AudioCodes CPE & Access Gateway Products

# MP-20x Telephone Adapter

Version 4.5.4





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Release Notes Notices

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## **Abbreviations and Terminology**

Each abbreviation, unless widely used, is spelled out in full when first used.

#### **Related Documentation**

Document I	٧	a	m	ıe
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MP-20x Quick Installation Guides

MP-20x Telephone Adapter User's Manual



## **Document Revision Record**

LTRT	Description
50522	Initial document release for Version 4.4.7.
50523	New features added for Version 4.4.7.
50524	Initial document release for Version 4.4.8.
50525	Initial document release for Version 4.4.9.
50526	New features added for Version 4.4.9 Build 111.
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50528	Resolved constraints added for Version 4.4.9 Build 146.
50529	New features and resolved constraints added for Version 4.5.0 and Version 4.4.9 Build 156.
50530	Resolved constraints for Version 4.5.0 and new features for Version 4.4.9 Build 156 were updated.
50531	New features and resolved constraints added for Version 4.4.9 Build 163.
50532	New features and resolved constraints added for Version 4.5.1.
50533	New features and known constraint added for Version 4.5.2.
50534	New features and known constraints added for Version 4.5.3.
50535	New features and known constraints added for Version 4.5.4.

### **Documentation Feedback**

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Release Notes 1. Introduction

## 1 Introduction

AudioCodes MP-20x series of analog Telephone Adapters are cost-effective, feature-rich gateways, allowing the connection of ordinary POTS analog telephones or fax machines to a Voice-over-Broadband (VoBB) service provider.

The MP-20x series is designed for the rapidly growing residential and Small Office/Home Office (SOHO) voice-over-IP (VoIP) market. The MP-20x series typically connects to an existing Broadband Internet device (Cable and ADSL modem, - depending on model), and establishes a communications path with the service provider network through its IP uplink connection. Supporting a rich set of subscriber calling features such as Caller ID, Call Forwarding, 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 with capabilities such as DHCP, NAT, Firewall, PPPoE, PPTP supporting connectivity of home PC networks.

The MP-20x VoIP Gateway is an all-in-one unit featuring (depending on model) a VoIP adapter, FXS lines, Ethernet LAN interfaces (with an internal Layer-2 switch), and Ethernet WAN interface.

Utilizing AudioCodes' VolPerfect™ core architecture and gaining from its accumulated experience in providing IP telephony solutions, the MP-20x series combines superior voice quality and cutting-edge 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 all the telephony ports to save valuable bandwidth.



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Release Notes 2. Version 4.5.x

## 2 Version 4.5.x

This section describes Version 4.5.x.

#### 2.1 Version 4.5.4

This section describes Version 4.5.4. This version is supported on specific modules and not on existing devices.

#### 2.1.1 New Feature

This section describes the new features introduced in this version:

- IPv6 WAN DHCPv6
  This version supports stateful addresses for IPv6.
- Support SNMP on IPv6

#### 2.1.2 Known Constraints

This section lists known constraints:

Table 2-1: Known Constraints for Version 4.5.4

Incident	Description
MP-835	Support DNS option 24 does not work.
MP-701	Management of CWMP over IPv6 does not work.
MP-793	The PC receives IPv6 DHCPv6 when connecting to a LAN port on the device.
MP-807	Cannot configure IPv6 on eth1 with VLAN.
MP-809	Dual Stack - Data service should support both IPv4 and IPv6.

#### 2.1.3 Resolved Constraints

Incident	Description
MP-323	IPV6 WAN - Support for DHCPv6 on IPv6 WAN.
MP-416	Support DNS option 23 does not work.
MP-379	It is not possible to set only IPv6 addresses from the web.
MP-443	DNS resolves when one proxy does not answer and does not try the other proxy.
MP-444	When choosing no IP on the User Interface, IPv4 and IPv6 are not accessible.
MP-529	Support SNMP on IPv6.
MP-628	When the preferred time is ending, the address is not deprecated.
MP-685	In the GUI, at static route IPv6, there is no option to configure the static route to the VLAN.
MP-712	MP-20x supports 802.1x as the authenticated device.
MP-722	TR-069 - Change Data Model to Device 2.
MP-729	After restoring, IPv4 and IPv6 are still running.



