Overview

Models

HP VCX Connect Primary MIM Module	JE252A
HP VCX Connect Secondary MIM Module	JE253A
HP MSR 30-16 Router with VCX Connect Primary MIM, 4-port FXO and 2-port FXS Modules	JD025A
HP MSR 30-40 Router with VCX Connect Primary MIM, 8-port FXO and 4-port FXS Modules	JD026A
HP MSR 30-40 Router with VCX Connect Primary MIM, 8-port BRI-ST and 4-port FXS Modules	JD027A
HP MSR 30-40 Router with VCX Connect Primary MIM, T1, 4-port FXO and 4-port FXS Modules	JD028A
HP MSR 30-40 Router with VCX Connect Primary MIM, E1, 4-port BRI-ST and 4-port FXS Modules	JD029A

Key features

- Economical VoIP bundles with enterprise WAN router
- Built-in phone, messaging, and softphone licenses
- Resiliency with optional redundant server
- Voice, video, IM collaboration, MS Lync interface
- Support up to 600 users with 6 servers

Product overview

HP VCX Connect Unified Communications MIM on MSR series delivers an enterprise-class, full-featured VoIP phone system designed to meet the needs of rugged, collaborative small business work environments with up to 100 phone users. Designed to seamlessly integrate within HP A-MSR 30 series WAN routers, the VCX Connect MIM leverages MSR modularity to provide a true office-in-a-box solution with a comprehensive suite of WAN, LAN, security, and voice interfaces. The VCX Connect MIM's flexible, intuitive design and management help businesses replace legacy PBXs with SIP-based VoIP solutions that provide a full range of collaborative functionality—including Microsoft® OCS/Lync and Exchange UM connectivity, click-to-call, presence, and instant messaging. VCX Connect MIM solution bundles, which combine a VCX Connect MIM module, an A-MSR 30 series router, and various media gateway interfaces, are available to reduce expenses and increase network freedom and flexibility.

Features and benefits

Quality of Service (QoS)

- **Echo cancellation**: automatically adjusts and removes echo from a telephone call
- **Voice activity detection**: the proprietary algorithm is designed to reduce/filter background noise
- **Comfort noise generation**: provides low audible artificial background noise to improve VoIP communications
- **802.1p/Q VLAN tagging**: delivers data to devices based on the priority and type of traffic; supports IEEE 802.1Q

Resiliency and high availability

- **Enhanced high availability**: backup VCX systems, whether co-located with the primary VCX or deployed in another office on the same network, provide geographic survivability and rapid failover for mission-critical communications
- **Optional redundant power supply**: provides seamless business continuity and data protection

Configuration

- **Media gateway support**: streamlines migration to IP communications and provides PSTN connectivity with a full range of either integrated or standalone VoIP gateways
- **Scheduled backups**: System Administration Web interface provides the ability to schedule static and reoccurring full system

Overview

backups

Integration

- **Converged IP telephony and data**: seamlessly integrate the VCX Connect MIM (multifunction interface module) into an HP A-MSR 30 series Power over Ethernet (PoE) or non-PoE router to deliver enterprise-class routing and telephony functionality

Investment protection

- **All-in-one solution**: decreases capital and operating expenses and increases network freedom and flexibility by integrating a comprehensive suite of available telephony, routing, switching, wireless and security interfaces and features—all in the same box
- **Analog phone support**: leverages existing investment in analog phones while implementing a full set of PBX features

Ease of use

- **Built-in licensing**: VCX Connect MIM system ships with default licenses—VCX IP Telephony/IP Messaging Server license, 25 business phone licenses, 25 IP messaging seat licenses, 25 Desktop Communicator softphone licenses, 25 Convergence Client softphone licenses, and 4 analog/entry licenses
- **LDAP synchronization with Microsoft® Active Directory, IBM Lotus Domino, Linux OpenLDAP**: easily integrate, filter, and synchronize employee contact information, thereby simplifying administration and providing reliable connections based on the most current user information
- **Ease of deployment**: VCX Connect MIM's out-of-the-box first-time configuration provides simpler installations using a Web-based, wizard-like interface that walks you through the installation process
- **Easy to use**: GUI-driven central management and configuration
- **NEW Replication status**: System Administration Web interface displays the replication status of primary and secondary pairs

Scalability

- **Supported devices**: let you pay as you grow up to 100 devices per platform and up to 600 devices in total via VCX global directory, which enables up to six VCX Connect MIM platforms to function as a single system

Additional information

- **Optional mobility for telecommuters**: optional HP VCX IP Telecommuting series provides remote users with the full benefit of their corporate IP telephony systems without compromising security
- **Optional multimedia conference bridge**: when businesses require a dense conferencing system to reduce the overhead and cost of expensive third-party conferencing products, the HP VCX V7000 IP Conferencing series provides capabilities that include host and participant Web-based conference controls, instant and emergency conferences with automatic dial-out options, scheduled and meet-me restricted conferences (requires participant passcode), peer-to-peer and one-to-many conferences, and more
- **Optional network management**: uses the HP Intelligent Management Center (IMC) and Voice Services Manager (VSM) to configure, monitor, and enhance the performance of media servers, gateways, and endpoints; to monitor VoIP traffic; and to control voice network quality; enhancements for the IMC VSM include MOS scoring and packet loss notification MIB changes; the VCX license MIBs support IMC

Product architecture

- **Multi-site architecture**: a highly flexible architecture eliminates the dependency on any single component for unprecedented resiliency and end-to-end survivability; allow you to use Web-based centralized administration, global directory, and global voicemail to seamlessly link VCX systems together to scale your IP-PBX network as your business grows
- **Standards-based IP-PBX**: supports standard PBX and advanced telephony and messaging features based on the IETF Session Initiation Protocol (SIP) standards; supports third-party SIP-based applications and devices

Overview

- **Integrated server**: IP telephony and IP messaging modules run on Linux OS
- **Direct SIP integration with Microsoft OCS/Lync and Exchange UM**: VCX direct SIP integration with Microsoft OCS/Lync allows VCX phones/clients to call and have basic features with phones/clients connected to OCS/Lync; OCS/Lync has access to VCX IP-PBX phones, clients, and gateways; VCX supports direct SIP integration with Office Communication Server 2007, Office Communication Server 2007 R2, and Microsoft Lync Server 2010

