



## Nokia M1112 & M1122

The Internet and its continued penetration into homes and businesses across the globe has created a demand. A demand for better, faster connections. The ability to download large file attachments in email and the growing requirements for higher bandwidth for video streaming are just two of the reasons why DSL (digital subscriber Line) technology is here to stay. ADSL (Asymmetric DSL) allows users to download up to 8 Mbits of information, perfect for heavy home users.

To alleviate this demand, Nokia produces a range of sleekly designed DSL gateways for home and office. These gateways include ADSL and other DSL modems as well as models combining particular types of DSL with integrated Wireless LAN, bringing final metre mobility to fixed locations.

For ADSL connectivity, Nokia supplies the Nokia M1122, an ADSL router with integrated 4x10BaseT hub. It fulfils ITU-T G.992.1 ADSL specification and is also compatible with ADSL lite specification, G.992.2. Nokia M1122 has full router functionality with NAPT, DHCP relay and server for LAN side, DNS and many other features. On the WAN (Wide Area Network) side it employs all the common encapsulation methods, from bridging to PPP over ATM. Nokia M1122 can also be managed either locally or remotely.

For carriers and service providers who wish to take advantage of their installed base of ISDN equipment, Nokia supplies the Nokia M1112, a variant of the product based on ADSL over ISDN specification.

The 4-port Ethernet hub enables multiple clients to concurrently share the same high-speed data connection to the service provider. Within the home or office environment all clients connected to the LAN can interconnect with each other as well as to the outside network through the ADSL connection.

The gateways are designed for consumer and small office/home office and reflect the future Internet as the source for knowledge and information today. With internal power supply, no floor-space consuming external power supply is needed.

In order to provide better performance for real time applications requiring low latency such as streamed video or video conferencing, M1122 and M1112 support Class of Service (CoS) by means of weighted fair queuing. This means that each service can be weighted in favour of those applications that have low latency thus avoiding blocking the network with less 'latency-critical' applications.

In today's web world there are basically 3 typical applications. Internet surfing is the most common activity in homes and offices across the globe. Remote work combined with Internet surfing is becoming more and more important as new work and social cultures change and become more popular. And thirdly, a branch office interconnection and small office Internet connection are typical office applications. Nokia M1122 and M1112 bring these high-speed services to end users today.



## Technical Data

## Nokia M1122

## Nokia M1112

### WAN specifications

ADSL standard(s)	ITU-T G.992.1 & G.992.2	ETSI ADSL over ISDN
Chipset	Alcatel MTK-20140	Alcatel MTK-20140
ADSL line connector	RJ-11	RJ-11
Cabling	Unshielded twisted pair	Unshielded twisted pair
ATM	Up to 8 ATM data VCCs, separate management VCC	Up to 8 ATM data VCCs, separate management VCC
Data encapsulation	RFC 2684 (IP and Ethernet over ATM PVCs) RFC 2364 (PPP over ATM) RFC 2516 (PPP over Ethernet)	RFC 2684 (IP and Ethernet over ATM PVCs) RFC 2364 (PPP over ATM) RFC 2516 (PPP over Ethernet)

### LAN interfaces

Ethernet	4 x10Base-T interface in-built hub ( Back plane RJ-45 connector)	4 x10Base-T interface in-built hub ( Back plane RJ-45 connector)
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### Routing

IP address translation	NAT and NAPT with server support and support for multiple TCP, UDP applications	NAT and NAPT with server support and support for multiple TCP, UDP applications
Routing	Static routes, Dynamic RIP v1 & v2	Static routes, Dynamic RIP v1 & v2
IP address management	DHCP server , DHCP relay, DNS proxy	DHCP server , DHCP relay, DNS proxy

### Bridging

	Self learning bridge with dynamic aging and 1024 MAC addresses	Self learning bridge with dynamic aging and 1024 MAC addresses
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### Tunneling

Modes	Local PPTP to PPPoATM VCC, PPPoE client and bridging	Local PPTP to PPPoATM VCC, PPPoE client and bridging
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### Management

HTTP	Configuration Web management	Configuration Web management
Telnet	Command Line interface	Command Line interface
Local management port	RS-232 interface, RJ-45 connector	RS-232 interface, RJ-45 connector
TFTP	Software uploads	Software uploads

### EMC, Safety and Telecom requirements

	Nokia M1122 is CE marked and complies with the following specifications provided that the device is connected to an earthed socket outlet:	Nokia M1112 is CE marked and complies with the following specifications provided that the device is connected to an earthed socket outlet:
	FCC part 15 class B ICES-003 class B EN300386-2:1997 EMC EN55022:1998 class B Emission EN55024: 1998 Immunity ITU-T K21 Overvoltage protection	FCC part 15 class B ICES-003 class B EN300386-2:1997 EMC EN55022:1998 class B Emission EN55024: 1998 Immunity ITU-T K21 Overvoltage protection
	UL 1950, third edition EN 60950	UL 1950, third edition EN 60950
	registered under FCC part 68 fulfills Canadian requirements	