Incident	Description
MP-738	IPv6 address does not connect to the Web.
MP-740	When changing all Dual Stack Services from IPv4 to IPv6, IPv6 mode is disabled.
MP-741	When changing to IPv6 stateful DHCPv6 through the web interface, the DHCP address is not received.
MP-743	SNMP does not work on IPv4.
MP-764	When adding a static IPv6 address, it can only connect after reboot.
MP-770	TFTP on the system shell does not work on IPv6.
MP-781	When you have an IPv6 SLACC/DHCPv6 and you add a static IP, it cannot connect the SLACC/DHCPv6 web/ping.
MP-800	Cannot configure DHCPv6 on eth1 with a VLAN that has DHCPv6.
MP-801	When deleting the bridge interface, the device crashes.

Release Notes 2. Version 4.5.x

## 2.2 Version 4.5.3

This section describes Version 4.5.3. This version is supported on specific modules and not on existing devices.

#### 2.2.1 New Feature

This section describes the new feature introduced in this version:

#### ■ Dual Stack Support for IPv4 and IPv6 Modes

With this feature, each service can work in either IPv4 mode or IPv6 mode (but not both). These modes can be configured using Command Line Interface (CLI) or by Web. By default, the device is configured as dual stack with all services working in IPv4 mode.

#### 2.2.2 Known Constraints

This section lists known constraints:

Table 2-2: Known Constraints for Version 4.5.3

Incident	Description
MP-444	When choosing "no IP" in the GUI, both IPv4 and IPv6 are disabled.
MP-463	Speed dial does not work sometimes in dual stack mode.
MP-628	When the Preferred Time has ended, the address is not deprecated.
MP-667	MP-202 sends an ACK with proxy authorization.
MP-685	In the GUI, when creating an IPv6 static route, there is no option to configure a VLAN device.
MP-691	When configuring VoIP type as "TLS", the 'Time' parameter is not received and the certificate is invalid.
MP-613	The Universal Plug and Play (UPnP) and Multicast Domain Name System (mDNS) still work on IPv4, even when IPv4 is disabled.
MP-636	In dual stack mode, IPv6 DNS sends only A query.
MP-681	In the GUI, in the Firmware Upgrade or Upload Configuration File, the 'URL' field does not support IPv6.
MP-692	On an incoming call, the MP-202 should not add '33' to the calling number in the "SIP from" field.
MP-693	The FXS port rings after the call has been disconnected in an attended transfer.



## 2.2.3 Resolved Constraints

Table 2-3: Resolved Constraints for Version 4.5.3

Incident	Description
MP-182	Unable to change the codec on the fly on the DSP Host.
MP-383	Enable/disable WAN/LAN connections from CLI takes affect only after reset.
MP-441	Trace route does not work with IPv6.
MP-455	When traceroute for WAN is disabled, IPv6 still answers to traceroute.
MP-461	On the Diagnostics page, can't enter IPv6 ARP value.
MP-481	Ping with FQDN does not work from CLI in IPv6 mode.
MP-515	When disabling the interface via Web, eth device state changed only after reboot.
MP-522	Call on Redundant Proxy with switchback does not work all the time.
MP-558	The NTP server's FQDN of IPv6/IPv6 address does not work in dual stack mode.
MP-560	When connecting Line1 and Line 2 to FXS1, VoIP crashes when calling to Line 2.
MP-576	When the device is configured as IPv4 only, it is still possible to add IPv6 configuration.
MP-598	When IPv4/IPv6 mode with two DNS servers are configured, messages are sent to both at the same time.
MP-599	MWI with subscribe only on IPv6 mode, does not work.
MP-601	DNS configuration is not seen on General Settings of the Ethernet device.
MP-605	When changing IPv6 DNS mode, the Quick Setup does not update.
MP-617	System crashes on conference call.
MP-627	Changes to static route, Web/CLI work only after reboot.
MP-637	Creating an IPv6 static route with metric 0 that was illegal, caused the status to fail.
MP-648	When the device is in IPv6 mode, the system fails when you get DNS on dev eth1.
MP-683	In dual stack, VoIP and provisioning do not work on IPv6.
MP-687	In QoS, some numbers in Hex do not work in IPv6 mode.

