

# MITEL IP-DECT SYSTEM (GLOBAL)

## SCALABLE, ROBUST, MESSAGING-CAPABLE WIRELESS SOLUTION

The Mitel® IP-DECT System (Global) provides a highly scalable, messaging-capable solution with a portfolio of wireless phones to address a wide range of usage scenarios. It is ideally suited to verticals such as healthcare, manufacturing, industrial, security, and retail that require wireless voice and messaging services. Integrating directly with the Mitel Communications Director (MCD), the system supports both European and North American DECT standards and can be deployed globally.

## WORKFORCE MOBILITY IMPROVES CUSTOMER SERVICE AND BUSINESS EFFICIENCY

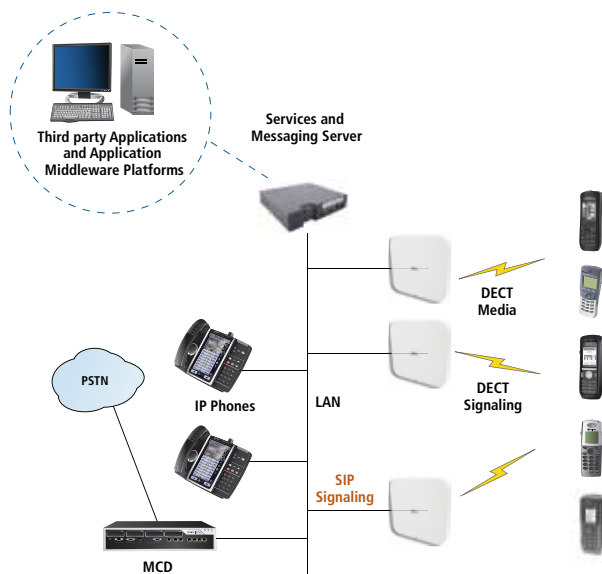
IP-DECT wireless technology enables businesses to extend the reach of their voice network to improve customer service in a cost-effective manner. Delivering relevant information in real-time to the responsible individual drives significant productivity benefits.

## COST-EFFECTIVE, HIGHLY SCALABLE SOLUTION

The option of widespread cellular phone usage can be very costly. The Mitel IP-DECT System (Global) enables the enterprise to control and manage their mobile communications costs on the premises. The IP-DECT System can deliver up to 2,000 handsets per installation via up to 1,000 LAN-connected radio base stations delivering comprehensive, cost-effective voice and messaging radio coverage. Requirements for even larger deployments are addressed via custom engineered solutions.

## SUPPORT FOR SAFETY AND SECURITY IN CHALLENGING ENVIRONMENTS

A range of wireless handsets is available to suit a broad range of scenarios including office, healthcare (solvent and moisture resistance), industrial (dust and shock resistance), and security (alarms and location).



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**MITEL IP-DECT BASE STATION**

The IP-DECT base solutions are deployed over the LAN, intergrating directly with the MCD to provide wireless access to mobile users within the desired coverage area.



**FEATURES INCLUDE:**

- Internal and external antenna variants (external antenna not available in North America)
- Connection to the MCD via LAN
- DECT radio interface
- Supports SIP over IP
- On-air synchronization
- Web interface for configuration and software upgrade
- Power-over-Ethernet (PoE) or local power supply
- Easy installation
- External LED status indication
- Roaming and handover
- Interactive messaging, alarm, and location (requires Mitel Wireless Services Messaging Gateway)
- Supports eight simultaneous calls
- Optional accessories include a power supply (if no PoE is available), a pole mounting set, and a protective external housing

**TECHNICAL SPECIFICATIONS**

**DECT FREQUENCIES**

- IPBS 2 Standard for use with DECT in the 880 – 1900 MHz frequencies
- IPBS 2 LA (Latin America) for use with DECT in the 1910 – 1930 MHz frequencies
- IPBS 2 US (North America) for use with DECT in the 1920 – 1930 MHz frequencies
- IPBS 2 Brazil for use with DECT in the 1910 – 1920 MHz frequencies

**PHYSICAL**

Dimensions	(l × w × d): 170 × 170 × 38 mm (including mounting bracket) (6.69 × 6.69 × 1.5 in)
Weight	400 g (0.88 lb)
Material	ABS molded plastic
Color	White
External	2 × MCX connectors