Technical features

- **Ad hoc conferencing**: VCX Connect MIM supports up to 30 sessions of ad hoc conferencing with a maximum of six parties per conference
- **Shared lines and extension status**: single-line and multi-line phone support and bridged extensions for executives and administrators

User productivity

- **Unified communications**: increases employee collaboration through the audio, video, instant messaging, file sharing, and presence capabilities within the HP Desktop Communicator; extends the Microsoft environment with HP Desktop Communicator Outlook Edition add-on to enable click-to-call/conference via Microsoft Outlook, to capture and retrieve call notes with Microsoft Journal, and to perform desktop call recording; HP VCX is fully integrated with Lotus Sametime
- **Unified messaging**: consolidates users' voicemail, email, and faxes into a single inbox for flexible, location-independent retrieval and management; schedules appropriate times when messages are delivered; sends voicemails to individuals or groups using extensive and easy-to-maintain distribution lists; sets up find me/follow me services to conveniently manage one's own access to help ensure that important calls are not missed; auto-delivers incoming fax calls to email and sends faxes from email
- **Web user interface**: listen to and manage voicemail messages
- **Lotus Domino/Sametime 8.5 support**: Sametime 8.5 can be deployed using a Sametime System Console and new meeting server functionality; VCX provides two packages for Sametime 8.5; can be deployed on Sametime Community Server ("classic" to pre-8.5) or on Sametime Media Manager (for 8.5) using the system console

Voice functionality

- **Hot desking**: mobile users can effortlessly traverse within the VCX system, log into another handset, and have all their desktop extension settings, including voicemail, at their fingertips
- **Call admission control**: fine-tune and throttle media traffic to prevent VoIP over-subscription—even down to a particular extension
- **Pin codes**: prevent unauthorized outbound dialing and/or manage and record telephony calls via forced account codes and customer account and billing codes; PIN code portability allows users to roam the VCX system and utilize their existing data
- **Hunt groups**: built-in call distribution provides agent log-in functionality; support for 3 selectable call routing algorithms
- **Automatic call distribution**: add-on economical call center application that includes 5 selectable routing algorithms, the ability to capture real-time statistics, and support for remote agents in various VCX locations
- **Simultaneous Ring provides mobility for VCX users**: Simultaneous Ring feature allows a user to configure their external phone (such as cell phone) to simultaneously ring with their desktop VCX IP phone; users can answer the call at any of the ringing endpoints; when a user at one of the ringing endpoints answers the call, the other ringing endpoint stops ringing; it allows a user to be reached at two different locations by ringing both locations at the same time
- **350x IP phone background/screen saver image restore** : VCX Web interface provides the ability to reset background/screen saver image to factory defaults on 350x IP phones; if an image is incorrect, VCX will display a notification to the administrator

Warranty and support

- **1-year warranty**: with advance replacement and 30-calendar-day delivery (available in most countries)
- **Electronic and telephone support**: limited electronic and telephone support is available from HP; refer to: www.hp.com/networking/warranty for details on the support provided and the period during which support is available
- **Software releases**: refer to: www.hp.com/networking/warranty for details on the software releases provided and the period

Overview

during which software releases are available for your product(s)

Technical Specifications

HP VCX Connect Primary MIM Module (JE252A)

Ports	1 RJ-45 autosensing 10/100 port (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX); Duplex: half or full	
	2 USB 2.0	
Physical characteristics	Dimensions	8.27(d) x 5.91(w) x 1.57(h) in. (21 x 15 x 4 cm) (1U height)
	Weight	2.43 lb. (1.1 kg)
Memory and processor	Module	Intel® Celeron® @ 600 MHz, 1 GB DDR SODIMM; storage: 160 GB HD
Mounting	VCX Connect Primary module slides into HP A-MSR 30 Series router MIM slot	
Environment	Operating temperature	41°F to 104°F (5°C to 40°C)
	Operating relative humidity	10% to 80%
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager; Telnet; HTTPS	
Notes	Integrated IP Messaging Voice Ports; up to 30 simultaneous auto-attendant, music-on-hold, fax, or voicemail ports supported Support for standalone VCX V7111, VCX V7122, MSR 20-xx, and MSR 30 Series analog, ISDN, and digital gateways	
Services	Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.	

HP VCX Connect Secondary MIM Module (JE253A)

Ports	1 RJ-45 autosensing 10/100 port (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX); Duplex: half or full	
	2 USB 2.0	
Physical characteristics	Dimensions	8.27(d) x 5.91(w) x 1.57(h) in. (21 x 15 x 4 cm)
	Weight	2.43 lb. (1.1 kg)
Memory and processor	Module	Intel® Celeron® @ 600 MHz, 1 GB DDR SODIMM; storage: 160 GB HD
Mounting	VCX Connect Secondary module slides into HP A-MSR 30 Series router MIM slot	
Environment	Operating temperature	41°F to 104°F (5°C to 40°C)
	Operating relative humidity	10% to 80%
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager; Telnet; HTTPS	
Notes	Integrated IP Messaging Voice Ports; up to 30 simultaneous auto-attendant, music-on-hold, fax, or voicemail ports supported Support for standalone VCX V7111, VCX V7122, MSR 20-xx, and MSR 30 Series analog, ISDN, and digital gateways	
Services	Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.	