Release Notes 2. Version 4.5.x

## 2.3 Version 4.5.2

This section describes Version 4.5.2. This version is supported on specific modules and not on existing devices.

## 2.3.1 New Features

This section describes the new features introduced in this version:

- IPv6 DNS servers
- Static Route Configuration
- Support for NTP options 31 & 56

## 2.3.2 Known Constraint

Speed dial with proxy is NOT supported in IPv6 mode.



#### 2.4 Version 4.5.1

This section describes Version 4.5.1. This version is supported on specific modules and not on existing devices.

#### 2.4.1 New Features

This section describes the new features introduced in this version:

- Obtaining IPv6 NTP or DNS server using DHCPv6 with 'O' flag
- Device management over Telnet/SSH/HTTP/S in IPv6 mode
- VoIP calls over UDP/TCP/TLS in IPv6 mode
- VoIP fax over UDP/TCP/TLS in IPv6 mode
- Provisioning over HTTP/S/TFTP in IPv6 mode
- VoIP logs over IPv6
- Network diagnostic ICMPv6

#### 2.4.2 Known Constraints

- The following functionalities are NOT supported in IPv6 mode:
  - IPv6 Static Address Configuration
  - IPv6 Stateful Autoconfiguration (DHCPv6)
  - IPv6/IPv4 dual stack mode
  - Management over SNMP
  - Management over CWMP
  - Syslog (System, Security, CDR)
  - Quality of Service (QoS)
  - Firewall
  - MWI subscribe
  - SIP Security with IPv6 hostname
  - DNS resolving for NTP server might take up to two minutes
  - Because the device web management is unstable, it may occasionally disconnect
  - Remote Conference is not supported
  - Speed dial with proxy doesn't work for IPv6

Release Notes 2. Version 4.5.x

## 2.4.3 Resolved Constraints

Table 2-4: Resolved Constraints for Version 4.5.0

Incident	Description
MP-322	Support provisioning over IPv6
MP-356	Support for TLS1.3
MP-397	AAAA query doesn't start following SRV response
MP-538	NTP domain resolving over IPv6



#### 2.5 Version 4.5.0

This section describes Version 4.5.0. This version is supported on specific HW models

#### 2.5.1 New Feature

This section describes the new feature introduced in this version:

#### Support SLAAC mode for IPv6

This version supports StateLess Address AutoConfiguration (SLAAC) mode for IPv6.

#### 2.5.2 Known Constraints

- The following functionalities are NOT supported in IPv6 mode:
  - IPv6 static address configuration
  - IPv6 SLAAC Router Solicitation (RS) message
  - IPv6 Stateful Autoconfiguration (DHCPv6)
  - IPv6/IPv4 dual stack mode
  - Management over SNMP
  - Management over Telnet
  - Management over CWMP
  - Syslog (system, VoIP, CDR)
  - SIP over TLS
  - Fax
  - Quality of Service (QoS)
  - Firewall
  - VolP redundancy based on DNS SRV/NAPTR
- When changing the WAN/LAN state, a reboot is required for the change to take effect.
- SIP Proxy and Outbound SIP Proxy can be configured with IPv6 addresses only, but not with hostnames.

