Lucent Access Router Family of Products

LAN Protocols TCP/IP, IPX (concurrent, per port) **Routing** RIP, OSPF protocols LAN-to-LAN, single user dial-up	**WAN Protocols** PPP (Fully compliant: RFCs 1171, 1172, 1331, 1332, 1334, 1618), SLIP, CSLIP, Frame Relay, MP (RFC 1990), V.25bis **Administration** Flash memory, local or network booting, SNMP MIB 2 and Enterprise MIB, Ping and Traceroute utilities, Telnet	**Bandwidth Management** Bandwidth on demand, port and session idle timers, IPX/SPX watchdog, and IPX serialization packet spoofing **Network Security** RADIUS, ChoiceNet, local user/password database, PAP, CHAP, CLID, callback	**Power Requirements** 100–240 VAC (autosensing) **Environmental Operating Range** Temperature: 32°F to 104°F (0°C to 40°C) Humidity: 10% to 90%
ISDN Office Router AP (U and ST interface versions) 	**One Ethernet port** (DB15 AUI, RJ45 10BaseT) **One ISDN BRI (Basic Rate Interface) port** Two 64Kbps B-channels, one 16Kbps D-channel ST or U (built-in NT1) interface option (RJ45)	**One 115.2Kbps asynchronous port** (RJ45, RS-423/232) **Stac data compression** (RFC 1962, 1974) **One analog phone/fax port** (AP version only). Supports up to 3 devices (RJ11) **ISDN Switch Compatibility** ATT5ESS, DMS100, NI1, NET3 (ETSI), 1TR6, NTT, KDD	**Dimensions** Length: 8.75 in (22 cm) Width: 10.5 in (26.2 cm) Height: 1.75 in (4.3 cm) Weight: 3.9 lb (1.8 kg) **Agency Approvals** FCC, UL®, CSA®, CE, JATE
Synchronous Office Router (384K and T1/E1 versions) 	**One Ethernet port** (DB15 AUI, RJ45 10BaseT) **One synchronous WAN port** T1/E1 version (HS): up to 2.048 Mbps (E1) 384K version (LS): up to 384Kbps	DB25 connector V.35, X.21, RS-530 electrical interface **One 115.2Kbps asynchronous port** (RJ45, RS-423/232) **Stac data compression** (RFC 1962, 1974)	**Dimensions** Length: 8.75 in (22 cm) Width: 10.5 in (26.2 cm) Height: 1.75 in (4.3 cm) Weight: 3.9 lb (1.8 kg) **Agency Approvals** FCC, UL, CSA, CE
PCMCIA Office Router 	**One Ethernet port** (DB15 AUI, RJ45 10BaseT) **One PCMCIA Type 2 serial port** Standard dial-up phone lines (V.32bis, V.34, 56K modems)	**One 115.2Kbps asynchronous port** (RJ45, RS-423/232) **Stac data compression** (RFC 1962, 1974)	**Dimensions** Length: 8.75 in (22 cm) Width: 10.5 in (26.2 cm) Height: 1.75 in (4.3 cm) Weight: 3.9 lb (1.8 kg) **Agency Approvals** FCC, UL, CSA
IRX Router 	**One Ethernet port** (DB15 AUI, BNC 10Base2, RJ45 10BaseT) **One to four synchronous WAN ports with selectable data rates** DB25 connector (V.35 adapter included) V.35, X.21, RS-530, RS-232 electrical interface	IRX-111 One port up to 2.048 Mbps IRX-112 One port up to 2.048 Mbps, one port up to 64Kbps IRX-114 Two ports up to 2.048 Mbps, two ports up to 64Kbps **One 115.2Kbps asynchronous port** (RJ45, RS-423/232) **BGP Routing Support**	**Expandable SIMM Memory** **Dimensions** Length: 11.5 in (292 cm) Width: 16.8 in (42.7 cm) Height: 3.2 in (8.1 cm) Weight: 12.4 lb (5.7 kg) **Agency Approvals** FCC, UL, CSA, CE
Firewall IRX Router 	**Two Ethernet ports** (DB15 AUI, BNC 10Base2, RJ45 10BaseT) **One synchronous WAN port up to 2.048 Mbps (E1)** DB25 connector (V.35 adapter included)	V.35, X.21, RS-530, RS-232 electrical interface **One 115.2Kbps asynchronous port** (RJ45, RS-423/232) **Optional rack mount kit** **BGP Routing Support** **Expandable SIMM Memory**	**Dimensions** Length: 11.5 in (292 cm) Width: 16.8 in (42.7 cm) Height: 3.2 in (8.1 cm) Weight: 12.4 lb (5.7 kg) **Agency Approvals** FCC, UL, CSA, CE

For additional information about our access router family of products, please contact your Lucent Technologies Sales Representative.

