



## BD5 *i* SERIES BUSINESS DIGITAL RADIO



SIMPLE, ROBUST, CLEAR-VOICE



Hytera's BD5i series two-way radio is the compact device that provides professional communications and easily operated. Today, communication tools are the key to improved efficiency. When we ask for clear voice, it means a reliable talk, easy-to-hear and understand. Long battery life helps you maintain control. A rugged and robust device takes the worry out of communicating. High-performance but simple operation will make everything go easy.

Hytera understands customers' requirements and meets them all in one. With lightweight, easy-operation, excellent performance, long battery life and reliability. We redefine a business radio using Hytera digital technology and quickly responding to what you need.

### GREAT PERFORMANCE

With innovative design, BD5i series has better performance than analog radios. Excellent reception ability makes talk range further extended. DMR digital radios with good performance and negligible interference, provide stable communication.

### RUGGED AND RELIABLE

BD502i/BD552i is designed and tested to meet Military Standards 810G, including temperature shock, vibration, high & low temperature and humidity. IP54 dust and water-proof design guarantees the reliability in different environments. Based on TDMA technology, the radio can work longer, up to 22 hours in digital mode.

### CLEAR VOICE

With digital encoding and correction technology, human voice is transmitted clearer without noise, even over greater distance. This is a new experience of improved audio quality.



## PROFESSIONAL AND SIMPLE TO USE

### **A/D** ANALOG & DIGITAL DUAL MODES

BD502i/BD552i can support both analog and digital modes on the same hardware. You can switch between two operation modes easily and it helps you to communicate with analog radios.

### **↔** ANALOG & DIGITAL AUTO DETECT

BD502i/BD552i can detect the signal type when receiving a call, then automatically switches between analog mode and digital mode. During the call hang time, user can reply by using the push-to-talk. This is migration technology from analog to digital.

### **📶** EXTENDED TALK RANGE

Based on Hytera innovative technology, your talk range is extended.

### **🕒** LONG WORKING TIME

Based on TDMA technology, BD5i series in digital mode can work upto 16 hours @ 1500mAh or 22 hours @2000mAh in 5-5-90 mode.

### **🎤** CLEAR VOICE

Excellent audio quality comes from the DMR digital technology, which makes communication more reliable.

### **🛡️** RELIABLE AND DURABLE

BD502i/BD552i is compliant with MIL-STD-810G and IP54.

### **⚡** ANTI-INTERFERENCE

Adopted digital encoding and error correcting module, BD5i series has the ability to avoid signal interference on the same frequency.

### **DMR** DMR SIGNALING

With DMR signaling, transmitting group call, private call and all call with PTT ID becomes quite easy.

### **📶** REPEATER OPERATION MODE

Use a DMR Tier II repeater to extend your communication range.

### **🗨️** VOICE ANNOUNCEMENT (only for BD502i)

Channel number announcement helps you to switch channels quickly and correctly, even in operations with low visibility.

### **🎧** VOX





This feature allows you to activate the radio microphone via your voices volume, and frees your hand from PTT.

### **🔄** SCANNING




















Allow BD5i series listening to communication activities on other channels.

## ACCESSORIES

### STANDARD ACCESSORIES

					
<p><b>AN0435W09</b> Whip Antenna, 400-470MHz, ① 16cm</p>	<p><b>BL1506</b> 1500mAh Li-ion battery</p>	<p><b>CH10L23</b> BD5i standard drop in single unit charger</p>	<p><b>BC08</b> belt clip</p>	<p><b>RO03</b> Nylon hand strap</p>	<p>power adapter input: 100-240VAC, output: 12VDC/1A  US/UK/AU/EU/CHINA/JAPAN /KOREA</p>

### OPTIONAL ACCESSORIES

				
<p><b>EHM15</b> D-style earpiece with in-line PTT &amp; MIC VOX-switch</p>	<p><b>EHM18</b> C-style earpiece with in-line PTT &amp; MIC VOX-switch</p>	<p><b>ESM12</b> Ear-bud with PTT on MIC VOX-switch</p>	<p><b>EAM12</b> Ear-bud with PTT on MIC VOX-switch</p>	<p><b>EAM13</b> 2-wire monitoring earpiece VOX-switch</p>
				
<p><b>ACM-01</b> PTT&amp;MIC-only with 3.5mm jack IP54</p>	<p><b>ES-01</b> Receive-only ear-bud</p>	<p><b>ES-02</b> Receive-only monitoring earpiece</p>	<p><b>EH-01</b> Receive-only C style earpiece</p>	<p><b>EH-02</b> Receive-only earhook speaker</p>
				