#### 2.5.3 Resolved Constraints

Table 2-5: Resolved Constraints for Version 4.5.0

Incident	Description
MP-224	Improvements were made to the VoIP logs.
MP-350	The device stops answering for two minutes after receiving SIP Error 480.
MP-351	The device does not send ACK for a SIP Error 500.
MP-368	New hardware with increased RAM and flash memory was added to enable IPv6 to run on the device.
MP-390	The device stops responding to incoming calls after a certain period of idle time.
MP-391	A new TR-69 parameter called InternetGatewayDevice.Services.VoiceService.1.X_00908F_UpdateSupp, was added.
MP-392	The device responds with a "491 Server Internal Error - re-Invite inside a re-Invite" in specific call scenarios.
MP-395	When PacketSmart was removed from the web interface, it still remained in the configuration.

Release Notes 2. Version 4.5.x

Incident	Description
MP-396	The device shows 4th FXS port even though Feature Key was set to 2 FXS ports.
MP-419	After making a change to the 'accept_ra' parameter, a reboot is required for the change to take effect.
MP-422	SIP lines become disabled when IPv6 mode is disabled and the proxy is configured with the IPv6 address.
MP-425	The eth0 was incorrectly getting the address of the SLAAC.
MP-428	When Local/Remote management settings were modified, a reboot was necessary for the changes to take effect.
MP-431	Tabs did not appear when IPv4 was disabled.
MP-434	Not all the IPv6 prefixes appearing on the SLAAC, are displayed on the WAN Ethernet Properties page.
MP-437	Sometimes, the IPv6 address is not sent from SLAAC.
MP-438	When disabled, IPv6 can still access the device via its link-local address.
MP-439	After doing a system restore to factory defaults on the device, the global address still incorrectly appeared on the LAN side.
MP-442	A failed CLI debugging message appeared when IPv6 was disabled.
MP-458	When configuring the Multi-Service Business Routers (MSBRs) with IPv6, after disabling IPv6, the IPv6 NTP server still appeared.
MP-473	Incorrect status for Network Bridge interface.
MP-475	On previous builds, the DNS server of IPv6 did not appear in the configuration log file.
MP-482	When IPv6 was disabled and the SIP Proxy was set to IPv6, the disconnect tone was not played.
MP-491	A button was added to the Quick Setup GUI to enable IPv4/IPv6 mode selection.
MP-493	An internal call would work only when the proxy was set to IPv4.



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Release Notes 3. Version 4.4.9

## 3 Version 4.4.9

This section describes Version 4.4.9.

#### 3.1 Version 4.4.9 Build 163

This section describes Version 4.4.9 Build 163.

#### 3.1.1 New Features

This section describes the new features introduced in this version:

#### Support for IEEE 802.1X as the authenticated device:

The device supports two Extensible Authentication Protocol (EAP) variants:

- MD5-Challenge (EAP-MD5):
- EAP-TLS

To configure these modes, refer to the IEEE 802.1X section in the latest *MP-20x Telephone Adapter User's Manual*.

#### 3.1.2 Known Constraints

Not applicable

#### 3.1.3 Resolved Constraints

This section lists constraints from previous releases that have now been resolved:

Table 3-1: Resolved Constraints for Version 4.4.9 Build 163

Incident	Description
MP-534	The device status is not monitored when the MP serial number is added in the One Voice Operations Center (OVOC).
MP-570	The device does not reset correctly in OVOC.

#### 3.2 Version 4.4.9 Build 156

This section describes Version 4.4.9 Build 156.

#### 3.2.1 New Features

This section describes the new features introduced in this version:

#### Support UPDATE method for SIP

This version supports the SIP UPDATE method.

#### Password values replaced with asterisks in the CLI/Configuration

This feature is controlled by a new parameter:

#### rg\_conf/hide\_passwords

By default, this parameter does not exist. Once the feature has been activated, the whole password is hidden by asterisks and the 'Configuration File' icon on the 'Advanced' web page disappears.