Visit our web site at http://www.lucent.com

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Access Routers

IRX™, Firewall IRX, and Office Routers

Connecting your world

A family of robust, reliable, full-featured access routers with built-in firewall security

For many companies, data networks have become the lifeblood of their business. As such, they require connectivity, security, and reliability.

Lucent Technologies understands. We offer a family of robust, reliable, full-featured access routers with built-in firewall security. Our access routers deliver exceptionally dependable, high-performance connectivity for branch office Local Area Network (LAN)-to-LAN communications and secure Internet access. All Lucent routers share the same advanced ComOS® operating system as our PortMaster® access concentrator — the servers that more than 2,000 Internet Service Providers (ISPs) and thousands of corporate networks rely on for mission-critical connectivity.

Our experience and technology mean you can count on Lucent for remote network products, whether you're sending voice, data or video around the corner or around the world.

Lucent routers offer the features and performance you need

Our Office, IRX and FireWall IRX routers provide a unique combination of flexibility, reliability, and security. As a result, they can handle virtually any network application, including yours.

Flexibility

Despite their modest cost, Lucent products provide the features and flexibility you require in an access router, such as optimized-routing for every widely used protocol, exceptionally fast data compression, an array of remote management capabilities, and support for a full range of security protocols.

Reliability

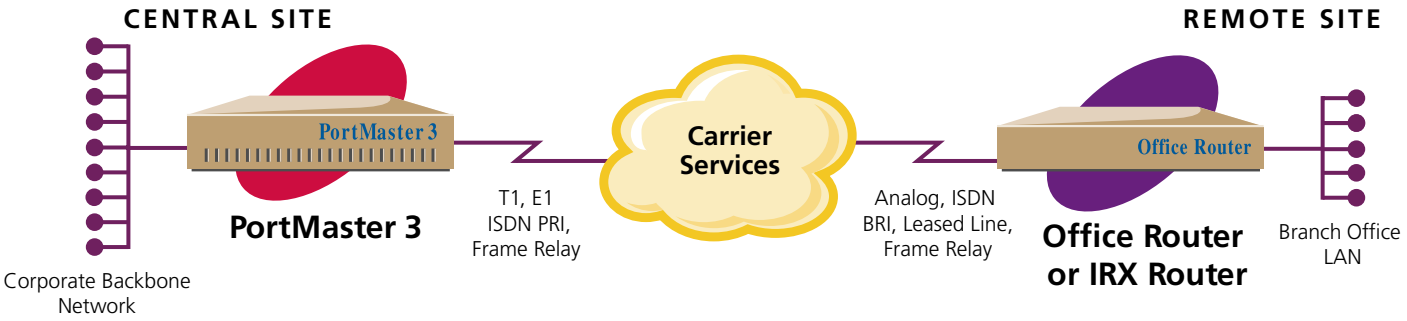
Our routers feature the same ComOS technology that has earned the PortMaster access concentrator a reputation for reliable performance under continuous use. With durable steel casing and a built-in auto-sensing power supply, they offer industrial strength reliability you can depend on 24 hours a day, 365 days a year.

Security

All Lucent products have multi-level authentication and sophisticated firewall packet filtering built in — at no extra cost.

Branch Office LAN-to-LAN Access

Lucent routers provide efficient, reliable LAN-to-LAN connectivity from remote offices to the main corporate network.