<p><b>PC76</b> data programming cable</p>	<p><b>SM08M3</b> Remote speaker microphone with 3.5mm audio jack</p>	<p><b>SM26M1</b> ① Remote speaker microphone IP54 with 2.5mm audio jack</p>	<p><b>LCBN13</b> Universal Nylon Chest Pack</p>	<p><b>NCN011</b> Nylon carrying jacket</p>
				
<p><b>BL2018</b> 2000mAh Li-ion battery</p>	<p><b>MCL19</b> BD5i multi-unit load</p>	<p><b>AN0435H13</b> Stubby antenna, 400-470MHz, ② 9cm</p>	<p><b>CHV09</b> Vehicle adapter (Input: 11-25V DC, Output: 12V DC &amp; 1A)</p>	

① SM26M1 can be used with earpieces EAS03,EHS17/18,ESS10.

② AN0435H13: 400-470MHz, 9cm AN0141H06: 136-147MHz, 17cm AN0167H06: 160-174MHz, 17cm AN0153H08: 147-160MHz/1575MHz, 12cm  
AN0435W09: 400-470MHz, 16cm AN0153H07: 147-160MHz, 17cm AN0160H13: 146-174MHz, 15cm AN0167H07: 160-174MHz/1575MHz, 12cm

## SPECIFICATION

General	
Frequency Range	UHF:400-470MHz VHF:136-174MHz
Channel Capacity	BD502i: 48, BD552i: 256
Capacity area	BD502i: 3, BD552i: 16
Channel Spacing	25/12.5KHz
Operating Voltage	7.2V
display	BD502i without display BD552i with display (0.91")
Battery	1500mAh (Li-Ion) 2000mAh (Li-Ion)
Battery Life (5/5/90)	Analog/Digital: 12/16 hours (1500mAh) 16/22 hours (2000mAh)
Weight	BD502i: 240g, BD552i: 250g (With AN0435W09 and BL1506)
Dimensions	BD502i: 108x54x28mm BD552i: 110x59x30mm
Frequency Stability	±0.5ppm
Antenna Impedance	50 $\Omega$
receiver	
Sensitivity (Digital)	0.22 $\mu$ V / BER 5%
Sensitivity (Analog)	0.22 $\mu$ V (Typical) (12dB SIN AD) 0.4 $\mu$ V (20dB SIN AD)
Adjacent Selectivity TIA-603	60dB@12.5KHz/70dB@25KHz
Spurious Response Rejection	TIA-603 70dB @ 12.5/25KHz
Inter modulation	TIA-603 65dB @ 12.5/25KHz
Hum&Noise	40dB@12.5KHz 45dB@25KHz
Rated Audio Power Output	0.5W
Rated Audio Distortion	3%
Audio Response	+1--3dB
Conducted Spurious Emission	<-57dBm

transmitter	
RF Power Output	VHF Highpower: 5W VHF Low power: 1W UHF High power: 4W UHF Low power: 1W
FM Modulation	11K0F3E@12.5KHz 16K0F3E@25KHz
4FSK Digital Modulation	12.5KHz Data Only: 7K60FXD 12.5KHz Data & Voice: 7K60FXW
Conducted/Radiated Emission	-36dBm <1GHz, -30dBm >1GHz
Modulation Limiting	±2.5KHz@12.5KHz ±5.0KHz@25KHz
FM Hum & Noise	40dB @ 12.5KHz 45dB @ 25KHz
Adjacent Channel Power	60dB@12.5KHz, 70dB@25KHz
Audio Response	+1--3dB
Audio Distortion	3%
Digital Vocoder Type	AMBE+2 TM
Digital-Protocol	ETSI-TS102 361-1,-2,-3

Environmental	
Operating Temperature	-30 $\circ$ ~ +60 $\circ$
Storage temperature	-40 $\circ$ ~ +85 $\circ$
ESD	IEC 61000-4-2 (Level 4) ±8kV (Contact) ±15kV (Air)
Dustproof & Waterproof	Standard IP54
Humidity	Per MIL-STD-810 G Standard
Shock & Vibration	Per MIL-STD-810 G Standard

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



### Hytera America

3315 Commerce Parkway, Miramar, FL 33025, United States  
Telephone: +1(954)846-1011

8 Whatney, Suite 200, Irvine, CA 92618, United States  
Telephone: +1(949)326-5740

1916 Wright Boulevard, Schaumburg, IL 60193, United States  
Telephone: +1 (213) 262-3578



Hytera retains right to change the product design and specification. Should any printing mistake occur, Hytera doesn't bear relevant responsibility. Little difference between real product and product indicated by printing materials will occur by printing reason.

**HYT**, **Hytera** are registered trademarks of Hytera Communications Co.,Ltd.  
© 2018 Hytera Communications Co.,Ltd. All Rights Reserved.