Enabling feature:

rg conf/hide config=1



Disabling feature:

rg\_conf/hide\_config=0

## 3.2.2 Known Constraints

Not applicable

## 3.2.3 Resolved Constraints

Table 3-2: Resolved Constraints for Version 4.4.9 Build 156

Incident	Description
MP-384	An incorrect Network Connection status was shown in the Web interface.
MP-392	The device responds with a "491 Server Internal Error - re-Invite inside a re-Invite" in specific call scenarios.
MP-490	Unable to set the certificate with the 4098 bit RSA key.
MP-494	Incorrect default packetization time for the first voice codec.
MP-495	DTAG: Hiding passwords by displaying asterisk instead
MP-496	Merge new Faxback application [1.20.11.30].
MP-501	Logging the history of generated 'random_tod/check_tod' and actual provisioning attempt times.
MP-505	Serial number value reported in DHCP Option 125 is missing the 'VT' prefix.

Release Notes 3. Version 4.4.9

## 3.3 Version 4.4.9 Build 146

This section describes Version 4.4.9 Build 146.

#### 3.3.1 New Features

Not applicable

## 3.3.2 Known Constraints

Not applicable

## 3.3.3 Resolved Constraints

Table 3-3: Resolved Constraints for Version 4.4.9 Build 146

Incident	Description
MP-351	MP-202 does not send ACK message on '500 Server Internal Error'.
MP-390	MP-202 does not respond to incoming calls after a specific period of idle time.
MP-391	CWMP: Adding X.parameter for 'voip/signalling/sip/update_support_enabled'.



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Release Notes 3. Version 4.4.9

## 3.4 Version 4.4.9 Build 142

This section describes Version 4.4.9 Build 142.

#### 3.4.1 New Features

Not applicable

#### 3.4.2 Known Constraints

Not applicable

## 3.4.3 Resolved Constraints

Table 3-4: Resolved Constraints for Version 4.4.9 Build 142

Incident	Description
MP-211	Failed EMS response when upgrading same file twice
MP-215	Drop from the conference with an internal call failed
MP-232	MP-202: Phone1 LED turns red after hang-up internal call
MP-253	MP-202 incorrect CID on analog device in specific scenarios
MP-259	[HGC]: Cancel all registered ABBD not work as expected
MP-278	Update default client certificate
MP-280	Syslog format improvement
MP-285	Support SIP Update method
MP-307	WEB: missing GW entry in static route rule
MP-317	Supporting provisioning based on random Time-Of-Day
MP-318	[HGC]: Cannot block/unblock Caller ID per call
MP-339	MP-202 response 491 then receiving INVITE inside re-INVITE
MP-341	WEB: Pressing on 'check now' button (configuration) cause reboot



#### 3.5 Version 4.4.9 Build 111

This section describes Version 4.4.9 Build 111.

#### 3.5.1 New Features

This section describes the new features introduced in this version:

#### Changing Default Cipher Suites for SIP over TLS

You can now change the default cipher suites to be used (or removed) for SIP over TLS.

#### Changing Default Cipher Suits for Provisioning

You can now change the default cipher suites to be used (or removed) for Provisioning.

#### Setting Provisioning Time of Day (TOD)

You can now configure the device to perform provisioning at random or fixed times using a specified configuration. You can also configure default behavior when if no random TOD or Fixed TOD has been configured,

#### 3.5.2 Known Constraints

This section lists known constraints:

Table 3-5: Known Constraints for Version 4.4.9 Build 111

Incident	Description
106501	Connected Line Presentation ('P-Asserted-Identity') is not updated after 'Forward on no answer'.
109783	Speed Dial: Destination SIP port cannot be changed from '5060'.
109789	Internal service: Call Forward 'Busy' mode does not work.
109790	Internal service: Call Forward 'No Reply' mode does not work.
109791	Internal service: DND prevents incoming calls to all SIP lines instead of the relevant SIP line.

