Mitel SIP-DECT - Single Cell

Adding mobility in the office, simply and effectively

Key Features

- Single cell DECT mobility solution for MiCloud Connect service
- Provides mobility for users within specific areas of any office or building
- Supports up to 20 x phones from a single base station, enabling more users to be added without additional cabling for desktop phones
- Highly secure encrypted wideband voice technology with 5 x simultaneous calls
- Add up to 3 x repeaters for additional coverage



Mitel SIP-DECT – Single Cell provides on-site mobility for MiCloud Connect installations where users must be contactable wherever they are within the office.

The Mitel SIP-DECT – Single Cell solution is comprised of the Mitel RFP 12 IP Single DECT base station, up to 20 x Mitel 112 DECT Phones plus up to 3 x Mitel RFP 12 IP Repeaters, providing a fully integrated mobility solution for small offices or for specific areas within larger offices or buildings.

It gives users the freedom and mobility to move away from their desk within their office or adjacent offices. Working with MiCloud Connect user profile it provides an easily implemented mobility solution for small and medium business and enterprise markets.

The solution has a broad appeal across a number of vertical markets. Customers who require a low-cost cordless handset solution will appreciate the simplicity and the range provided by the DECT technology for personal area mobility. In the hospitality market, hotel guests will appreciate the convenience of additional cordless phone extensions in their rooms, while IT staff will appreciate the cost savings of servicing an entire room or suite of rooms with a single LAN drop.

The solution is ideal for users in retail markets, such as stores or cardealerships, health care locations, such as clinics, dental or medical offices, and small businesses who only require a small number of cordless handsets to augment their MiCloud Connect Service.

The cordless Mitel 112 DECT Phone is perfect for users who want the convenience of a cordless handset but need to be able to access more telephony features, such as caller ID, call transfer, conferencing, etc. while away from their desk.



Mitel 112 DECT Phone

FEATURES INCLUDE:

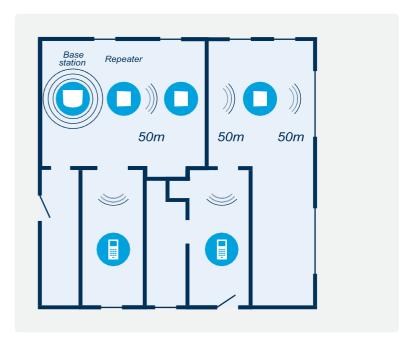
- · Color, illuminated 1.44" display (128 x 128) with auto dimming
- Wideband audio support (G.722) handset, headset and speakerphone
- 21 keys including dial pad, menu, navigation, softkeys, answer and end keys
- Two-line capability (e.g. answer call on one line, place that call on hold and initiate call on second line)
- Menu Key provides graphical options for Contacts, Settings, Messages, Call Logs, Connectivity and Audio features
- Configurable high-visibility LEDs for call indication, message waiting, missed calls and battery warning
- Settings allow users to adjust audio preferences, ringer melodies, telephony functions, call forwarding options, and to access system and network settings
- Message Key provides access to voice mail box and displays softkey prompts for voice mail functions
- Call Logs displays up to 20 call entries (all, missed, incoming, outgoing) with a date and time stamp
- Contacts List: Stores and manages personal contacts and allows speed dials for contacts to be created or groups of contacts to be created
- · Speakerphone for handsfree capability, with adjustable volumes
- · Five polyphonic ring tones
- Distinctive ringing based on Calling LineID
- Display features time and date, user name, connection status, battery status, call log and options softkeys
- Multiple languages support: English, French, Spanish, German, Italian, Dutch, Portuguese, Danish, Swedish, Turkish, Polish
- Supports Conferencing, Call Transfer, Call Waiting, Call Forwarding, Hold and many more SIP telephony features from the MiCloud Connect Service
- Hotel Mode provides call logs suppression, phone book lock, Settings lock, and suppresses tones and lights on Handset during upgrades or reboots
- Supports operating time of 7 hours talk / 75 hours standby
- · Ringer and speaker volume controls including mute
- · Low battery and low coverage audible warnings
- Standard headset support (3.5 mm jack)
- · Message waiting indicator (missed calls, voice mail)
- · Hearing Aid Compatible (HAC) handset
- · Firmware download over the air
- · Desktop charger included

