

MP-20x series

Analog Telephone Adapters with Integrated Router



- Residential and SOHO telephony for Voice over Broadband (VoB) networks
- Toll quality voice compression and wide-band vocoders
- Standard T.38 Fax support
- Easy integration into existing network
- Rich set of subscriber calling features
- Integrated router capabilities

Part of the **Nuera's MP Series** of analog VoIP gateways, the MP-20x series of Telephone Adapters are cost-effective, cutting edge products, which allow connecting ordinary analog telephones or fax machines to a Voice over Broadband (VoB) service.

The MP-20x series of Telephone Adapters are well-suited for commercial VoIP deployments. Field proven voice and fax technology and feature rich design makes them an excellent choice for Voice over Broadband (VoB) service providers and operators.

Designed for Residential and SOHO IP Telephony

The MP-20x series is designed for the rapidly growing residential and Small Office /Home Office (SOHO) VoIP market. The MP-20x series typically connects to an existing Broadband Internet device (cable or DSL modem), and establishes a communications path with the Service Provider network via its IP Uplink connection. The MP-20x series provides up to 2 VoIP ports for connecting up to 2 POTS lines or fax machines. Supporting a rich set of subscriber calling features such as Caller ID, Call Forward, and Call Waiting, the MP-20x series maintains a uniform user experience when migrating to VoIP services. In addition, the MP-20x Series serves as a router, supporting connectivity of a PC or LAN hub/switch, and including NAT (Network Address Translation), DHCP, PPPoE functions required for simultaneous telephone and Internet usage, as well as a built-in firewall.

Benefit from Extensive Experience

Utilizing the VoIPerfect™ core architecture, and gaining from its accumulated experience in providing IP telephony solutions the MP-20x series combines superior voice quality and "state of the art" features for end users, such as T.38 Fax Relay and G.168-2004 compliant Echo Cancellation. Low bit-rate vocoders (voice coders) can be used simultaneously on both telephony ports to save valuable bandwidth. The "Voice over Data" prioritization algorithm prevents degradation in voice quality even during large data transfers.

Interoperability

The MP-20x Series is designed for full interoperability with leading Softswitches and SIP Servers for deployment in various network environments. Throughout the years, Nuera has invested significant effort in complying with the leading and evolving VoIP standards. Support of the Session Initiation Protocol (SIP), which is commonly found in Voice over Broadband (VoB) networks, assures seamless integration and rapid deployment.

MP-20x Key Features

- Seamlessly connect Fax and Telephone over broadband infrastructure
- Best of breed voice quality, based on VoIPerfect™ core architecture
- Rich telephony features including Caller ID, Call Waiting, 3-Way calling and more
- Interoperable with SIP-compliant devices including Softswitches, Application Servers, Media Servers, and other gateways
- Second Ethernet port for LAN/PC connectivity
- Router functionality with prioritized voice over data traffic (when connected to a broadband modem)

MP-20x Series

Specifications

Interfaces

Voice Ports	MP-201 – 1 telephony port* MP-202 – 2 telephony ports
Telephone Interfaces	RJ11 connector
Network Interface	LAN I/F (Uplink): RJ-45 - 10/100 Base-T LAN I/F (Down link): RJ-45 – 10/100 Base-T

Features

Telephony Features / Signaling	FXS Loop Start FXO* DTMF – Detection and Generation, TIA464B Caller ID (type 1 & 2) Call Hold Call Transfer 3-way conferencing Call Waiting Call Forward*
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Signaling

VoIP Signaling Protocols	SIP – RFC 3261 MGCP – RFC 2705*
Data Protocols	IPv4, TCP, UDP, ICMP, ARP PPPoE – RFC 2516, PPTP DNS, Dynamic DNS IEEE 802.1p/q (QoS & VLAN tagging) ToS/Diffserv Layer 2 switching or WAN to LAN Layer 3 routing with: DHCP Client/Server – RFC 2132 RIP V1/V2 and static routing NAT – RFC3022, Application Layer Gateway (ALG) Voice over Data prioritization Firewall & URL filtering

Media Processing

Voice Coders	G.711, G.723.1, G.729A/B, iLBC, GSM FR*
Wideband Coders*	G.722, G.722.2 (WB-AMR)
Fax	T.38, network delay up to 10 sec
Echo Cancellation	G.168-2004 compliant, 64 msec tail length
Silence Suppression	VAD, CNG
Adaptive Jitter Buffer	300 msec
Packetization	RTP/RTCP Packetization – RFC 3550, 3551, 2198 DTMF Relay - RFC 2833

Provisioning Management

Provisioning	Embedded Web Server for Configuration and Management Software and Configuration upgrade from HTTP Integrated SNMP agent CLI over Telnet Syslog support for debug and diagnostics Configurable Call progress tones Configurable line characteristics
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Security

Management	HTTPS for Web-based configuration Password protected Web pages (MD5)
Media+Control	IPSec* for media streaming and data traffic
LEDs Indications	Ethernet activity Phone activity Power

Physical

Power	+12VDC, 0.6A Power adaptor: 110VAC/220VAC to 12VDC, 1A
Dimensions	103x74x29.5 mm
Environmental	Operation: 5-40°C Storage: -25°C - 70°C

Applications

- Voice over Broadband (VoB)
- Residential Telephony
- SOHO VoIP Telephony
- Converged Access

About Nuera Communications

Nuera Communications, designs, manufactures & sells packet voice gateways to communication service providers worldwide. These products work over any medium (cable, wireless, copper and fiber). Nuera's ORCA (Open Reliable Communications Architecture) product portfolio of VoIP gateways, softswitches, and management systems provide telephony solutions for cable and DSL networks, international long distance networks and enterprise networks. Nuera is a leader in the broadband telephony market.

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* Please contact Nuera for specific software availability

