



SERIES BD302i



BD302i UHF Two-Way DMR Radios

Compact and lightweight BD302i Series radios provide cost-effective and easy-to-use radio communications with excellent performance



The Hytera BD302i is an entry-level, grab-and-go digital radio that requires minimal training for users.

Weighing only 5 ounces, the lightweight and compact design makes the BD302i easy to carry and operate for long shifts.

The BD302i has 2W of output power, which provides suitable range for small and medium workplaces like retail, hospitality, and single-site school campuses.

The BD30i supports the 400 to 470MHz UHF frequency range with 48 Channels and 3 Zones (16 Channels per Zone).

Excellent Performance and Value

The BD302i provides reliable communications, crystal clear digital audio, powerful Li-Ion battery for up to 16 hours of operation, and excellent value for the money.

Rugged and Reliable

The BD302i meets MIL-STD-810-G for shock and vibration, and IP54 for dust and water resistance to guarantee reliability in harsh environments.

Analog or Digital

Many radio manufacturers are discontinuing their legacy analog radio systems, and the BD302i can be configured to operate in analog or digital mode to provide a simple and cost-effective way to migrate to modern digital radios.



KEY FEATURES



ERGONOMIC AND EASY TO USE

- Tactile buttons for no-look PTT and emergency calling



ANALOG OR DIGITAL OPERATION

- The BD302i operates in analog or digital mode
- Allows switching between the two modes for communication with analog radios
- Enables a simple and cost-effective migration path from analog to digital



HIGH QUALITY AUDIO

- DMR digital technology provides excellent audio quality for reliable communication



EXTENDED TALK RANGE

- Hytera's innovative receiving technology extends talk range



LONG-LIFE BATTERY

- Powerful 2200mAh Lithium Ion batteries enable up to 16 hours of operation in digital mode and 12 hours in analog



RELIABLE AND DURABLE

- Compliant with MIL-STD-810-G for shock and vibration
- IP54 rated for water and dust resistance



SCANNING

- Allows listening to communication activities on other channels



EMERGENCY CALLING

- One-touch Emergency Alarms can be sent to other radios with the programmable button
- Improves worker safety and emergency response time



ANTI-INTERFERENCE

- Digital encoding and error correcting reduces signal interference on the same frequency



DMR

- DMR signaling enables group call, private call, and all call transmitting with PTT ID
- Supports DMR Tier II repeaters to extend coverage



PSEUDO TRUNKING

- Automatically uses whichever digital timeslot is free to improve call connectivity and frequency efficiency



AUDIO CHANNEL ANNOUNCEMENT

- Voice announcement of channel number for quick and accurate channel switching, even in low visibility



VOX

- Voice activated microphone enables hands free operation
- Also supported on external earpiece and microphone accessories



The BD302i is ideal for

- Warehousing and Logistics
- Entertainment Venues
- Small Campus Education
- Restaurants and Hospitality
- Property Management

Standard Accessories



Optional Accessories



Specifications

General	
Frequency Range	UHF 400-470MHz
Channel Capacity	48 Channels (24 Analog, 24 Digital)
Zone Capacity	3 Zones with 16 Channels per Zone
Channel Spacing	25/12.5kHz
Operational Voltage	3.8W
Battery	2200mAh (Li-Ion)
Battery Life (5/5/90)	16 hours Digital, 12 hours Analog
Weight	5 ounces (140g)
Dimensions	3 31/32" x 1 15/16" x 1 1/32" (101 x 49 x 26mm)
Frequency Stability	± 0.5ppm
Antenna Impedance	50Ω
Receiver	
Digital Sensitivity	0.22μV (BER 5%)
Analog Sensitivity	0.22μV (Typical) (12dB SINAD) 0.4μV (20dB SINAD)
Adjacent Selectivity	TIA-603: 60dB @ 12.5kHz, 70dB @ 25kHz
Spurious Response Rejection	TIA-603: 70dB @ 12.5/25kHz
Intermodulation	TIA-603: 65dB @ 12.5/25kHz
Hum and Noise	40dB @ 12.5kHz, 45dB @ 25kHz
Rated Audio Power Output	0.5W
Rated Audio Distortion	≤5%
Audio Response	+1 to -3dB
Conducted Spurious Emission	<-57dBm