Release Notes 3. Version 4.4.9

## 3.5.3 Resolved Constraints

Table 3-6: Resolved Constraints for Version 4.4.9 Build 111

Incident	Description
MP-1	ARP requests received on WAN, answered with LAN IP instead of a WAN IP.
MP-6	Incorrect Caller ID is displayed for forwarded incoming calls.
MP-14	Unnecessary DNS NAPTR query is sent before an INVITE is sent.
MP-15	An old configuration path for Remote Conference URI was removed.
MP-25	Software Fastpath doesn't work on bridge configuration.
MP-45	Internal calls do not work in specific scenarios.
MP-54	Payment terminal transaction failed when Transparent mode was used.
MP-62	SIP destination port remains unchanged for calls executed by speed dial.
MP-70	The device does not answer incoming SIP keep-alive OPTIONS.
MP-75	FaxBack: Signaling was routed to the network instead of the pFax application.
MP-93	Incoming DTMF (SIP INFO method) for "*" and "# " are played like the "0".
MP-98	Internal calls do not work when ATA is configured for TLS/SRTP.
MP-101	VoIP failure was encountered when receiving specific RTCP packets.
MP-106	Support for Huawei's softswitch format for MWI Notify event.
MP-116	URL value with .cfg extensions provided by DHCP Option 66 is being ignored by CPE.
MP-138	Call forward busy embedded service doesn't work on Line 2.
MP-139	Caller ID + prefix was not converted into '00' in the Call Log history of the phone.
MP-167	Bad handling of REFER call flow for specific scenarios.
MP-168	Voice is not established when INVITE is missing the SDP header.



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## 4 Device Gateway Specifications

The specifications for the router and VoIP functionality are listed in the table below:

Table 4-1: MP-20x Telephone Adapter Software Specifications

Table 4-1. MF-20x Telephone Adapter Software Specifications		
Feature	Details	
VoIP Signaling Protocols	• SIP - RFC 3261, RFC 2327 (SDP)	
Data Protocols	<ul> <li>IPv4, TCP, UDP, ICMP, ARP, LLDP, TLS</li> <li>PPPoE (RFC 2516)</li> <li>PPTP (RFC 2637)</li> <li>DNS, Dynamic DNS</li> <li>WAN-to-LAN Layer-3 routing with:         <ul> <li>DHCP Client/Server (RFC 2132)</li> <li>NAT: RFC 3022, Application Layer Gateway (ALG)</li> <li>Stateful Packet Inspection Firewall</li> <li>QoS - Priority queues, VLAN 802.1p, Q tagging, traffic shaping</li> </ul> </li> <li>STUN (RFC 3489)</li> </ul>	
Media Processing	<ul> <li>Voice Coders: G.711, G.729A/B, G.726, G.722</li> <li>Echo Cancelation: G.168-2004 compliant, 64-msec tail length</li> <li>Silence Compression</li> <li>Adaptive Jitter Buffer 300 msec</li> <li>Fax bypass, Voice-Band Data and T.38 fax relay</li> <li>Automatic Gain Control</li> </ul>	
Telephony Features	<ul> <li>Call Hold and Transfer</li> <li>Call Waiting Type 1 and 2</li> <li>Message Waiting Indication</li> <li>3-Way Conferencing</li> <li>Speed Dial</li> <li>Polarity Reversal</li> </ul>	
Configuration/ Management	<ul> <li>Embedded Web Server for configuration and management</li> <li>TR-069 and TR-104 for remote configuration and management</li> <li>Remote firmware upgrade and configuration by HTTP, TFTP, FTP and HTTPS</li> <li>Configuration file encryption (3DES)</li> <li>SIP-triggered remote firmware and configuration upgrade</li> <li>Command-Line Interface (CLI) over Telnet</li> <li>Dual image management</li> <li>SNMP</li> <li>Local Support and Troubleshooting with Web interception and voice notification</li> <li>BroadSoft BroadCloud certification</li> <li>BroadCloud PacketSmart integration (applicable only to MP-20xR)</li> <li>Optional 3G/4G dongle (not applicable to MP-202)</li> <li>Link Layer Discovery Protocol (LLDP) support</li> <li>Faxback integration (Fax over HTTPS) – Optional</li> <li>File server</li> <li>Printer server</li> <li>DLNA Media server</li> </ul>	