MITEL RFP 12 IP SINGLE

- The Mitel RFP 12 IP Single acts as a DECT base station for the Mitel 112 DECT Phone. It provides IP DECT to SIP gateway functionality. It is a 6-slot base station designed for indoor deployment and provides superior HD-audio coverage in a given limited area.
- · Supports up to 20 Mitel 112 DECT Phones
- Five simultaneous calls, narrowband G.711 and wideband G.722 and four compressed G.729
- Supports up to three Mitel RFP 12 IP Repeaters
- 10BASE-T RJ45 Ethernet port
- Wall Mountable
- · Configurable via web based configuration interface

MITEL RFP 12 IP REPEATER

- The Mitel RFP 12 IP Repeater extends the range of the RFP 12 IP Single base station, with a maximum of 3 RFP 12 IP Repeaters being connected in a daisy-chain configuration.
 The RFP 12 IP Repeater can also be utilized wherever there is a need to increase limited coverage or improve reception in remote areas. Features include:
- Handling of 5 active narrowband calls simultaneously
- Handling of 2 active wideband calls simultaneously
- Supports automatic handover of calls between Repeaters
- · Maximum of 3 connected to the RFP 12 IP Single
- Worldwide DECT support
- DECT encryption
- · Wall Mountable



2 | Mitel

Mitel 112 DECT Phone Specifications

Display		
Туре	1.44" TFT color LCD (128x128), 64k colors	
Illuminated	Yes, backlit	
Number of lines	1 line status 6 lines for content (menus e.g.) 1 line for soft keys	
Number of characters per text line	16	
Character set	ISO 8859-1 or Unicode Standard 4.1	
LED Indicators		
Message Waiting	Yes, Red	
Missed Calls	Yes, Green	
Keys		
Number of Keys	21 keys including 4 navigation and a confirmation key	
Keypad	12 keys: 0 - 9, * and #	
Off hook	1 key: Off hook and call log access from idle	
On hook / power on/off	1 key: Power on/off	
OK-key/Confirmation-key	1 key: Confirmation key and menu key from idle	
Up/Down Navigation	Yes	
Left/Right Navigation	Yes	
Menu	Yes	
Side keys for volume	No	
Softkeys	2	
Keylock	Yes (long press at * key)	
Ringer mute	Yes (long press at # key)	
Voice mail key	Yes (long press at 1 key)	
Volume Up / Down	Yes	
Hardware Features		
Battery type	2pcs NiMH AAA, rechargeable batteries	
Battery capacity	600 mAh	
Speakerphone	Yes	
Headset connector	3.5mm standard	
Charging terminals	2 fixed	
Performance Features		
Talk time (NB):	Min. 8 hours	
Talk time (WB):	Min. 6 hours	
Standby time:	Min. 75 hours	
Charge time (0% - 100%)	Max. 10 hours	

Mitel 112 DECT Phone Specifications (cont.)

Audio features			
Handset Ringer volume	Yes, 6 levels		
Earpiece volume	Yes, 6 levels		
Headset volume	Yes, 6 levels		
Loudspeaker volume	Yes, 6 levels		
Adjustable ringer volume	Yes, 6 levels, including Silent		
Ringer melody	6 selectable, polyphonic		
Key tones	On/Off		
Coverage warning	On/Off		
MWI warning	On/Off		
Phone Mute	By long key press at # key		
Menu Settings / Indicators			
Battery indication	Yes		
Confirmation for menu selection	Yes		
Coverage warning	Yes		
Key click	Yes		
Voice mail message waiting	Yes – Icon based		
Ringer melody types – distinctive ringing	Depending on the type of the incoming call it is possible to select a different ringer		
Tringer melody types – distinctive mignig	melody. The following call types (call class) are distinguished: Internal Call VoIP Call		
Automatic encryption (secure calls)	Yes – according to DECT standard		
Call duration display	Yes		
	Note: Only displayed at the end of call		
Missed call log	Yes		
Call reject option	Yes		
Calling Line Identification (CLID)	Yes		
Calling name support	Yes – when matching with local phonebook or when received from the RFP 12 IP Single Base Station		
Date / time display	Yes		
Date / time stamp logged calls / messages	Yes		
Display update/refresh	When the DECT system provides (updated) display information then the handset will use this info to update the handset's display		
Headset connection (incl. microphone)	Yes		
Illuminated display	Yes		
Illuminated keyboard	No		
Key click on/off	Yes		
Language Support	English, French, Spanish, German, Italian, Dutch, Portuguese, Danish, Swedish, Turk Polish		
Loudspeaker for monitoring / handsfree	Yes		
Microphone mute	Yes		
Last number redial list	Yes, at least redial option from last called number		
Call log list	Last 20 numbers including all missed, outgoing and incoming calls.		
Pre-dial number preparation	Yes, edit before dial		
Shared phone book in base	Phonebook database with 3000 entries are stored in RFP 12 IP Single Base Station. U to 20 handsets can access and share the phonebook database.		
Recall / hold	Yes		
Removable belt-clip	No		
Ringer mute during call (silence)	Yes		
Ringer on / off	Yes		
Silent charging	Yes		
Trembler/Vibrator	No No		

Mitel 112 DECT Phone Specifications (cont.)