Transmitter	
RF Power Output	UHF High Power: 2W UHF Low Power: 1W
FM Modulation	11K0F3E @ 12.5kHz 16K0F3E @ 25kHz
4FSK Digital Modulation	12.5kHz Data Only: 7K60FXD 12.5kHz Data and Voice: 7K60FXW
Conducted/Radiated Emission	-36dBm <1GHz, -30dBm >1GHz
Modulation Limiting	±2.5kHz @ 12.5kHz ±5.0kHz @ 25kHz
FM Hum and Noise	40dB @ 12.5kHz, 45dB @ 25kHz
Adjacent Channel Power	60dB @ 12.5kHz, 70dB @ 25kHz
Audio Response	+1 to -3dB
Audio Distortion	≤5%
Digital Vocoder Type	AMBE++
Digital Protocol	ETSI-TS102 361-1,-2,-3
Environmental	
Operating Temperature	-22°F to +140°F (-30°C to +60°C)
Storage Temperature	-40°F to +185°F (-40°C to +85°C)
ESD	IEC 61000-4-2 (Level 4) ±8kV Contact, ±15kV Air
Dust and Water Ingress	IP54 Standard
Humidity	Per MIL-STD-810 C/D/E/F/G Standard
Shock and Vibration	Per MIL-STD-810 C/D/E/F/G Standard

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



Hytera North America



HYT, Hytera are registered trademarks of Hytera Communications Co., Ltd.

© 2021 Hytera Communications Co., Ltd. All Rights Reserved.

Hytera retains right to change the product design and specification.

BD302i-DS-D 5/21



**Contact Us Online
Or Let's Talk!
866-547-4988**





“Hello Yellow”



BD612i Two-Way Digital Radios

Rugged UHF and VHF BD612i DMR radios provide cost-effective and easy-to-use radio communications with excellent performance

Improved Digital Performance

The BD612i radios feature digital noise cancellation for improved audio quality, and long battery life for up to 16 hours of operation. Digital encoding and high output power provides excellent reception and extended range.

Light and Compact

Weighing less than 9 ounces, the light and compact design makes the BD612i easy to carry and operate.

Rugged and Reliable

The BD612i is built to the MIL-STD-810G standard for shock and temperature endurance, and complies with the IP66 standard for water and dust resistance.

The BD612i digital radios are the next generation of the TC6 analog radios, and improves on the legendary Hytera ruggedness, performance, and value.

- Built rugged for the most demanding environments
- Digital audio quality for clear calls on noisy job sites
- Powerful battery for reliable operation over long shifts
- Extended range to improve efficiency and reduce infrastructure costs
- Compact and easy-to-use



BD612i Key Features



ERGONOMIC AND EASY TO USE

- Tactile buttons for no-look PTT and emergency calling
- Simple operation with channel and power/volume knobs
- LED Indicator shows transmit and receive status in green and red lights



ANALOG OR DIGITAL OPERATION

- The BD612i operates in analog or digital mode, and allows switching between the two modes for communication with analog radios
- Enables simple and cost-effective migration path to digital



HIGH QUALITY AUDIO

- Audio equalizer adjusts low, mid, and high frequency gain
- Provides the best audio performance in noisy or quiet environments



LONG-LIFE BATTERY

- Powerful 1500mAh Lithium Ion battery delivers up to 16 hours of operation, and an optional 2000mAh Lithium Ion battery delivers up to 22 hours of operation



RELIABLE AND DURABLE

- Compliant with MIL-STD-810-G for shock and vibration
- IP66 rated for water and dust resistance



SCANNING

- Allows listening to communications on other channels



EMERGENCY CALLING

- One-touch Emergency Alarms can be sent to other radios with the programmable button
- Improves worker safety and emergency response time



ANTI-INTERFERENCE

- Digital encoding and error correcting reduces signal interference on the same frequency