Technical Specifications

HP MSR 30-16 Router with VCX Connect Primary MIM, 4-port FXO and 2-port FXS Modules (JD025A)

Ports	3 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX); Duplex: half or full	
	3 USB 2.0	
	4 RJ-11 FXO ports	
	2 RJ-11 FXS ports	
	1 Compact Flash port	
Physical characteristics	Dimensions	17.39(d) x 17.4(w) x 1.74(h) in. (44.17 x 44.2 x 4.42 cm) (1U height)
	Weight	16.25 lb. (7.37 kg) including bundle components
Mounting	VCX Connect Primary module slides into HP A-MSR 30 Series router MIM slot; A-MSR30 router mounts in EIA-standard 19 inch telco rack or equipment cabinet or table top (hardware included)	
Environment	Operating temperature	41°F to 104°F (5°C to 40°C)
	Operating relative humidity	10% to 80%
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
Electrical characteristics	Voltage	100-240 VAC
	Frequency	50/60 Hz
Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager; Telnet; HTTPS	

Notes: Integrated IP Messaging Voice Ports; up to 30 simultaneous auto-attendant, music-on-hold, fax, or voicemail ports supported MSR 30-16 integrated voice gateways options:

- Supports up to a maximum of twelve (12) analog voice ports
- Supports up to a maximum of eight (8) ISDN voice ports
- Supports up to a maximum of four (4) E1 or T1 digital voice spans

Support for standalone VCX V7111, VCX V7122, MSR 20-xx, and MSR 30 Series analog, ISDN, and digital gateways

Bundle includes MSR 30-16 router with VCX Connect Primary MIM, 2-port FXO SIC (qty 2), and 2-port FXS SIC modules

Services:
3-year, parts only, global next-day advance exchange (UX150E)
3-year, 4-hour onsite, 13x5 coverage for hardware (UX151E)
3-year, 4-hour onsite, 24x7 coverage for hardware (UX154E)
3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UX157E)
3-year, 24x7 SW phone support, software updates (UX160E)
4-year, 4-hour onsite, 13x5 coverage for hardware (UX152E)
4-year, 4-hour onsite, 24x7 coverage for hardware (UX155E)
4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UX158E)
4-year, 24x7 SW phone support, software updates (UX161E)
5-year, 4-hour onsite, 13x5 coverage for hardware (UX153E)
5-year, 4-hour onsite, 24x7 coverage for hardware (UX156E)
5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UX159E)
5-year, 24x7 SW phone support, software updates (UX162E)
3 Yr 6 hr Call-to-Repair Onsite (UX163E)
4 Yr 6 hr Call-to-Repair Onsite (UX164E)

Technical Specifications

5 Yr 6 hr Call-to-Repair Onsite (UX165E)

Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

HP MSR 30-40 Router with VCX Connect Primary MIM, 8-port FXO and 4-port FXS Modules (JD026A)

Ports	1 RJ-45 autosensing 10/100 port (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX); Duplex: half or full
	4 USB 2.0
	8 RJ-11 FXO ports
	4 RJ-11 FXS ports
	2 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only
	2 SFP
	1 Compact Flash port

Physical characteristics	Dimensions	16.62(d) x 17.4(w) x 3.47(h) in. (42.21 x 44.2 x 8.81 cm) (2U height)
	Weight	30.29 lb. (13.74 kg) including bundle components
Mounting	VCX Connect Primary module slides into HP A-MSR 30 Series router MIM slot; A-MSR30 router mounts in EIA-standard 19 inch telco rack or equipment cabinet or table top (hardware included)	
Environment	Operating temperature	41°F to 104°F (5°C to 40°C)
	Operating relative humidity	10% to 80%
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
Electrical characteristics	Voltage	100-240 VAC
	Frequency	50/60 Hz
Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager; Telnet; HTTPS	

Notes
Integrated IP Messaging Voice Ports; up to 30 simultaneous auto-attendant, music-on-hold, fax, or voicemail ports supported MSR 30-40 integrated voice gateways options:

- Supports up to a maximum of twenty-four (24) analog voice ports
- Supports up to a maximum of sixteen (16) ISDN voice ports
- Supports up to a maximum of five (5) E1 or T1 digital voice spans

Support for standalone VCX V7111, VCX V7122, MSR 20-xx, and MSR 30 Series analog, ISDN, and digital gateways
Bundle includes MSR 30-40 router with VCX Connect Primary MIM, 4-port FXO MIM (qty 2), and 4-port FXS MIM modules

Services
3-year, parts only, global next-day advance exchange (UX150E)
3-year, 4-hour onsite, 13x5 coverage for hardware (UX151E)
3-year, 4-hour onsite, 24x7 coverage for hardware (UX154E)
3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UX157E)
3-year, 24x7 SW phone support, software updates (UX160E)
4-year, 4-hour onsite, 13x5 coverage for hardware (UX152E)

Technical Specifications

4-year, 4-hour onsite, 24x7 coverage for hardware (UX155E)
4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UX158E)
4-year, 24x7 SW phone support, software updates (UX161E)
5-year, 4-hour onsite, 13x5 coverage for hardware (UX153E)
5-year, 4-hour onsite, 24x7 coverage for hardware (UX156E)
5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UX159E)
5-year, 24x7 SW phone support, software updates (UX162E)
3 Yr 6 hr Call-to-Repair Onsite (UX163E)
4 Yr 6 hr Call-to-Repair Onsite (UX164E)
5 Yr 6 hr Call-to-Repair Onsite (UX165E)

Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

HP MSR 30-40 Router with VCX Connect Primary MIM, 8-port BRI-ST and 4-port FXS Modules (JD027A)

Ports	1 RJ-45 autosensing 10/100 port (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX); Duplex: half or full
	4 USB 2.0
	8 RJ-45 ISDN voice ports
	4 RJ-11 FXS ports
	2 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only
	2 SFP
	1 Compact Flash port

Physical characteristics	Dimensions	16.62(d) x 17.4(w) x 3.47(h) in. (42.21 x 44.2 x 8.81 cm) (2U height)
	Weight	30.34 lb. (13.76 kg) including bundle components

Mounting	VCX Connect Primary module slides into HP A-MSR 30 Series router MIM slot; A-MSR30 router mounts in EIA-standard 19 inch telco rack or equipment cabinet or table top (hardware included)

Environment	Operating temperature	41°F to 104°F (5°C to 40°C)
	Operating relative humidity	10% to 80%
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)

Electrical characteristics	Voltage	100-240 VAC
	Frequency	50/60 Hz

Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager; Telnet; HTTPS

Notes	Integrated IP Messaging Voice Ports; up to 30 simultaneous auto-attendant, music-on-hold, fax, or voicemail ports supported MSR 30-40 integrated voice gateway options:

