

# PortMaster 2i

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



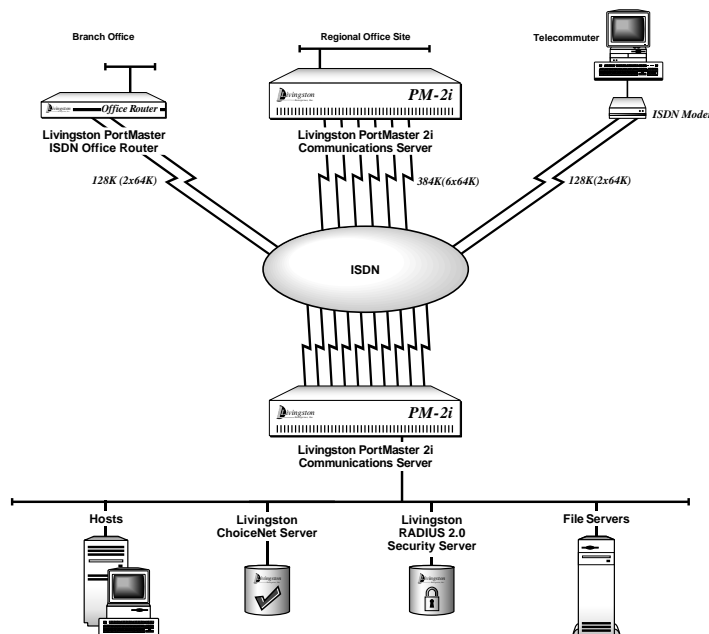
*New ISDN communications server and routing hub*

### 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**

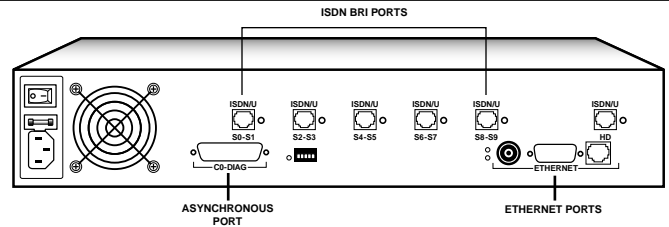
Local username/password database  
 Dialback  
 PAP and CHAP authentication  
 Inbound/outbound IP and IPX packet filters  
 Central authentication via RADIUS protocol  
 Per-user authorization filters (source address, destination address, protocol,  
 protocol service [Web, e-mail, ftp], status of connection)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

**ASYNCHRONOUS PORT SUPPORT**

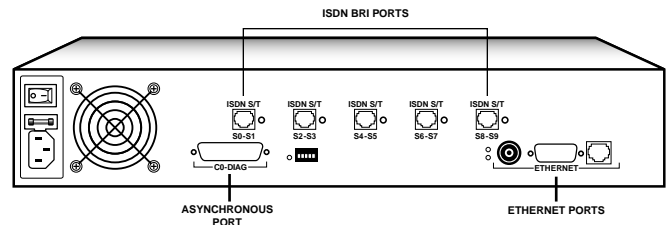
LAN-to-LAN dial-on-demand routing  
 Concurrent TCP/IP and Novell IPX dial-in  
 Standard dial-up phone lines (using V.32 bis and V.34 modems)  
 ISDN (using terminal adapter)  
 Local and remote console  
 Dial backup of ISDN WAN ports

**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),  
 Itr6, 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, Tx/D, Rx/D

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  $\pm$  10%, 47-63 Hz  
 240 VAC  $\pm$  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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