Yes		
8 (2 – 9 keys)		
Long key press on key 1		
After call established by hook off key (swap between earpiece and handsfree)		
Yes		
20, All, Answered, Dialed, Missed		
Name and Number		
50 entries		
Yes		
Yes (by soft-key)		
No		
Yes		
Yes		
2, only one on hold		
Yes (by left navigation key)		
Yes (by right navigation key)		
Yes		
Yes		
AM / PM or 24h		
Yes		
On /Off		
List: Software version, IPEI, MAC address		
Yes		
4000 4000 MUL (FMFA)		
1880 – 1900 MHz (EMEA)		
1920 – 1930 MHz (USA) (DECT 6.0)		
Auto detection in handset		
<250 mW (for USA < 140mW)		
1		
Yes, via air interface with operation during upgrade		
Yes		
Yes, G.722 (HD voice)		
G.726		
Yes		
EU DECT covering European Union countries		
US DECT covering United States and Canada		
AUS DECT covering Australia and New Zealand		
Note: The handset can be configured for EU, US or LATAM operation via software settings.		
Yes		
No		
No		
No No		

Mitel RFP 12 IP Single Specifications

Interfaces				
Power	Input: 100-240 VAC 50-60Hz (90 – 265	5 VAC)		
	Output Nom: 5VDC 1000mA			
	Type: Switch mode single or multi-plug s	olution		
	Plugs: UK, EU, US and AUS			
LAN Interface	Standard : 10BASE-T(IEEE 802.3 100	Mbps), Connector: RJ45 8/8		
Keys				
	1: Reset key, Page, and Restore Factory	Defaults		
LED Indicator				
	One Status LED (multi-colour, red, greer	n, orange)		
RF				
Frequency Bands	1880 – 1900 MHz (EMEA)			
	1920 - 1930 MHz (USA)	1920 – 1930 MHz (USA)		
	(Factory setting which can't be modifie	d after production)		
Output Power	250 mW or 140mW depending on cour	ntry version		
Antenna	Two antennas for diversity			
Software Updates				
Downloadable	Remote firmware update using HTTP,	HTTPS or TFTP		
Range (Handset to Base Station)				
Indoor	50 meters (150 feet)			
Outdoor	300 meters (900 feet) (EU)			
	250 meters (750 feet) (NA)			
Call Features				
Calls Supported	5 simultaneous calls supported			
Simultaneous Calls/Base	5 Wideband calls (G.722), 5 Narrowband	5 Wideband calls (G.722), 5 Narrowband calls (PCMA, PCMU, G.726) or 4 Compressor		
	calls (G.729)			
Simultaneous Calls/ Handset	2			
Call Features	Codec Negotiation	Calling line identity		
	Codec Switching	Outgoing call		
	Missed call notification	CallToggle/Swap		
	Voice message waiting notification	Incoming call		
	Date and Time synchronization	Line identification		
	Parallel calls	Multiple Lines		
	Call Hold	Multiple calls		
	Call Retrieve	Call identification		
	Call transfer unannounced	Calling Name Identification Presentation		
	Call transfer announced	(CNIP)		
	Conference (3-Party)	Calling Line Identification Presentation		
	Conference, Network	(CLIP)		
	Call Waiting Indication	Call Completed Elsewhere		
	Can training marcaners	Distinctive Ringing		
Central Phone Book	Yes			
- LDAP	Yes			
- XML		face		
- CSV	Yes, file load through web interface	Yes, remote or file load from web interface		
Do Not Disturb (DND)				
Call Forward		Yes Configurable from been or bandeet		
		Configurable from base or handset		
- CFU		Yes		
- CFNA		Yes		
- CFB	Yes			
Call Groups	Yes, 1-20 handsets/SIP account			
Hotel Mode	Yes (suppress call logs, no sound or lights during reboot, lock phone book, Settings lock, Audio settings lock, PIN protected, Contacts removed)			

Mitel RFP 12 IP Single Specifications (cont.)