- Supports up to a maximum of twenty-four (24) analog voice ports
- Supports up to a maximum of sixteen (16) ISDN voice ports
- Supports up to a maximum of five (5) E1 or T1 digital voice spans

Support for standalone VCX V7111, VCX V7122, MSR 20-xx, and MSR 30 Series analog, ISDN, and digital gateways

Technical Specifications

	Bundle includes MSR 30-40 router with VCX Connect MIM Primary, 4-port BRI-ST MIM (qty 2), and 4-port FXS MIM modules
Services	3-year, parts only, global next-day advance exchange (UX150E) 3-year, 4-hour onsite, 13x5 coverage for hardware (UX151E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UX154E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UX157E) 3-year, 24x7 SW phone support, software updates (UX160E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UX152E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UX155E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UX158E) 4-year, 24x7 SW phone support, software updates (UX161E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UX153E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UX156E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UX159E) 5-year, 24x7 SW phone support, software updates (UX162E) 3 Yr 6 hr Call-to-Repair Onsite (UX163E) 4 Yr 6 hr Call-to-Repair Onsite (UX164E) 5 Yr 6 hr Call-to-Repair Onsite (UX165E) Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

HP MSR 30-40 Router with VCX Connect Primary MIM, T1, 4-port FXO and 4-port FXS Modules (JD028A)

Ports		1 RJ-45 autosensing 10/100 port (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX); Duplex: half or full
		4 USB 2.0
		1 RJ-45 T1 port
		4 RJ-11 FXO ports
		4 RJ-11 FXS ports
		2 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only
		2 SFP
		1 Compact Flash port
Physical characteristics	Dimensions	16.62(d) x 17.4(w) x 3.47(h) in. (42.21 x 44.2 x 8.81 cm) (2U height)
	Weight	30.23 lb. (13.71 kg) including bundle components
Mounting		VCX Connect Primary module slides into HP A-MSR 30 Series router MIM slot; A-MSR30 router mounts in EIA-standard 19 inch telco rack or equipment cabinet or table top (hardware included)
Environment	Operating temperature	41°F to 104°F (5°C to 40°C)
	Operating relative humidity	10% to 80%
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
Electrical characteristics	Voltage	100-240 VAC
	Frequency	50/60 Hz

Technical Specifications

Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager; Telnet; HTTPS
Notes	Integrated IP Messaging Voice Ports; up to 30 simultaneous auto-attendant, music-on-hold, fax, or voicemail ports supported MSR 30-40 integrated voice gateway options:

- Supports up to a maximum of twenty-four (24) analog voice ports
- Supports up to a maximum of sixteen (16) ISDN voice ports
- Supports up to a maximum of five (5) E1 or T1 digital voice spans

Support for standalone VCX V7111, VCX V7122, MSR 20-xx, and MSR 30 Series analog, ISDN, and digital gateways
Bundle includes MSR 30-40 router with VCX Connect Primary MIM, 1-port T1 MIM, 24-Channel VPM, 4-port FXO MIM, and 4-port FXS MIM modules

Services

3-year, parts only, global next-day advance exchange (UX150E)
3-year, 4-hour onsite, 13x5 coverage for hardware (UX151E)
3-year, 4-hour onsite, 24x7 coverage for hardware (UX154E)
3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UX157E)
3-year, 24x7 SW phone support, software updates (UX160E)
4-year, 4-hour onsite, 13x5 coverage for hardware (UX152E)
4-year, 4-hour onsite, 24x7 coverage for hardware (UX155E)
4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UX158E)
4-year, 24x7 SW phone support, software updates (UX161E)
5-year, 4-hour onsite, 13x5 coverage for hardware (UX153E)
5-year, 4-hour onsite, 24x7 coverage for hardware (UX156E)
5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UX159E)
5-year, 24x7 SW phone support, software updates (UX162E)
3 Yr 6 hr Call-to-Repair Onsite (UX163E)
4 Yr 6 hr Call-to-Repair Onsite (UX164E)
5 Yr 6 hr Call-to-Repair Onsite (UX165E)

Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

Features

SYSTEM	
Ad hoc conferencing	Mute
Centralized management	Paging (analog external paging system)
Call detail records	Paging (group - zone)
Converged application based architecture	Paging (phone-to-phone), send beep with calling number
Emergency services	Paging (SIP external paging system)
End-to-end SIP signaling	Phone lock/unlock
Global directory	Privacy (block silect monitor/barge-in)
Global voice mail	Privacy (calling number suppression)
IP telephony	Serial calling (transfer with callback)
IP unified messaging	Silent monitor/barge-in
Linux operating system with additional security	Simultaneous Ringing
SIP back-to-back user Agent	Speed dial (personal)
Standards-based connectivity	Speed dial (system)
System redundancy	Transfer to voicemail (direct)
Web services SDK	Voicemail access
	Warmline (warm ring down circuits)

RESILIENCY

Technical Specifications

Redundancy, IP telephony
Redundancy, IP messaging
Redundancy, IP phones and media gateways
Redundancy, optional RAID
Redundancy, optional power supply

SYSTEM ADMINISTRATION
Add VCX licenses
Administration access control
Administration secure access
Audit trails and logging enhancements
Command Line Interface
Configuration back-up and restore
CPU, memory, I/O statistics
First-time configuration
First-time data import
Importing data
Installed component versions
Multiple administrators
Multiple language support
Online administrator help
Password support, administrator and system access
Provisioning; bulk moves, adds, changes
Remove previous software versions
Resetting a VCX server
Reset to defaults
Root directory access
Searches
Site configuration data
Software upgrades and rollbacks
Switch software versions
System information
User data LDAP synchronization: Lotus Domino running on IBM; Lotus Domino running on Windows® Server 2003, 2008; Microsoft Active Directory on Windows Server 2003, 2008; OpenLDAP on Linux
VCX service licensing
View VCX licensing data
Virtual numbers

QUALITY OF SERVICE
DSCP tagging
Dynamic jitter buffer
G.711 audio codec
G.729ab audio codec
Packet-loss rate
Pay-load length
QoS: 802.1p tagging (Prioritization)
QoS: 802.1Q tagging (VLAN)
Video codec
Video resolution

