

# Cordless DECT IP Multi-Cell System

The Yealink W90 DECT IP Multi-Cell System, consisting of three elements - a Virtual Integrator Manager (optional), a DECT Manager W90DM and a base station W90B, is designed to provide the organizations who require wireless coverage with the full ease of deployment. This DECT multi-cell system intends to create an extremely scalable and reliable solution for organizations of any size and shape. The VIM system supports up to 10 DM, 600 base stations, 2500 handsets and 2500 simultaneous calls. The W90 multi-cell system supports up to 1 DM, 600 base stations, 250 handsets and 2500 simultaneous calls, which ensures one call in each handset. It allows you to get rid of the limited wireless signal coverage of only one base station. Meanwhile, the system can work with Yealink W53H, W56H, W59R, W57R, W73H, W78H, WH62, WH63, CP930W, CP935W and DD Phone (T54W DD Phone is not applicable to VIM system) with seamless roaming and handover of the calls, making freely mobile communication in and between each zone achievable. Both W90B and W90DM join the modern, compact design with Yealink HD voice quality that sets free your ears and gives you an elaborate audio experience.



Up to 600 Base Stations



Compatible with Multiple Devices



DECT/ SRTP/TLS



Auto-P



Cloud Contact/ LDAP/XML/XSI



HD Audio



Wall Mountable



External Antenna

# Key Features and Benefits

### No Perception Upgrade

You can upgrade the W73H, W78H, W57R and W59R handsets with no perception. The upgrade of the handsets will be completed within two minutes. The channel will not be occupied during the firmware transmission, and the handsets can be used normally.

## Sync Level1 Base Backup

Yealink W90 DECT IP Multi-Cell System supports sync Level 1 base backup. When the Level 1 base goes offline, other bases in the system can be used as the backup Level 1 base, and the backup can be completed within one minute to replace the Level 1 Base so that the system can quickly maintain normal use.

## Headsets Registration

The Yealink W90 DECT IP Multi-Cell System supports the WH62/WH63 headset registration. It can be registered separately and used on W90B alone or paired with other handsets. After pairing, you can switch the handset and the headset to process the calls freely.

## Seamless Stability

The Yealink W90 DECT IP Multi-Cell System brings seamless stability. The rotatable external antennas ensure further signal range, industry-leading coverage, and flexible steering for complex areas, which truly saves amount and cost of bases in deployment with industry-leading coverage. Moreover, the Lan Sync guarantees stable roaming even in poor signal transmission environment or strong signal interference like warehouses with overcrowded cargos or several iron gates.

## Easy Deployment

The Yealink W90 DECT IP Multi-Cell System provides easier and faster setup for users: the DECT Deployment Toolkit for quick base location, IP discovery tool for quickly getting IP of DM, and auto sync level for self-organizing network without manual operation. Instead of complex steps, it takes less time from deployment to daily management for large system.

## Wide Coverage

Available for 10 DM, 600 bases, 2500 handsets and 2500 parallel calls, the Yealink W90 DECT IP multi-cell system is tailored for large space and multi-locations & bases, delivering unified communicating solution especially for warehouses, hospitals, hotels, supermarkets chains, cruises, authorized car dealerships, offices, retail formats, etc. Virtual machines and more bases will be supported in the future, boarding the coverage once more.

# Full Scenarios

The Yealink W90 DECT IP Multi-Cell System supports various devices: W53H, W56H, W57R, W59R, W73H, W78H, CP930W, CP935W, DD Phone, which definitely matches different employee roles and full scenes communicating demand from mobile, desk to conference with flexible scalability.

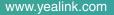
## Multiple Phone Books

The Yealink W90 DECT IP multi-cell system offers easy access to multiple phone books, including Local Directory, Remote Phonebook, LDAP, and XML Phonebook. Additionally, it is broadly compatible with PBX contacts.

- Support Air and LAN synchronization
- · Seamless handover and roaming
- Up to 10 DM
- Up to 600 base stations
- Up to 2500 handsets
- Up to 2500 SIP accounts
- Up to 2500 parallel calls
- Support XML/LDAP/Remote Phonebook
- Support XSI Directory/XSI Call Log
- External antenna, DECT radio coverage up to 50m indoors and 300m outdoors
- DECT technology:

Yealink DECT technology is based on CATiq2.0, which focuses on high-quality Audio VoIP (wideband), and low-bitrate data applications. However, we are not compatible with any third-party DECT devices (base station, handset, etc.).

