

## Specifications

General Specification	
Frequency Range	VHF:136-174MHz UHF:400-480MHz 350-400MHz 450-520MHz
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 DC7.4V 2200mAh
Standby Time	68 hours( 2200mAh)
Dimension (height*width*thickness)	118.5mm*53.8mm*31mm
Weight	138.5g(radio body) / 268.4g(with battery and antenna)
IP Rate	IP56

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


Receiver	
Sensitivity(12dB SINAD)	25Ks:122dBm 12.5Ks:122dBm
SNR	25Ks:45 dB 12.5Ks:40 dB
Adjacent Channel Selectivity	25Ks:65 dB 12.5Ks:60 dB
Intermodulation	25Ks:60 dB 12.5Ks:55 dB
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.

## New Generation, Higher Performance

# A520T

Economical DMR radio

 Standby time increased by 86.7%

 Volume increased by 100%



**ABELL INDUSTRIES CO., LTD**  
Website:www.abell.com.cn E-mail:sales@abell.com.cn

Dealer Area

**RadioStanice.cz**  
RCS Brno - radiostanice.cz, a.s.  
Přestávka 304/63 602 00 Brno  
☎ +420 548 216 942  
✉ obchod@radiostanice.cz



## Super Loud, Long Endurance, Short Delay, High Reliability

### Super loud

With the new sound cavity and circuit design, the A520T has clear and loud voice even in noisy environment, twice as loud as the previous model A520T. (Data provided by ABELL Laboratory)

### Long endurance

Low power consumption design, with 7.4V 2200mAh large-capacity lithium battery, standby time is up to 81 hours, 86.7% increased comparing with previous, digital 5-5-90 test battery life can be 27.4 hours, 50% improved comparing with previous, easily cope with staff who need to dispatch and command for a long time. (The data is calculated according to the general standard formula)

### Short delay, quick response

The new optimized circuit design, A520T go online faster, with lower latency, and fast communication without losing words.

### High reliability

Full Al-alloy chassis, PC+ABS housing, equipped with a full PC1414 GE formula plastic battery shell, greatly improves the drop and pressure resistance of the radio. IP55 rate improves the rainproof performance.

### Dual mode (digital & analog)

Smooth transition from analog to digital.

### Voice encryption

Voice encryption and provide privacy protection for users' calls.

### Voice broadcast

Support channel and battery power level announcements, easy to know the current channel number and real-time battery level for timely charging.

### TDMA 2 slots at direct mode

2 slots of 1 frequency can be used to 2 talk groups, reduce user frequency application and usage fees.

### VOX (hands free)

Specific for users who are not available to push PTT key to talk, with the VOX feature user can activate the PTT by voice directly, without pressing PTT key.

## Application



Shopping mall



Security



Hotel



Logistics and warehousing



Manufacturing



Construction

## Standard Accessories



## Optional Accessories