IP TELEPHONY ROUTING
Calendar bands
Call admission control
Call blocking
Daytime bands
Dialing prefixes
Direct Inward Dialing (DID)
Direct Outward Dialing (DOD)
DNIS (Dialed Number Identification Service)
E.164 numbering plan
External directory access
Holidays
NANP support
Network abbreviated dialing
Number translations
Outdial patterns
Patterns
Prioritization of trunks/routes
Private line service
Requestors
Routes
Route (plans and plan wizard)
Routing (alternate)
Routing (blacklist)
Routing (call coverage)
Routing (first available)
Routing (global directory)
Routing (IP to PSTN)
Routing (IP to IP)
Routing (least cost)
Routing (PSTN to IP)
Routing (source based)
Routing (VPN numbering plan)
Routing (white list)
Trusted end points
Weekday bands

IP MESSAGING ARCHITECTURAL
G.711
G.729
Global voicemail central server
Redundancy (intelligent mirroring)

IP MESSAGING
Message annotation
Message append
Message auto-delivery
Message auto playback
Message broadcast
Message delete
Message delete retrieval
Message delivery report

Technical Specifications

Wide-band audio codec

SECURITY
Network security policies
Operating system security
Secure access
Security: Locking MAC addresses to switches
User authentication methods

SYSTEM MANAGEMENT
Alarm notification
Audio performance reporting (local)
Auto discovery and management of IP devices
Intelligent Management Center Voice Service
Manager: centralized management
Maintenance, graceful shutdown of services
Operating system updates
Quality of service end of call reporting
SNMP MIB access
SNMP traps
SNMP v1, v3
System back-ups

REPORTING
Call detail records (reporting)
Call detail records (structure)

IP TELEPHONY CALLING
Anonymous all
Anonymous next
Anonymous call reject
Automatic call distribution (ACD)
ACD groups (call coverage)
ACD groups (calling groups)
ACD groups (CDR reporting)
ACD groups (circular)
ACD groups (feature interactions)
ACD groups (least-call count)
ACD groups (linear)
ACD groups (login/logout)
ACD groups (malicious call trace)
ACD groups (message-waiting indication)
ACD groups (most idle agent)
ACD groups (multisite)
ACD groups (real-time statistics)
ACD groups (view ACD group status)
Automatic line selection (Multiple system
appearance)
Bridged line appearance
Bridge line appearance (MWI)
Bridge line appearance (shared hold)
Busy lamp field

Message delivery to non-subscribers
Message deposit
Message deposit treatment options
Message folders
Message forward
Message notification
Message notification options
Message priority
Message record options
Message reply
Message retrieval
Message review
Message review options
Message review playback controls
Message save
Message schedule delivery
Message send
Message send treatment options
Mailbox login

GREETING
Default system greeting
Personal busy greeting
Personal extended absence greeting
Personal normal greeting
Personal scheduled greetings

DISTRIBUTION LIST
Administrator distribution lists
Personal distribution lists
System distribution lists

DIRECTORY
Directory search
Directory search (dial-by-name)

USER PRODUCTIVITY
Auto attendants
Bulletin board
Call back
Call monitor
Family mailbox
Force password change
Listen and manage voicemail messages from Web
user interface
Mailbox alias
Mailbox auto login
Mailbox full alert
Mailboxes for announcements
Mailboxes for forms (Q&A)
Mailboxes for information
Mailboxes for surveys

Technical Specifications

Call conference (drop)
Call conference (six-way calling)
Call conference (three-way calling)
Call coverage
Call drop
Call duration display
Call forward all (universal)
Call forward busy
Call forward no answer
Call forward out-of-coverage
Call forward programmable
Call forward reminder
Call forward remote
Call history (missed/answered/placed logs)
Call history display sort
Call hold
Call hold reminder
Call park/retrieve
Call park (button mapping)
Call park (fallback)
Call pick-up (directed)
Call pick-up (group)
Call restrictions (black list)
Call restrictions (blocking inbound)
Call restrictions (blocking outbound)
Call restrictions (call screening)
Call restrictions (forward to trunk)
Call restrictions (toll screening)
Call restrictions (transfer to trunk)
Call restrictions (white list)
Call return
Call transfer (attended)
Call transfer (fallback on transfer failure)
Call transfer (unattended)
Call transfer (restrictions)
Call waiting
Caller ID (called party)
Caller ID (calling party number)
Caller ID (calling party name)
Caller ID (privacy)
Camp on busy (automatic call back)
Class of service override
Customer account and billing codes
Delayed or no ringing
Directory (local user)
Directory (global user)
Distinctive ringing, ring patterns (different call types)
Distinctive ringing, selective ringing (ident-a-call)
Do not disturb
DTMF dialing
Feature codes
Feature access codes

Mailboxes for system bulletins/broadcasts
Message-waiting indication
Music-on-hold
Outline help
Personal address book
Personal auto-attendant
Privacy
Prompt bypass
Set-up assistant tutorial
Shortcut keys
User password change
User provisioning through TUI
User provisioning through Web
Virtual calling card
Zero out

FIND ME/FOLLOW ME
Find me/follow me
Find me/follow me call intercept

FAX MAIL
Electronic fax sending
Fax auto-delivery to email
Fax auto-delivery to fax machine
Fax delivery to fax machine
Fax message deposit
Fax message retrieval
Never-busy fax

EMAIL INTEGRATION
Client integration
Email auto delivery
Email integration
Email synchronization
Fax attachment in email (.tif or .pdf formats)
Unified inbox for Domino on Windows
Voicemail POP3/IMAP4 client integration

IP MESSAGING ADMINISTRATION
Administration of all parameters through X-terminal interface
Class of service administration
Company/division administration
Export mailbox/COS
Import mailbox/COS
IMAP SSLv3 support
IP messaging Web portal
Mailbox administration
Mailbox on-the-fly
Mailbox un-login
Multiple administration
Multiple language support

