

## MP-11x & 124 Series

### Analog VoIP Gateways



- Provides fax, voice and modem support
- Offers toll quality voice compression
- Enhanced capabilities including MWI, long haul, Metering Tones Generation, CID and out door protection
- Allows Fallback to PSTN for E911 or upon net work/power failure (FXS/FXO)
- Supports SIP, H.323 and MGCP standard control protocols
- Proven integration with leading PBXs, IP-PBXs, Softswitches and Gatekeepers

The Nuera's MediaPack™ Series Analog VoIP Gateways are cost-effective, cutting-edge technology products. These stand-alone analog VoIP Gateways provide superior voice technology for connecting legacy telephones, fax machines and PBX systems with IP-based telephony networks, as well as for integration with new IP-based PBX systems. These products are designed and tested to be fully interoperable with leading Softswitches, SIP servers and H.323 gatekeepers.

The MediaPacks are well suited for commercial VoIP deployment because of their mature and field-proven voice and fax technology. Their rich feature set allows integration with a wide range of Carriers and Enterprise network applications. MediaPack gateways are used by Carriers and Service Providers in Access networks for connecting Multi-Tenant Units (MTU), IP-Centrex subscribers, payphones and rural users over various wireless and satellite links. Enterprises use MediaPack gateways to connect their legacy PBX systems over an IP infrastructure. Enterprises also use MediaPack gateways to connect IP-PBX systems to PSTN networks (using FXO interfaces) or to connect analog phones and fax machines (utilizing FXS interfaces). The flexible gateways support a combination of FXS and FXO interfaces enabling a broad range of deployment options which include PSTN Fallback for overcoming network disconnection or congestion. The hybrid FXS/FXO configuration enables enterprises to reduce their telephony bills by using VoIP while maintaining existing phone numbers for incoming calls from the PSTN.

#### Deliver Feature-Rich Solutions

The MP series is a third generation products that has been designed to meet real market needs. In addition to superior voice technology, the products provide advanced telephony features such as long-haul, metering tones generation, country dependent MWI and CID for true integration with existing telephony infrastructure. A variety of management and provisioning tools, such as EMS, embedded web server, Telnet and SNMP enable fast deployment and management of large and complex networks. The MP series is based on VoIPerfect™ architecture, an underlying, best-of-breed, core media gateway technology.

#### Provide Interoperability

The MP series is part of Nuera's complete family of stand-alone VoIP Gateways for OEM system integration. Throughout the years, Nuera has invested significant effort in complying with the leading and evolving VoIP standards. Support of multiple VoIP control protocols has been tested with leading Softswitch vendors. As a provider for OEMs, System Integrators and Network Equipment Providers, Nuera offers short time-to-market with field-proven products.

#### Benefit From Extensive Experience

Nuera, established in 1997, is one of the world's leading providers of VoIP technology. Nuera's commitment to innovation yields consistently high-quality voice processing products that are feature-rich and field-proven.

#### MP Series Features

- Spans a range of 2 to 24 analog ports
- Supports PSTN/PBX analog telephone sets or analog trunk lines (FXS/FXO)
- Selectable, multiple LBR coders per channel
- T.38 compliant
- Echo canceller, Jitter Buffer, VAD and CNG
- Complies with MGCP, H.323 (V4) and SIP control protocols
- Comprehensive support for supplementary services
- Enhanced capabilities including MWI, long-haul, Metering Tones Generation, CID and outdoor protection
- Fallback to PSTN using bypass relay (FXS/FXO)
- Web Management for easy configuration and installation
- EMS for comprehensive management operations (FCAPS)
- Automatic provisioning via TFTP/HTTP

# MP-11x & 124 Series

## Specifications

	MP-112	MP-114 and MP-118	MP-124D
<b>Interfaces</b>			
Voice Ports	2 ports	4 ports and 8 ports	24 ports
Telephone Interfaces	FXS, RJ11	FXS, FXO or mixed FXS/FXO, RJ11	FXS, 50-pin Telco Connector
Life Line	Automatic cut through of a single analog line		
Network Interface	10/100 BASE-TX, RJ45		
Indicators	Channel status and activity LEDs		
<b>Voice, Fax, Modem</b>			
Voice over Packet Capabilities	G.168-2004 compliant Echo Cancellation, VAD, CNG, Dynamic programmable Jitter Buffer, modem detection and auto switch to PCM		
Voice Compression	G.711, G.723.1, G.726, G.729A		
Fax over IP	T.38 compliant		
QoS	Group 3 fax relay up to 14.4 kbps with automatic switching to PCM or ADPCM		
IP Transport	Diffserve, TOS, 802.1 P/Q VLAN tagging		
IP Transport	RTP/RTCP per IETF RFC 3550 and 3551, PPPoE		
<b>Signaling</b>			
Signaling	FXS Loop-start	FXS, FXO Loop-start	FXS Loop-start
In-band Signaling	DTMF (TIA 464B) User defined and call progress tones		
Control	MGCP (RFC 2-05), H.323 (V4), SIP (RFC 3261)		
Provisioning	BootP, DHCP, TFTP and HTTP for Automatic Installation Remote management using Web browser EMS (Element Management System) Syslog support RS-232 for basic configuration		
<b>Security</b>			
Media	SRTP		
Control	H.235, IPSEC, TLS/SIPS		
Management	HTTPS, Access List, IPSEC		
<b>Physical</b>			
Power	100-240 VAC/50-60 Hz		
Environmental	Operational: 5 to 40° C 41 to 104° F Storage: -25 to - 85° C -13 to 185° F Humidity: 10 to 90% non-condensing		
Dimensions (HxWxD)	42x172x220mm	42x172x220mm	44 x 445 x 269mm
Mounting	Rack mount, Table top, Wall mount		
<b>Additional Features</b>			
Short and Long Haul	REN3: Up to 9Km (24 AWG line)		
Caller ID	Bellcore Type 1 & 2, ETSI, BT, NTT and DTMFbased CID (Brazil, Denmark, India, Netherlands, Sweden)		
Polarity Reversal / Wink	Immediate or smooth to prevent erroneous ringing		
Metering Tones	12/16 KHz sinusoidal bursts, Generation on FXS		
Distinctive Ringing	By frequency (15-100 Hz) and cadence patterns		
Message Waiting Indication	DC voltage generation (TIA/EIA-464-B), V23 FSK data, Stutter dial tone		
Outdoor Protection	Over-voltage protection and surge immunity		
<b>Homologation</b>			
EMC	EN55022 Class B , CFR Part 15 Class B, EN55024, EN61000-3-3, EN61000-3-2, VCCI Class X1 (equals to class B)		
Safety	EN60950-1 Safety of information technology equipment, UL60950-1 Including compliance to section 6 (over voltage protection).		
Telecom	TRR-21, TIA-968		

## Applications

- Converged access and IP Centrex for hosted services
- Multi Tenant Unit
- POTs and fax extensions for IP-PBX
- Voice VPN
- VoIP-enabled PBX
- Unified Messaging and recording

## 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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