CODECs		
G.711 PCM A-law & U-law	Yes	
G.722	Yes	
G.726	Yes	
G.729	A/AB (including VAD), max 4 codecs, G.729 license not included	
SIP		
RFC2327	SDP: Session Description Protocol	
RFC2396	Uniform Resource Identifiers (URI): Generic Syntax	
RFC2833	In-Band DTMF/Out of band DTMF support	
RFC2976	The SIP INFO method	
RFC3261	SIP 2.0	
RFC3262	Reliability of Provisional Responses in the Session Initiation Protocol (PRACK)	
RFC3263	Locating SIP Servers (DNS SRV, redundant server support)	
RFC3264	Offer/Answer Model with SDP	
RFC3265	Specific Event Notification	
RFC3326	The Reason Header Field for the Session Initiation Protocol	
RFC3311	The Session Initiation Protocol UPDATE Method	
RFC3325	P-Asserted Identity	
RFC3326	The Reason Header Field for the Session Initiation Protocol (SIP)	
RFC3489	STUN	
RFC3515	REFER: Call Transfer	
RFC3550	RTP: A Transport Protocol for Real-Time Application	
RFC3581	Rport	
RFC3842	Message Waiting Indication	
RFC3891	Replace header support	
RFC3892	The Session Initiation Protocol (SIP) Referred-By Mechanism	
RFC3960	Early Media and Ringing Tone Generation in the Session Initiation Protocol (SIP)	
RFC4475	Session Initiation Protocol (SIP) Torture Test Messages	
SIPS	Secure SIP	
In-band DTMF	No	
SRTP	Yes, packet authentication will limit the number of calls to 4	
SIP Registrations	max 20	
RTP Streams	max 10	
SIP Transport	UDP, TCP or TLS	
Redundant Server	Yes	
Web Server		
	Embedded web server, accessed using HTTP	
	Easy configuration of the phone, remote configuration via Management Interface	
	Password protection	

Mitel RFP 12 IP Single Specifications (cont.)

IP Features	
IPv4	Yes
IPv6	Hardware ready, software not included
TCP/IP/UDP	Yes
DHCP Support	Yes
DHCP Option	66, 120
Static IP	Yes
DNS srv	Yes
VLAN	Yes, 802.1p/q
Quality of service	Type of Service (ToS) including DiffServ Tagging, and QoS per IEEE 802.1p/q
TLS	Yes, 1.0
Certificates	Yes, X.509 (certificate not included)
TFTP	Yes, for firmware and configuration file download
HTTP Server	Yes
HTTP Client	Yes, for firmware and configuration file download
HTTPS	Yes, for firmware and configuration file download
SNTP	Yes, For internet clock synchronization
DECT	
DECT Handover	Yes, inter-cell handover for repeater support
CAT-IQ v1.0	HD audio or NB audio support
Repeater Support	Yes, up to 3 per Base Station
Intercom	No
DECT Encryption	Yes
DECT Authentication	Yes
Group TPUI support	Yes, for call groups
GAP compliant	No
CAT-IQ Compliant	No
Handset Registrations	20
Other Features	
IP Quality	Warning – Network outage, VoIP service outage
Jitter Buffer	Yes, adaptive
Packet Loss Concealment	Yes
Automatic DST	Yes
Tone Scheme	Country Dependent Tone Scheme
Provisioning	Yes
Re-direct Server	Yes
SIP Configuration	Yes, from web page or configuration file
Call Groups	Yes
Platform Minimum Software Req	
MiCloud Connect	Release 1908, SIP 5.2.1
	1/GIEdSE 1900, SIF 9.2.1
Profile Requirements	
MiCloud Connect	Supported on all service plans except voicemail only