Technical Specifications

Forced account codes
Forward to mail
Hands-free support
Hotline (hot ring down circuits)
Hunt groups
Hunt groups (call coverage)
Hunt groups (calling group)
Hunt groups (circular)
Hunt groups (feature interactions)
Hunt groups (linear)
Hunt groups (login/logout)
Hunt groups (malicious call trace)
Hunt groups (message-waiting indication)
Hunt groups (multisite)
Hunt groups (view hunt group status)
Last number redial
Malicious call trace
Message-waiting indication (MWI), audio
Message-waiting indication (MWI), visual
Missed call indicator
Mobility (multisite hot desking)
Mobility (single-region hot desking)
Music on hold

Multiple permission levels
Pager templates
Send-user groups
Support for multi-language voicemail
Telephone user interface (native)
Telephone user interface (traditional)
Time zones
Upload audio files via Web interface
VPIM support

IP MESSAGING MANAGEMENT
System alarms
System backup
System restoration
System status

LANGUAGE SUPPORT
Chinese (Mandarin), Dutch, English (Australian, UK and US), French (Canadian and Parisian), German, Italian, Korean, Portuguese (Brazilian), Russian and Spanish (Castilian and LAT)

HP MSR 30-40 Router with VCX Connect Primary MIM, E1, 4-port BRI-ST and 4-port FXS Modules (JD029A)

Ports	1 RJ-45 autosensing 10/100 port (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX); Duplex: half or full
	4 USB 2.0
	1 E1 port
	4 RJ-45 ISDN voice ports
	4 RJ-11 FXS ports
	2 RJ-45 autosensing 100/1000 ports (IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 100BASE-TX: half or full; 1000BASE-T: full only
	2 SFP
	1 Compact Flash port

Physical characteristics	Dimensions	16.62(d) x 17.4(w) x 3.47(h) in. (42.21 x 44.2 x 8.81 cm) (2U height)
	Weight	30.23 lb. (13.71 kg) including bundle components
Mounting	VCX Connect Primary module slides into HP A-MSR 30 Series router MIM slot; A-MSR30 router mounts in EIA-standard 19 inch telco rack or equipment cabinet or table top (hardware included)	
Environment	Operating temperature	41°F to 104°F (5°C to 40°C)
	Operating relative humidity	10% to 80%
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
Electrical characteristics	Voltage	100-240 VAC
	Frequency	50/60 Hz

Technical Specifications

Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager; Telnet; HTTPS
Notes	Integrated IP Messaging Voice Ports; up to 30 simultaneous auto-attendant, music-on-hold, fax, or voicemail ports supported MSR 30-40 integrated voice gateway options:

- Supports up to a maximum of twenty-four (24) analog voice ports
- Supports up to a maximum of sixteen (16) ISDN voice ports
- Supports up to a maximum of five (5) E1 or T1 digital voice spans

Support for standalone VCX V7111, VCX V7122, MSR 20-xx, and MSR 30 Series analog, ISDN, and digital gateways

Bundle includes MSR 30-40 router with VCX Connect Primary MIM, 1-port E1 MIM, 32-Channel VPM, 4-port BRI-ST MIM, and 4-port FXS MIM modules

Services

3-year, parts only, global next-day advance exchange (UX150E)
3-year, 4-hour onsite, 13x5 coverage for hardware (UX151E)
3-year, 4-hour onsite, 24x7 coverage for hardware (UX154E)
3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UX157E)
3-year, 24x7 SW phone support, software updates (UX160E)
4-year, 4-hour onsite, 13x5 coverage for hardware (UX152E)
4-year, 4-hour onsite, 24x7 coverage for hardware (UX155E)
4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UX158E)
4-year, 24x7 SW phone support, software updates (UX161E)
5-year, 4-hour onsite, 13x5 coverage for hardware (UX153E)
5-year, 4-hour onsite, 24x7 coverage for hardware (UX156E)
5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UX159E)
5-year, 24x7 SW phone support, software updates (UX162E)
3 Yr 6 hr Call-to-Repair Onsite (UX163E)
4 Yr 6 hr Call-to-Repair Onsite (UX164E)
5 Yr 6 hr Call-to-Repair Onsite (UX165E)

Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

Features

SYSTEM	Paging (analog external paging system)
Ad hoc conferencing	Paging (group - zone)
Centralized management	Paging (phone-to-phone), send beep with calling
Call detail records	number
Converged application based architecture	Paging (SIP external paging system)
Emergency services	Phone lock/unlock
End-to-end SIP signaling	Privacy (block silect monitor/barge-in)
Global directory	Privacy (calling number suppression)
Global voice mail	Serial calling (transfer with callback)
IP telephony	Silent monitor/barge-in
IP unified messaging	- Simultaneous ringing allows for user mobility by
Linux operating system with additional security	ringing desk phone and cell phone
SIP back-to-back user Agent	Speed dial (personal)
Standards-based connectivity	Speed dial (system)
System redundancy	Transfer to voicemail (direct)
Web services SDK	Voicemail access
Direct SIP integration with Microsoft Lync and	Warmline (warm ring down circuits)
Exchange UM	ACD Agent licenses are assigned dynamically

Technical Specifications

ACD Agents can be automatically logged in

RESILIENCY

Redundancy, IP telephony
Redundancy, IP messaging
Redundancy, IP phones and media gateways
Redundancy, optional RAID
Redundancy, optional power supply

SYSTEM ADMINISTRATION

Add VCX licenses
Administration access control
Administration secure access
Audit trails and logging enhancements
Command Line Interface
Configuration back-up and restore
CPU, memory, I/O statistics
First-time configuration
First-time data import
Importing data
Installed component versions
Multiple administrators
Multiple language support
Online administrator help
Password support, administrator and system access
Provisioning; bulk moves, adds, changes
Remove previous software versions
Resetting a VCX server
Reset to defaults
Root directory access
Searches
Site configuration data
Software upgrades and rollbacks
Switch software versions
System information
User data LDAP synchronization: Lotus Domino
running on IBM; Lotus Domino running on
Windows® Server 2003, 2008; Microsoft Active
Directory on Windows Server 2003, 2008;
OpenLDAP on Linux
VCX service licensing
View VCX licensing data
Virtual numbers
Extensions and mailboxes can start with "0"
Selectively delete Future Delivery messages
Scheduled VCX backups
350x IP Phone Background/Screen saver Image
reset to factory defaults via web