DMR

- DMR signaling enables group call, private call, and all call transmitting with PTT ID
- Supports DMR Tier II repeaters to extend coverage



PSEUDO TRUNKING

- This virtual trunking feature automatically uses whichever digital timeslot is free to improve call connectivity and frequency efficiency



AUDIO CHANNEL ANNOUNCEMENT

- Channel number voice announcement for fast and accurate channel switching



VOX

- Voice activated microphone enables hands free operation
- Also supported on external earpiece and microphone accessories

Standard Accessories




					
AN0435W09 16cm Whip Antenna 400-470MHz	BL1506 1500mAh Li-Ion Battery	BC08 Belt Clip	CH10L23 Drop-In Single Unit Charger	R003 Nylon Hand Strap	PS1014 Power Adapter Input: 100-240VAC Output: 12VDC/1A

Optional Accessories

OTHER ACCESSORIES

		
PC76 Data Programming Cable	AN0435H13 [®] 9cm Stubby Antenna	NCN011 Nylon Carrying Jacket

POWER ACCESSORIES

		
BL2018 2000mAh Li-Ion Battery Provides 22 hours operation in Digital Mode (16 Analog)	MCL19 Multi-unit Charger for Six Radios (includes power supply)	CHV09 Vehicle Adapter (Input: 11-25V DC, Output: 12V DC & 1A)

Specifications

General	
Frequency Range	UHF: 400-470 MHz VHF: 136-174 MHz
Channel Capacity	48 Channels (24 Analog, 24 Digital)
Zone Capacity	3 Zones with 16 Channels per Zone
Channel Spacing	25/12.5kHz
Operational Voltage	7.2V
Li-Ion Battery	1500mAh Standard, 2000mAh Optional
Battery Life (5/5/90)	1500mAh: 16 hours Digital, 12 hours Analog 2000mAh: 22 hours Digital, 16 hours Analog
Weight	8.5 ounces (240g)
Dimensions	4 1/4" x 2 1/8" x 1 5/32" (108 x 54 x 29mm)
Frequency Stability	± 0.5ppm
Antenna Impedance	50Ω
Receiver	
Digital Sensitivity	0.22μV (BER 5%)
Analog Sensitivity	0.22μV (Typical) (12dB SINAD) 0.4μV (20dB SINAD)
Adjacent Selectivity	TIA-603: 65dB @ 12.5kHz, 70dB @ 25kHz
Spurious Response Rejection	TIA-603: 70dB @ 12.5/25kHz
Intermodulation	TIA-603: 65dB @ 12.5/25kHz
Hum and Noise	40dB @ 12.5kHz, 45dB @ 25kHz
Rated Audio Power Output	0.5W
Rated Audio Distortion	≤5%
Audio Response	+1 to -3dB
Conducted Spurious Emission	<-57dBm

Transmitter	
RF Power Output	VHF High Power: 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 and Voice: 7K60FXW
Conducted/Radiated Emission	-36dBm <1GHz / -30dBm >1GHz
Modulation Limiting	±2.5kHz @ 12.5kHz ±5.0kHz @ 25kHz
FM Hum and Noise	40dB @ 12.5kHz, 45dB @ 25kHz
Adjacent Channel Power	60dB @ 12.5kHz, 70dB @ 25kHz
Audio Response	+1 to -3dB
Audio Distortion	≤3%
Digital Vocoder Type	AMBE++
Digital Protocol	ETSI-TS102 361-1,-2,-3
Environmental	
Operating Temperature	-22°F to +140°F (-30°C to +60°C)
Storage Temperature	-40°F to +185°F (-40°C to +85°C)
ESD	IEC 61000-4-2 (Level 4) ±8kV Contact, ±15kV Air
Dust and Water Ingress	IP66 Standard
Humidity	Per MIL-STD-810 C/D/E/F/G Standard
Shock and Vibration	Per MIL-STD-810 C/D/E/F/G Standard