The ideal solution for branch office and Internet connectivity

Optimized edge routing

- Support for Routing Information Protocol (RIP), advanced Open Shortest Path First (OSPF), and Border Gateway Protocol (BGP) routing, for building complex networks more efficiently
- Multiprotocol Internet Protocol (IP) and Internet Packet Exchange (IPX) support
- Point to Point Protocol (PPP) and Multilink PPP
- Bandwidth on demand. Dial-up connections are initiated and terminated as needed, so you only pay for bandwidth actually used
- Stac data compression for up to four times greater throughput

Comprehensive management

- Support for Simple Network Management Protocol (SNMP), Telnet, and out-of-band console remote management
- PMconsole™ graphical management utility
- Flash upgrade capability

Versatile Wide Area Network (WAN) access options

- Analog
- Integrated Services Digital Network (ISDN) with ST or U (built-in NT1) interface
- Leased Line
- Frame Relay
- Access speeds up to 2.048 Mb/sec

Support for comprehensive multi-level security

- Authentication via Password Authentication Protocol (PAP), Challenge Handshake Authentication Protocol (CHAP), calling line ID, and call back
- Built-in firewall packet filtering
- Centralized security administration and accounting through Remote Authentication Dial-In User Service (RADIUS) software and Syslog support
- Encrypted and RADIUS-authenticated administrative passwords
- Scalable filter management through ChoiceNet™ software

The Firewall IRX Router

The solution for secure Internet Access

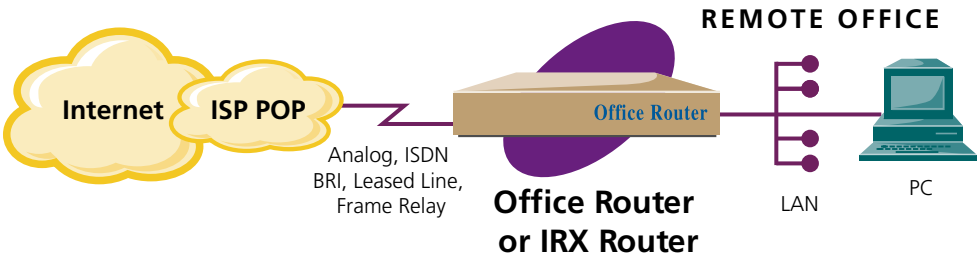
Our Firewall IRX 211 offers you all the performance, management, and security capabilities of our other routers plus a secure, "screened subnet" architecture that delivers bulletproof network protection.

The Firewall IRX comes with two Ethernet ports. The first is for your public Internet-accessible network where Web and FTP servers reside. The second Ethernet port connects to your private, internal enterprise-wide network. This dual-port design allows you to physically isolate and protect it from unwanted traffic or break-ins via the Internet. The Firewall IRX can be used together with other security devices such as proxy servers and software-based firewall servers to create a multi-level security system.

For wide-area connectivity, the Firewall IRX has both a T1/E1 synchronous WAN port and an asynchronous WAN port. The asynchronous port can be used for primary or back-up routing, or for out-of-band management.

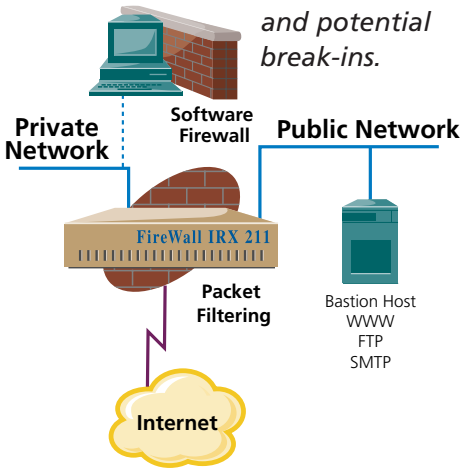
The optimal end-to-end solution

Because all these products share the same Internet-proven ComOS software architecture, our access routers provide a superior, optimized solution for linking with a PortMaster access concentrator at a central site or Point of Presence (POP).



Internet connectivity
Lucent access routers connect remote LAN-based users to the Internet through an ISP's local POP, with compression-enhanced throughput at speeds up to T1/E1.

Firewall IRX connectivity
FireWall IRX Router provides a secure dual Ethernet architecture that isolates your internal network from Internet traffic and potential break-ins.



Firewall Filtering

These advanced firewall features are standard on all Lucent routers.

- Separate input and output filters on:
  - Source and destination address
  - Protocol (TCP/IP, IPX, UDP, ICMP, RIP, OSPF, BGP)
  - Protocol service (Web, e-mail, FTP)
  - Established sessions
- Packet logging
- Extended Frame Relay filtering

	Office Router	IRX	Firewall IRX
WAN Ports	1	1–4	1
Asynchronous Ports	1	1	1
Ethernet Ports	1	1	2
Expandable Memory	No	Yes	Yes
RIP and OSPF	Yes	Yes	Yes
BGP	No	Yes	Yes