QUALITY OF SERVICE

DSCP tagging
Dynamic jitter buffer
G.711 audio codec

IP TELEPHONY ROUTING

Calendar bands
Call admission control
Call blocking
Daytime bands
Dialing prefixes
Direct Inward Dialing (DID)
Direct Outward Dialing (DOD)
DNIS (Dialed Number Identification Service)
E.164 numbering plan
External directory access
Holidays
NANP support
Network abbreviated dialing
Number translations
Outdial patterns
Patterns
Prioritization of trunks/routes
Private line service
Routes
Route (plans and plan wizard)
Routing (alternate)
Routing (blacklist)
Routing (call coverage)
Routing (first available)
Routing (global directory)
Routing (IP to PSTN)
Routing (IP to IP)
Routing (least cost)
Routing (PSTN to IP)
Routing (source based)
Routing (VPN numbering plan)
Routing (white list)
Trusted end points
Weekday bands
Extensions and mailboxes can start with "0"

IP MESSAGING ARCHITECTURAL

G.711
G.729
Global voicemail central server
Redundancy (intelligent mirroring)

IP MESSAGING

Message annotation
Message append
Message auto-delivery
Message auto playback
Message broadcast
Message delete

Technical Specifications

G.729ab audio codec
Packet-loss rate
Pay-load length
QoS: 802.1p tagging (Prioritization)
QoS: 802.1Q tagging (VLAN)
Video codec
Video resolution
Wide-band audio codec

SECURITY
Network security policies
Operating system security
Secure access
Security: Locking MAC addresses to switches
User authentication methods

SYSTEM MANAGEMENT
Alarm notification
Audio performance reporting (local)
Auto discovery and management of IP devices
Intelligent Management Center Voice Service
Manager: centralized management
Maintenance, graceful shutdown of services
Operating system updates
Quality of service end of call reporting
SNMP MIB access
SNMP traps
SNMP v1, v3
System back-ups
Scheduled VCX backups
QoS MIB and license MIB enhancements for IMC
VSM

REPORTING
Call detail records (reporting)
Call detail records (structure)

IP TELEPHONY CALLING
Anonymous all
Anonymous next
Anonymous call reject
Automatic call distribution (ACD)
ACD groups (call coverage)
ACD groups (calling groups)
ACD groups (CDR reporting)
ACD groups (circular)
ACD groups (feature interactions)
ACD groups (least-call count)
ACD groups (linear)
ACD groups (login/logout)
ACD groups (malicious call trace)
ACD groups (message-waiting indication)

Message delete retrieval
Message delivery report
Message delivery to non-subscribers
Message deposit
Message deposit treatment options
Message folders
Message forward
Message notification
Message notification options
Message priority
Message record options
Message reply
Message retrieval
Message review
Message review options
Message review playback controls
Message save
Message schedule delivery
Message send
Message send treatment options
Mailbox login

GREETING
Default system greeting
Personal busy greeting
Personal extended absence greeting
Personal normal greeting
Personal scheduled greetings

DISTRIBUTION LIST
Administrator distribution lists
Personal distribution lists
System distribution lists

DIRECTORY
Directory search
Directory search (dial-by-name)

USER PRODUCTIVITY
Auto attendants
Bulletin board
Call back
Call monitor
Family mailbox
Force password change
Listen and manage voicemail messages from Web
user interface
Mailbox alias
Mailbox auto login
Mailbox full alert
Mailboxes for announcements
Mailboxes for forms (Q&A)

Technical Specifications

ACD groups (most idle agent)
ACD groups (multisite)
ACD groups (real-time statistics)
ACD groups (view ACD group status)
Automatic line selection (Multiple system appearance)
Bridged line appearance
Bridge line appearance (MWI)
Bridge line appearance (shared hold)
Busy lamp field
Call conference (drop)
Call conference (six-way calling)
Call conference (three-way calling)
Call coverage
Call drop
Call duration display
Call forward all (universal)
Call forward busy
Call forward no answer
Call forward out-of-coverage
Call forward programmable
Call forward reminder
Call forward remote
Call history (missed/answered/placed logs)
Call history display sort
Call hold
Call hold reminder
Call park/retrieve
Call park (button mapping)
Call park (fallback)
Call pick-up (directed)
Call pick-up (group)
Call restrictions (black list)
Call restrictions (blocking inbound)
Call restrictions (blocking outbound)
Call restrictions (call screening)
Call restrictions (forward to trunk)
Call restrictions (toll screening)
Call restrictions (transfer to trunk)
Call restrictions (white list)
Call return
Call transfer (attended)
Call transfer (fallback on transfer failure)
Call transfer (unattended)
Call transfer (restrictions)
Call waiting
Caller ID (called party)
Caller ID (calling party number)
Caller ID (calling party name)
Caller ID (privacy)
Camp on busy (automatic call back)
Class of service override

Mailboxes for information
Mailboxes for surveys
Mailboxes for system bulletins/broadcasts
Message-waiting indication
Music-on-hold
Outline help
Personal address book
Personal auto-attendant
Privacy
Prompt bypass
Set-up assistant tutorial
Shortcut keys
User password change
User provisioning through TUI
User provisioning through Web
Virtual calling card
Zero out

FIND ME/FOLLOW ME
Find me/follow me
Find me/follow me call intercept

FAX MAIL
Electronic fax sending
Fax auto-delivery to email
Fax auto-delivery to fax machine
Fax delivery to fax machine
Fax message deposit
Fax message retrieval
Never-busy fax

EMAIL INTEGRATION
Client integration
Email auto delivery
Email integration
Email synchronization
Fax attachment in email (.tif or .pdf formats)
Unified inbox for Domino on Windows
Voicemail POP3/IMAP4 client integration
Integration with Microsoft Exchange Unified Messaging

IP MESSAGING ADMINISTRATION
Administration of all parameters through X-terminal interface
Class of service administration
Company/division administration
Export mailbox/COS
Import mailbox/COS
IMAP SSLv3 support
IP messaging Web portal
Mailbox administration