Feature	Details
	FXS Voice Menu
Packetization	<ul><li>RTP/RTCP Packetization (RFC 3550, RFC 3551)</li><li>DTMF Relay (RFC 2833)</li></ul>
Security	<ul><li>HTTPS for Web-based configuration</li><li>Password protected Web pages (MD5)</li></ul>
Telephony Signaling	<ul> <li>In-band:         <ul> <li>DTMF: Detection and Generation, TIA464B</li> <li>Caller ID: Telcordia, ETSI, NTT - Type I, Telcordia Type II</li> <li>Call Progress Tones</li> </ul> </li> <li>Out-of-band:         <ul> <li>FXS Loop-start Signaling</li> <li>On/Off Hook, Flash Hook</li> </ul> </li> </ul>
Hardware	
Power	<ul><li>MP-202: Power Supply 12VDC/1A</li><li>MP-202R/MP-204R/MP204: Power Supply 12VDC/2A</li></ul>
Interfaces	<ul> <li>WAN 10/100Base-T (RJ-45)</li> <li>LAN 10/100Base-T (RJ-45)</li> <li>RJ-11 FXS ports for telephones (POTS)</li> <li>Network Interface WAN/LAN 10/100 Base-T(RJ-45)</li> <li>Ethernet ports are 10/100/1000Base-T (applicable to MP-20xR)</li> <li>USB 2.0 (not applicable to MP-202)</li> </ul>
LED Indications	<ul> <li>FXS Phone lines (1 to 4, depending on MP-20x model) - Registered, In Use, Alert</li> <li>LAN activity on Ethernet Port</li> <li>WAN</li> <li>USB (applicable for MP20xR only)</li> <li>Status</li> <li>Power on</li> </ul>
3G Backup (Optional)	<ul> <li>Support for 3G USB dongles for primary WAN backup including:</li> <li>Alcatel 4G LTE (1bbb:f000-&gt;1bbb:0195)</li> <li>Alcatel AL720</li> <li>Huawei E1550</li> <li>Huawei E156</li> <li>Huawei E166</li> <li>Huawei E169</li> <li>Huawei E1750</li> <li>Huawei E1756</li> <li>Huawei E1756</li> <li>Huawei E303</li> <li>Huawei E3131</li> <li>Huawei E3272</li> <li>Huawei E3276</li> <li>Huawei E367</li> <li>Huawei E392</li> <li>Huawei K3765</li> <li>Huawei K3772</li> <li>Sierra AC326U</li> <li>Vertex</li> </ul>

Feature	Details
	<ul> <li>✓ ZTE K3805-Z</li> <li>✓ ZTE MF110</li> <li>✓ ZTE MF190</li> <li>✓ ZTE MF626</li> <li>✓ ZTE MF823</li> </ul>
SLIC Characteristics	<ul> <li>Maximum Ringer Load (REN) = 5</li> <li>Short Haul</li> <li>Ringer Voltage - up to 65Vrms</li> <li>Configurable Terminating Impedance</li> </ul>
Environmental	<ul> <li>Operating Temperature: 0 to 40°C</li> <li>Storage Temperature: -25 to 70°C</li> <li>Operating Humidity: 10 to 90% non-condensing</li> <li>Storage Humidity: 10 to 90% non-condensing</li> </ul>
Weight and Dimensions	<ul> <li>MP-202B: 230 grams; 167 x 133 x 33 mm</li> <li>MP-202R: 280 grams; 167 x 133 x 33 mm</li> <li>MP-204B: 280 grams; 167 x 133 x 33 mm</li> <li>MP-204R: 280 grams; 167 x 133 x 33 mm</li> </ul>

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