

## Specifications

### General Specification

Frequency Range	UHF:400-480MHZ PMR446
Channel Capacity	32CH
Channel Spacing	Analog : 12.5KHz/25KHz Digital : 12.5KHz
Operation Temperature	-25°C ~ + 60 °C
Operation Voltage	7.5VDC
Antenna Impedance	50Ω
Microphone Impedance	2.2KΩ
Frequency Stability	±1.5 ppm
Battery Capacity	Li-ion DCT 4V 1600mAh
Dimension <small>(height*width*thickness)</small>	108.4mm*53.6mm*31.6mm
Weight	130.25g(radio body) 220.4g(with battery and antenna)

### Receiver

Sensitivity(12dB SINAD)	≤-121dBm @25KHz ≤-121dBm @12.5KHz
SNR(Signal-To-Noise Ratio)	≥45 dB @25KHz ≥40 dB @12.5KHz
Adjacent Channel Selectivity	≥65 dB @25KHz ≥60 dB @12.5KHz
Intermodulation	≥60 dB @25KHz ≥55 dB @12.5KHz
Spurious Response Rejection	≥65 dB
Audio Output Power	≥1000 mW
Sensitivity(digital)	0.18μV/BER5%
Rated Audio Distortion	≤ 5%

• All specifications are subject to change without notice due to continuous development.

### Transmitter

RF Power	H : 4 W L : 1.5 W PMR446 : 0.5W
FM Modulation	25K/16KΦF3E 12.5K/8KΦF3E
4FSK Digital Modulation	12.5KHz Data7K60FXD 12.5KHz Data and Voice 7K60FXW
Digital Vocoder Type	AMBE++
Digital protocol	ETSI-TS102 361-1,-2
Harmonic	≥ 70 dB
SNR (Signal-to-Noise Ratio)	25K: ≥45 dB 12.5K: ≥40 dB
Rated Radio Distortion	≤5%
Max.Frequency Deviation	25K: ≤5 kHz 12.5K: ≤2.5 kHz

**ABELL**<sup>®</sup>  
DMR Solution Specialist



## A420T

### Commercial DMR Radio

- Super High Cost-Effectiveness
- Super Long Stand-by Time
- Super Reliable for Daily Use



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Dealer Area

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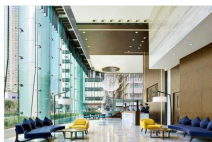
## Application



Shopping mall



Property management



Hotel



Cafeteria



Construction



Manufacturing

## Technical Highlights

### Dual mode:digital & analog(smooth transition)

Supports both digital and analog modes, compatible with existing analog systems, ensuring a smooth transition from analog to digital products.

### Ultra long battery life

Ultra-long standby time, no need to charge or replace battery frequently, 76 hours standby time, by 5-5-90 duty, usage time - analog: 15.9 hours, digital: 24.9 hours.

### Voice encryption function

Provides voice encryption functions for the privacy of business users' calls.

### Voice announcements

Support voice broadcast of channel number, power, battery capacity, etc., easy for users to understand the current channel and aware of low power, timely charge.

### Channel scan

Supports analog and digital channels scanning individually or with each other

### Emergency alarm

Various alarm modes: siren only (local alarm), normal (remote alarm) and secret alarm (no local siren, remote alarm secretly)

### DMR mode

Support group call, individual call.

### Transmit authority

The same frequency group can set the transmitting authority by choosing channel free, color code free, or sub-tone free (i.e., the channel is busy and transmitting is not allowed during the reception period, so you need to wait) to improve the efficiency of the call.

## Standard Accessories



Charger Base  
BC-51

Power Adapter

Li-ion battery  
AB-L1642 1600mAh

Belt clip

Antenna

Hand strap

## Optional Accessories



6-Way Power Supplier  
CA-6

Earphone  
AE-HS-T02

Short Antenna

Speaker Microphone  
AM-MS-T