Technical Specifications

Customer account and billing codes
Delayed or no ringing
Directory (local user)
Directory (global user)
Distinctive ringing, ring patterns (different call types)
Distinctive ringing, selective ringing (ident-a-call)
Do not disturb
DTMF dialing
Feature codes
Feature access codes
Forced account codes
Forward to mail
Hands-free support
Hotline (hot ring down circuits)
Hunt groups
Hunt groups (call coverage)
Hunt groups (calling group)
Hunt groups (circular)
Hunt groups (feature interactions)
Hunt groups (linear)
Hunt groups (login/logout)
Hunt groups (malicious call trace)
Hunt groups (message-waiting indication)
Hunt groups (multisite)
Hunt groups (view hunt group status)
Last number redial
Malicious call trace
Message-waiting indication (MWI), audio
Message-waiting indication (MWI), visual
Missed call indicator
Mobility (multisite hot desking)
Mobility (single-region hot desking)
Music on hold
Mute

Mailbox on-the-fly
Mailbox un-login
Multiple administration
Multiple language support
Multiple permission levels
Pager templates
Send-user groups
Support for multi-language voicemail
Telephone user interface (native)
Telephone user interface (traditional)
Time zones
Upload audio files via Web interface
VPIM support

IP MESSAGING MANAGEMENT
System alarms
System backup
System restoration
System status
Selective deletion of messages via web
Voice mail full return receipt support

LANGUAGE SUPPORT
Chinese (Mandarin), Dutch, English (Australian, UK and US), French (Canadian and Parisian), German, Italian, Korean, Portuguese (Brazilian), Russian and Spanish (Castilian and LAT)

Accessories

HP VCX Connect Unified Communications MIM on MSR Series accessories

Cables

HP X260 E1 BNC 75 ohm 3m Router Cable	JD175A
HP X260 E1 RJ45 3m Router Cable	JD509A
HP X260 E1 RJ45 BNC 75-120 ohm Conversion Router Cable	JD511A
HP X260 E1 BNC 20m Router Cable	JD514A
HP X260 E1 BNC 75 ohm 40m Router Cable	JD516A
HP X260 E1 RJ45 20m Router Cable	JD517A
HP X260 T1 Router Cable	JD518A

Power Supply

HP A-RPS800 Redundant Power System	JD183A

License

HP VCX Business IP Phone License E-LTU	JE427BAE
HP VCX Basic IP Phone License E-LTU	JE426BAE
HP VCX Third Party IP Phone License E-LTU	JE444BAE
HP VCX Business IP Phone License 50 Bundle E-LTU	JE332BAE
HP VCX Basic IP Phone License 50 Bundle E-LTU	JE329BAE
HP VCX Business IP Phone License 250 Bundle E-LTU	JE331BAE
HP VCX Basic IP Phone License 250 Bundle E-LTU	JE328BAE
HP VCX Entry/Analog Phone License E-LTU	JE425BAE
HP VCX IP Messaging Seat License E-LTU	JE301BAE
HP VCX IP Messaging Seat License 50 Bundle E-LTU	JC515BAE
HP VCX IP Messaging Seat License 250 Bundle E-LTU	JC514BAE
HP VCX Desktop Communicator Standalone Soft Phone License E-LTU	JE435BAE
HP VCX Desktop Communicator Outlook Edition Standalone Soft Phone License E-LTU	JE436BAE
HP VCX Desktop Communicator to Outlook Edition Upgrade Soft Phone License E-LTU	JE437BAE
HP VCX Desktop Communicator Soft Phone License 50 Bundle E-LTU	JE334BAE
HP VCX Desktop Communicator Outlook Edition Soft Phone License 50 Bundle E-LTU	JE336BAE
HP VCX Desktop Communicator Soft Phone License 250 Bundle E-LTU	JE333BAE
HP VCX Desktop Communicator Outlook Edition Soft Phone License 250 Bundle E-LTU	JE335BAE
HP VCX Convergence Center Client Standalone License E-LTU	JE434BAE
HP VCX ACD Agent License E-LTU	JE422BAE
HP VCX ACD 5 Agent License E-LTU	JE424BAE
HP VCX ACD 10 Agent License E-LTU	JE423BAE

Routers

HP A-MSR30-16 Router	JF233A
HP A-MSR30-16 PoE Router	JF234A
HP A-MSR30-20 Router	JF284A
HP A-MSR30-20 PoE Router	JF802A
HP A-MSR30-40 Router	JF229A
HP A-MSR30-40 PoE Router	JF803A
HP A-MSR30-60 Router	JF230A
HP A-MSR30-60 PoE Router	JF804A

Router Modules

Accessories

HP A-MSR 24-Channel Voice Processing Module	JD599A
HP A-MSR 32-Channel Voice Processing Module	JD598A
HP A-MSR Voice Co-processing Module	JD610A
HP A-MSR 1-port FXO SIC Module	JD559A
HP A-MSR 2-port FXO SIC Module	JD558A
HP A-MSR 1-port FXS SIC Module	JD561A
HP A-MSR 2-port FXS SIC Module	JD560A
HP A-MSR 2-port FXS/1-port FXO SIC Module	JD632A
HP A-MSR 2-port ISDN-S/T Voice SIC Module	JF821A
HP A-MSR 1-port E1 Voice SIC Module	JD575A
HP A-MSR 1-port T1 Voice SIC Module	JD576A
HP A-MSR 4-port E/M MIM Module	JD539A
HP A-MSR 2-port FXO MIM Module	JD543A
HP A-MSR 4-port FXO MIM Module	JD542A
HP A-MSR 4-port FXS MIM Module	JD553A
HP A-MSR 16-port FXS MIM Module	JF822A
HP A-MSR 4-port ISDN-S/T Voice MIM Module	JF837A
HP A-MSR 1-port E1 Voice MIM Module	JD565A
A-MSR 1-port T1 Voice MIM Module	JD566A
HP A-MSR 2-port E1 Voice MIM Module	JD567A
HP A-MSR 2-port T1 Voice MIM Module	JD568A
Power cords	
HP X290 1m RPS Cable	JD637A

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