
- Support for IP host, subnet, and network routes
- Automatic packet queuing and redial
- Proxy ARP

**SECURITY**

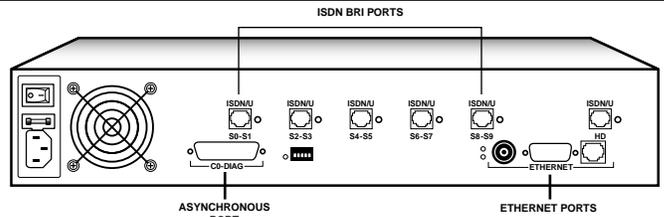
- Local username/password database
- Dialback
- PAP and CHAP authentication
- Inbound/outbound IP and IPX packet filters
- Central authentication via RADIUS protocol
- Per-user authorization filters (source address, destination address, protocol, protocol service [Web, e-mail, ftp], status of connection)
- User accounting (audit trails)
- ChoiceNet centralized filtering technology

**ASYNCHRONOUS PORT SUPPORT**

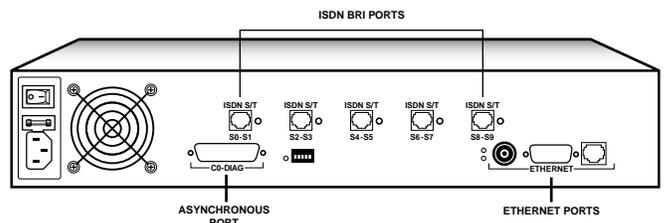
- LAN-to-LAN dial-on-demand routing
- Concurrent TCP/IP and Novell IPX dial-in
- Standard dial-up phone lines (using V.32 bis and V.34 modems)
- ISDN (using terminal adapter)
- Local and remote console
- Dial backup of ISDN WAN ports

**ISDN SUPPORT**

- Standards: ITU-T Q.920, Q.921, Q.922, Q.930, Q.931, Q.932
- Certifications: NET3/ICTR3, JATE\*
- Switch compatibility: National ISDN-1 (NI-1), AT&T 5ESS custom, Northern Telecom DMS-100 custom, Euro-ISDN (ETSI), 1tr6, German National ISDN, VN4, NTT INS-Net64\*, KDD\*
- Compatible with CSD/CSV services
- V.120 ISDN-to-DTE terminal rate adaption
- AT command emulation for ISDN dial-out
- V.120/Synchronous PPP autodetect
- Digital dialtone diagnostics
- Multilink PPP with dynamic bandwidth extensions
- \*pending approval



ABOVE: Back panel of the Livingston PORTMASTER 2i Communications Server with 5 BRI ports, U INTERFACE, high-density connector, Ethernet port (AUI connector or built-in 10BaseT transceiver) and asynchronous serial port.



BELOW: Back panel of the Livingston PORTMASTER 2i with 5 BRI ports, S/T INTERFACE, Ethernet port (AUI connector or built-in 10BaseT transceiver) and asynchronous serial port.

**HARDWARE**

- One Ethernet port with three switch-selectable interfaces:
  - Built-in 10BaseT transceiver (twisted pair)
  - Built-in 10Base2 transceiver (thin Ethernet)
  - AUI connector
- Five BRI ports
  - Per BRI port: S/T interface or U interface (with integrated NT1), two 64 Kbps B-channels, one 16-Kbps D-channel
  - U interface only: One 10-pin RJ-45 high-density (HD) connector for single-cable connection to punchdown block per 5 BRI ports (10-foot cable included)
- One asynchronous serial port
  - Up to 115.2 Kbps
  - RS-423/232 interface
  - DB-25 connector
  - DTR, DSR, DCD, RTS, CTS, TxD, RxD
- Dimensions
  - Length: 11.5 in (29.2 cm)
  - Width: 16.8 in (42.7 cm)
  - Height: 6.5 in (16.5 cm)
  - Weight: 18.9 lb (8.6 kg)
- Power Requirements
  - 110 VAC ± 10%, 47-63 Hz
  - 240 VAC ± 10%, 47-63 Hz
- Environmental Operating Range
  - Temperature: 41F to 113F, 5C to 45C
  - Humidity: 20% to 80%
- Agency Approvals
  - FCC, UL, CSA, CE



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