**POWER**

Power over Ethernet	IEEE 802.3af or local power supply
Operating voltage	21 to 56 Vdc
Power consumption	Typical 4 W, maximum 5 W

**NETWORK**

Ethernet	10/100baseT
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### VOICE OVER IP

Voice over IP	SIP with RFC 1889, RFC 2327, RFC 2396, RFC 2617, RFC 2782, RFC 2833, RFC 2976, RFC 3261, RFC 3262, RFC 3263, RFC 3264, RFC 3265, RFC 3311, RFC 3325, RFC 3326, RFC 3420, RFC 3515, RFC 3555, RFC 3680, RFC 3842, RFC 3891, RFC 3892, RFC 4568, RFC 3711, RFC 2246 and RFC 3280
Voice Encoding	G.711 A-law / $\mu$ -law (64 kbps) G.723.1 (5.3 kbps) G.729A and AB (16 kbps)

### RADIO

RF output power (e.r.p.), EU	Between 23 dBm and 28 dBm (with internal antenna)
RF output power (e.r.p.), US	Between 17 dBm and 21.6 dBm (with internal antenna)

### ENVIRONMENTAL

Operating temperature	-10 °C to +55 °C, (14 °F to 131 °F)
Storage temperature	-25 °C to +55 °C, (-13 °F to 131 °F)
Relative operating humidity	15 to 90%, non condensing
Relative storage humidity	5 to 95%, non condensing
Immunity to electromagnetic fields	10 V/m (EN61000-4-3)
Immunity to ESD	6 kV contact discharge and 8 kV air discharge (EN61000-4-2)

## MITEL WIRELESS SERVICES MESSAGING GATEWAY



The Mitel Wireless Services Messaging (WSM) Gateway enables the wireless handsets to function as two-way messaging and alarming devices, allowing integration to other enterprise systems or specialized applications to provide mobile workers access to real-time critical information. The WSM Gateway is a hardware-plus-embedded-software solution that includes one hardware base unit and two optional licenses, as described below.

#### WSM3 – BASE

- WSM3 hardware and power supply
- IP-DECT and Wi-Fi® (5624) support
- MCD (Mitel 3300 Controller) directory interface (searchable;

2,000 entry limit). Directory interface supported directly on IP-DECT R5 Basic stations if messaging capability not required

- Central Device Management (up to 100 users)
- Handset to Handset Text Messaging
- Web Messaging Tool (browser based; send to single handsets)

#### WSM3 – STANDARD LICENSE (BASE +)

- External Directory access (via LDAP)
- Messaging Acknowledgement
- Messaging to Groups
- Alarms Support
- PTT (Group Call) Support
- Enhanced Web Messaging Tool (bi-directional; priority; non-text alerts; groups)
- Two RS-232 external messaging interfaces (ESPA 4.4.4, TAP 1.8, or ALP)
- Ascom “Unite” Module Interconnect
- Single External Messaging Interface over IP (URL)
- Central Device Management (up to 2,500 users)

**WSM3 – OAP LICENSE (STANDARD +)**

- Third-Party Application Integration (over OAP)
- Advanced Interactive Messaging (over OAP)
- Call Setup (over OAP)
- Location (Alarm Triggered) Support (over OAP)
- OAP (Open Access Protocol) for integration to third-party applications

**SIMPLIFIED DEVICE MANAGEMENT  
MCD MANAGEMENT INTEGRATION**

The new Mitel 5603, 5604, 5607, and 5624 Wireless Phones (Wi-Fi) are configured as specific device types on the MCD, making the IP-DECT configuration more concise and making adds, moves, and changes simpler to manage from the Mitel Enterprise® Manager. To consolidate management of the IP-DECT solution, the IP-DECT Management Tool now launches from the Enterprise Manager, and SNMP alarms are sent from the IP-DECT system to Enterprise Manager.