Mitel SIP-DECT-Single Cell General Specifications

Physical			
Dimensions (L x W x D)			
Phone	13.4 x 4.2 x 2.3 cm		
Base Station	17.8 x 12.0 x 3.0 cm		
Repeater	12.0 x 13.0 x 3.0 cm		
Weight			
Phone (incl. Batteries)	111 g (3.9 oz)		
Base Station	173 g (6.1 oz)		
Repeater	132 g (4.7 oz)		
Environmental Conditions			
Operational	Temperature Humidity		
Storage	0°C to +40°C 95% at 29°C		
	-20°C to +65°C 95%at29°C		
Product Reliability			
Vibration (packed)	1) Free vibration: 1Hr (Random)		
	(2) Fixed vibration: 1Hr (3-axis each)		
	(3) Freq.: 5Hz		
	(4) Acceleration: 1.2g		
Drop Test (Carton)	(1) With full carton packaging		
	(2) 1 corner, 6 faces and 3 edges on hard wooden ground,		
	(3) height: 76cm under 9.5kg, 61cm if weight between 9.5kg to 18.5kg, 46cm if		
	weight between 18.5kg to 27.5kg, 30.5cm if over 27.5kg		
Drop Test (Gift Box)	(1) Floor Type: Concrete		
	(2) Height: 95 cm.		
	(3) Direction and times: One time for each face. One time for each corner		
Drop Test (Un-packed)	(1) 6 faces on hard wooden ground		
	Height: Handset = 1.7m, Charger/base= 1.0m		
	(2) If base station wall mounted, added test: Base 2 faces 1.50m		
Silkscreen and Paint Abrasion Test (Keypad/ Keytop)	RCA machine, 2 meters@170g		
Rubbing Test with Alcohol	Material: 75% - 99% alcohol and coarse cloth		
-	Loading: 450gm @ (12.5x12.5)mm2 with 100 cycles		

Mitel SIP-DECT – Single Cell General Specifications (cont.)

Regulatory Approvals		
Safety and CB Certificate	Canada / USA / EU / Australia and New Zealand: IEC60950-1:2005(2nd Ed.); AM 1:2009 EN60950-1:2006/ A1:2010 + A11:2009	
EMC	EU / Australia and New Zealand: EN 301489-1 V1.9.1 EN 301489-6 V1.3.1 CISPR 22	
Telecom	CANADA: CS-03 Part V (Hearing Aid Compatible) USA: FCC part 68 (Hearing Aid Compatible) US Americans with Disabilities Act (ADA) (HAC & Volume Control) Australia and New Zealand: AS/ACIF S040:2001 (Hearing Aid Compatible)	
Acoustic	EU: TBR10, Edition 3 Australia and New Zealand: AS/ACIF S004:2008	
Radio	Canada: RSS213, issue 2 USA: FCC Part 15, Subpart D EU / Australia and New Zealand: EN 301406 V2.1.1	
SAR	USA and Canada: FCC OET Bulletin 65, Supplement IC, RSS-102 issue 2 Australia and New Zealand: IEEE Standard C95.1-2005 IEC/EN 62209-1 IEC 62209-2 IEEE Std 1528-2003	

Part Numbers Rental SKU

Item	MRC_SKU	Description
Mitel 112 DECT Phone	55000011 (NA)	Phone, charging cradle with hard wired power supply adapter (the power supply adapter kit contains multiple, attachable, voltage connector plugs) and 2 x rechargeable NiMH batteries
Mitel RFP 12 IP Single base station	55000009 (NA)	Ethernet cable 5v Power supply adapter for base station (the power supply adapter kit contains multiple, attachable, voltage connector plugs, EU variant contains UK, EU and AUS Plug types)
Mitel RFP 12 IP Repeater	55000010 (Universal)	Power supply adapter for repeater (the power supply adapter kit contains multiple, attachable, voltage connector plugs)
RFP 12 Single Cell Base Station (EU)	55000012	

Mitel SIP-DECT – Single Cell General Specifications (cont.)

Purchase SKU

Item	Country	NRC SKU
RFP 12 Single Cell Base Station (NA)	Canada United States	51303911
RFP 12 Single Cell Base Station (EU)	Australia United Kingdom United States	51303912
112 DECT Phone, Universal (w/Charger)	Australia Canada United Kingdom United States	51303913
112 DECT Phone Chrgr PSU+4 Plugs (FRU)	Australia Canada United Kingdom United States	51303915
112 DECT Phone,Universal (w/o Chrgr)(FRU	Australia Canada United Kingdom United States	51303916
112 DECT Phone NiMH Rechargeable Battery	Australia Canada United Kingdom United States	51303917
RFP 12 Basestation 5v PSU+1 Plug NA FRU	Canada United States	51303920
RFP 12 Basestation 5v PSU+3 Plugs EU FRU	Australia United Kingdom United States	51303921
RFP 12 Repeater 12 Slot	Australia Canada United Kingdom United States	51303922
RFP 12 Repeater PSU + Plugs (Spare)	Australia Canada United Kingdom United States	51303923