- Support Opus
- Support SRTP/SIPS/TLS, LDAP(s) and HTTPS
- Support PoE
- Support IPv6
- Compatible with Yealink W57R/W59R/W56H/ W53H/W73H/W78H, CP930W, CP935W and DD Phone





# **Specifications**

### **Phone Features**

- · Sync over the Air and LAN (Seamless handover and roaming)
- · Each VIM System
  - Up to 10 DM
  - Up to 600 base stations
  - Up to 2500 handsets
  - Up to 2500 VoIP accounts
  - Up to 2500 simultaneous calls
  - Up to 8 WB (4 active handsets) calls per base
  - Up to 8 NB calls per base
- Each W90 Multi-Cell System
  - Up to 60 base stations
  - Up to 250 handsets
  - Up to 250 VoIP accounts
  - Up to 250 simultaneous calls
  - Up to 8 WB (4 active handsets) calls per base
  - Up to 8 NB calls per base
- Up to 2 simultaneous calls per handset
- Call hold, call transfer, 3-way conference
- Switching between calls
- Call waiting, mute, silence, DND
- Caller ID with name and number
- Anonymous call, Anonymous call rejection
- Call forward (always/busy/no answer)
- Speed dial, voicemail, redial
- Message Waiting Indication (MWI)
- Music on hold (server-based)
- Local phonebook for up to 100 entries per hand-
- Remote phonebook/LDAP/XML phonebook
- Phonebook search/import/export
- Call history (all/missed/placed/received)
- Reset to factory, reboot
- Keypad lock, emergency call
- Broadsoft directory, BroadSoft call log
- Broadworks feature key synchronization

- Shared Call Appearance (SCA)
- · XML browser
- IPUI registration
- · User access level
- DM backup (W90 multi-cell system)

### Management

- Auto-provision via TFTP/FTP/HTTP/HTTPS/RPS
- · Auto-provision with PnP
- · Handset upgrade: OTA (Over-The-Air)
- · Configuration: browser/phone/auto-provision
- · Trace package and system log export

#### **Audio Features**

- · Full-duplex speakerphone
- · Hearing Aid Compatibility (HAC) compliant
- · Wideband codec: Opus, AMR-WB (optional), G.722
- Narrowband codec: AMR-NB (optional), PC-MU(G.711µ), PCMA(G.711A), G.726, G.729, G.729A, iLBC
- · VAD, CNG, AGC, PLC, AJB

## **Network Features**

- SIP v1 (RFC2543), v2 (RFC3261)
- SNTP/NTP
- VLAN (802.1Q and 802.1P)
- 802.1x, LLDP
- · STUN Client (NAT Traversal)
- · UDP/TCP/TLS
- IP assignment: static/DHCP
- · Support outbound proxy server backup

## Security

- Open VPN
- Transport Layer Security (TLS1.0/TLS1.2)
- · HTTPS (server/client), SRTP
- · Digest authentication

- Secure configuration file via AES encryption
- Support SHA256/SHA512/SHA384

## DECT

- · Frequency bands: 1880-1900 MHz (Europe), 1920-1930 MHz (US) 1902-1906 MHz (TH), 1910-1920 MHz (BR)
- · DECT Standards: CAT-iq2.0

#### Interface

- 1 x RJ45 10/100M Ethernet port
- · Power over Ethernet (IEEE 802.3af), Class 1

### Physical Features

- · Indoor Range: 30 m-50 m (The ideal distance is 50
- Outdoor Range: 300 m (in ideal conditions)
- Wall mountable
- Three LED indicators on W90DM/W90B:
  - 1 x LAN (Power Indicator & Network Status) LED
  - 1 x Role LED
  - 1 x DECT LED
  - External Yealink AC adapter: AC 100-240V Input and DC 5V/1.2A Output
  - Color: Pearl White
  - Dimension: 134 mm x 100 mm x 28 mm
  - Operating humidity: 10-95%
- Operating temperature: -10 to +45 °C (+14 to 113 °F)
- Storage temperature: -30 to +70 °C (-22 to +158

## Package Features

- Package contents:
  - W90DM/W90B
- Expansion Screws
- Quick Start Guide
- Power Adapter (optional)
- Qty/CNT: 10 PCS
- Giftbox size: 158 mm x 203 mm x 63 mm
- · Carton meas: 420 mm x 338 mm x 167 mm
- N.W: 2.8 kg
- G.W: 3.4 kg

# CE FC S



Compliance

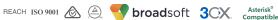






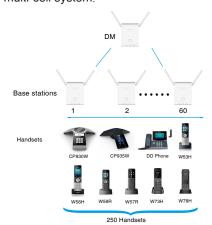




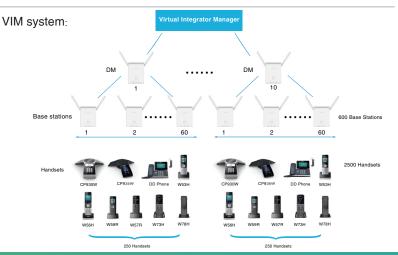




# W90 multi-cell system:



250 Handsets





## **About Yealink**

Yealink (Stock Code: 300628) is a global-leading provider of Unified Communication & Collaboration Solutions specialized in video conferencing, voice communications, and collaboration, dedicated to helping every person and organization embrace the power of "Easy Collaboration, High Productivity".

With best-in-class quality, innovative technology, and user-friendly experiences, Yealink is one of the best providers in more than 140 countries and regions, ranks No.1 in the global market share of IP Phone, and is the Top 5 leader in the video conferencing market (Frost & Sullivan, 2021).

For more information about Yealink, click here.

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# **Technical Support**

Visit Yealink WIKI (http://support.yealink.com/) for firmware downloads, product documents, FAQ, and more. For better service, we sincerely recommend you to use Yealink Ticketing system (https://ticket.yealink.com) to submit all your technical issues.



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