**SIMPLIFIED DEVICE MANAGEMENT**

Simplified device management is compatible with the 5603, 5604, 5607, and 5624 Wireless Phones (Wi-Fi). The following features are available (depending on handset type):

- Overview of all devices
- Configuration of handsets
- Configuration of network connected chargers
- Templates for common settings for several or all devices
- Software upgrade (can be scheduled to specific date and time)
- Backup of all handsets’ individual settings, including contact list
- Download to handset of company phonebook

- Download to handset of contact list
- Download to handset of language file (for additional handset languages)
- Multiple devices can be handled simultaneously
- License handling for devices (upgrade device, move license)

**DEVICE MANAGEMENT**

The WSM3 enables centralized management of devices “over-the-air” or in conjunction with the 5603 / 5604 / 5607 Wireless Phone Handset Programmer or 5624 Wireless Phone Handset Programmer over the LAN. This capability includes both programming and software upgrading.

**PC-BASED DEVICE MANAGEMENT**

The WinPDM software in conjunction with either the 5603 / 5604 / 5607 Wireless Phone Handset Programmer or 5624 Wireless Phone Handset Programmer enables management of devices on a one-by-one basis. This includes both programming and software upgrading.

**DEVICE REPLACEMENT**

In conjunction with either the 5603 / 5604 / 5607 Wireless Phone Handset Programmer or 5624 Wireless Phone Handset Programmer, it is now possible to simply and quickly transfer the full configuration of a disabled 5603, 5604, 5607, or 5624 Wireless Phone handset to a replacement handset simply and quickly.

**TECHNICAL SPECIFICATIONS**

**HARDWARE REQUIREMENTS**

ELISE3

**PC REQUIREMENTS**

Installation and administration	Windows® Internet Explorer® 8.0 or later Sun Java Runtime Environment (JRE) 6 or later Mozilla® Firefox® 3.6 or later
Screen resolution	1024 x 768 pixels (minimum)

**LANGUAGE**

Installation GUI	English only
Operational GUI	English as standard, translations can be added

### CENTRAL PHONEBOOK

Number of entries (.csv import)	500 editable or 2,000 uneditable
Supported protocols	LDAP 3 and MCD .csv files import
Supported LDAP servers	Microsoft® Active Directory® in Windows® 2000 Server Active Directory in Windows Server 2003

### GROUP CAPACITY

Number of groups	30 with up to 15 users and 1 with up to 50 users
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### TIME SYNCHRONIZATION

Time server ability	Yes – can act as NTP sever
Automatic daylight saving adjustment	Yes
Date and time format	Adjustable to commonly used formats
Time sources	NTP server Local Clock

### MESSAGING

IP-DECT Max capacity	12,000 messages / hour
Wi-Fi Max capacity	12,000 messages / hour Maximum total capacity of messaging in WSM is 12,000 messages / hour
Supported special characters	Swedish, Norwegian, Danish, Finnish, and German language

### MESSAGE PRIORITY AND BEEP CODES

Priority	9 levels (requires 5604 or 5607 Wireless Phone Services license)
Beep Codes	7
Colored Messaging	Yes; can be mapped to beep codes (required 5604 or 5607 Wireless Phone Services License)

### LOCATION

Base Station	Yes (required 5604 or 5607 Wireless Phone Services license)
DECT Beacons	Yes (required 5604 or 5607 Wireless Phone Services license)

### SUPPORTED TELEPHONE SYSTEMS

DECT	IP-DECT
Wi-Fi	VoWiFi

One DECT system and Wi-Fi can run simultaneously (included with Standard License).

## ALARM HANDLER (INCLUDED WITH STANDARD LICENSE)

Triggers	Input activity from ELISE3, Data from portables, Alarm from portables
Max. No. of triggers	250
Actions	Messages with information about user identity, alarm type and descriptions Activation of outputs on ELISE3
Max. No. of actions	250
Location	Nearest base station location can be included in messages
Broadcast	Messages can be sent to all users in one transmission

## ADVANCED WEB MESSAGING TOOL (NETPAGE) (INCLUDED WITH STANDARD LICENSE)

Max. No. of predefined messages	30 common messages, predefined messages with 50 call numbers each max 60 kB in total 30 local messages, max. 20 kB in total
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## MESSAGING PROTOCOLS AND MESSAGING INTERFACES (INCLUDED WITH STANDARD LICENSE)

Supported protocols	ESPA 4.4.4 protocol, Ascom Line protocol, URL Messaging Protocol, TAP 1.8, URL protocol
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## OAP, OPEN ACCESS PROTOCOL (INCLUDED WITH OAP LICENSE)

OAP	Basic messaging, interactive messaging, alarm, and location
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## HARDWARE

### ELISE3

Embedded solid state server for Linux-based application.

- Embedded Linux® server
- Wall mountable (horizontally or vertically)
- Can be rack-mounted side-by-side and back-to-front in 19-inch chassis
- Management via LAN or via mini-USB device port

### PHYSICAL

Dimensions (h × w × d)	44 x 220 x 199 mm (1.73 x 8.66 x 7.83 in)
Weight	1520 g (3.34 lbs)
Material	Case: Sheet metal / plastic
Color	Light grey / Dark grey

### FUNCTIONAL

Supply voltage	100 – 240 V AC ± 20%, 12 – 24 V DC (-25% and + 20%)
Current consumption	Max 275 mA of AC input (100 – 200 V AC), Max 1A at DC input (12 V)

#### ENVIRONMENTAL

Operating temperature	0 °C to 40 °C (32 °F to 104 °F)
Storage temperature	-25 °C to 55 °C (-13 °F to 122 °F)
Relative humidity	30 – 85% (non-condensing)
Enclosure protection	IP 30
Immunity to electromagnetic fields	10 V/m
Immunity to ESD	6 kV contact discharge and 8 kV air discharge

#### MEMORY

RAM	256 MB
NAND	1 GB (for application)
Serial Data Flash	8 GB (for booting purposes)
SD Card (future use)	1 x slot for 1 GB SD card

#### INPUT / OUTPUT

Two serial ports	RS232 (modular jacks, RJ45)
One serial port	RS485 (screw terminals or modular jacks, RJ45)
Two LAN ports (one future use)	10baseT or 100baseT Ethernet (modular jack, RJ45)
USB ports	2 x USB Host port, 2.0 full speed, 1 x Mini USB_B Device port 2.0 full speed
Power Supply	1 x screw terminal for a 12 – 24 V DC external supply or 12 V CD lead battery maximum 10 Ah
Error relay output	Configurable – make / break operation (100 mA, 30 V DC) Used for fault actions and error indications
AUX outputs	Two galvanically isolated open collector outputs (100 mA, 30 V DC)
AUX inputs	Two digital inputs

#### ACCESSORIES

Front Mount Rack Kit	Brackets to rack mount
Rear Mount Rack Kit	Brackets to rack mount

**5603 / 5604 / 5607 WIRELESS PHONES CHARGERS AND PROGRAMMER**

**5603 / 5604 / 5607 WIRELESS PHONE RACK CHARGER**

- Wall Mountable
- Charges six 5603 / 5604 / 5607 Wireless Phones simultaneously
- Charging status indicated on handset display

**5604 WIRELESS PHONE BATTERY PACK CHARGER**

- Charges six batteries simultaneously for 5604 Wireless Phone
- Wall Mountable

**5607 WIRELESS PHONE BATTERY PACK CHARGER**

- Charges six batteries simultaneously for 5607 Wireless Phone
- Wall Mountable

**5603 / 5604 WIRELESS PHONE DESKTOP CHARGER**



For charging a single 5603 / 5604 Wireless Phone

- Charging status indicated on handset display
- Supports optional "In Charger" mode with absence indication
- Trickle and fast charge support

**5607 WIRELESS PHONE DESKTOP CHARGER**

- For charging a single 5607 Wireless Phone
- Charging status indicated on handset display
- Supports optional "In Charger" mode with absence indication
- Trickle and fast charge support

**5603 / 5604 / 5607 WIRELESS PHONE PROGRAMMER**



- Charging functionality of the 5603 / 5604 / 5607 Wireless Phone Desktop Charger
- Supports remote management
- Enables programming and upgrading of the phones on a one-by-one basis, using the PDM software (included) via USB
- Ethernet connection for centralized handset management via the WSM Gateway
- Supports easy replacement of telephones
- Supports 5604 and 5607 Wireless Phone optional license activation

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