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



HYT: Hytera are registered trademarks of Hytera Communications Co., Ltd.
© 2022 Hytera Communications Co., Ltd. All Rights Reserved.
Hytera retains right to change the product design and specification.
BD612I-DS-A 3/22



**Contact Us Online
Or Let's Talk!
866-547-4988**



CAVCOM
NOTHING SOUNDS SAFER®

Hytera
BD5i  **SERIES**



BD502i and BD552i Two-Way DMR Radios

Compact UHF and VHF BD5i Series DMR radios provide cost-effective and easy-to-use radio communications with excellent performance

Excellent Performance

The BD5i Series radios provide high-quality voice communications with an audio equalizer, and long battery life for up to 16 hours of operation. The BD5i Series features excellent reception with digital encoding and high output power for extended range. Optional Bluetooth (BD552i-BT) supports wireless audio accessories.

Light and Compact

Weighing less than 9 ounces, the light and compact design makes the BD5i Series easy to carry and operate.



Analog and Digital

Can be programmed to operate in analog or digital DMR mode to provide an easy and cost-effective upgrade path to digital systems.

Rugged and Reliable

The BD5i Series radios meet MIL-STD-810-G for shock and vibration, and are IP54 rated for dust and water resistance to guaranty reliability in harsh environments.



Key Features



ERGONOMIC AND EASY TO USE

- Tactile buttons for no-look PTT and emergency calling
- The BD552i features a high contrast OLED screen for Channel number, Caller ID, Zone number, battery power, and high/low power



ANALOG OR DIGITAL OPERATION

- The BD5i series operates in both analog or digital modes
- Allows switching between the two operation modes for communication with analog radios
- Enables simple and cost-effective migration path to digital



HIGH QUALITY AUDIO

- Audio equalizer adjusts low, mid, and high frequency gain
- Provides the best audio performance in noisy or quiet environments



LONG-LIFE BATTERY

- Powerful 1500mAh Lithium Ion batteries deliver up to 16 hours of operation in digital mode and 12 in analog mode



RELIABLE AND DURABLE

- Compliant with MIL-STD-810-G for shock and vibration
- IP54 rated for water and dust resistance



EMERGENCY CALLING

- One-touch Emergency Alarms can be sent to other radios with the programmable button
- Improves worker safety and emergency response time



BUILT-IN BLUETOOTH

- Built-in Bluetooth enables connectivity to earpieces and other wireless accessories (BD552i-BT models only)



ANTI-INTERFERENCE

- Digital encoding and error correcting reduces signal interference on the same frequency



DMR

- DMR signaling enables group call, private call, and all call transmitting with PTT ID
- Supports DMR Tier II repeaters to extend coverage



PSEUDO TRUNKING

- This virtual trunking feature automatically uses whichever digital timeslot is free to improve call connectivity and frequency efficiency



AUDIO CHANNEL ANNOUNCEMENT

- Channel number voice announcement for fast and accurate channel switching, even in low visibility (BD502i only)



VOX

- Voice activated microphone enables hands free operation
- Also supported on external earpiece and microphone accessories



SCANNING

- Allows listening to communication activities on other channels

Specifications

General	
Frequency Range	UHF: 400-470 MHz VHF: 136-174 MHz
Channel Capacity	BD502i: 48 Channels (24 Analog, 24 Digital) BD552i: 256 Channels (128 Analog, 128 Digital)
Zone Capacity	BD502i: 3 Zones with 16 Channels per Zone BD552i: 16 Zones with 16 Channels per Zone
Channel Spacing	25/12.5kHz
Operational Voltage	7.2W
Battery	1500mAh (Li-Ion) Standard, 2200mAh Optional
Battery Life (5/5/90)	1500mAh: 16 hours Digital, 12 hours Analog 2200mAh: 22 hours Digital, 16 hours Analog
Weight	BD302i: 8.5 ounces (240g) BD352i: 8.8 ounces (250g) (with AN0435W09 antenna and BL1506 battery)
Dimensions	BD502i and BD552i: 4 1/4" x 2 1/8" x 1 5/32" (108 x 54 x 29mm)
Frequency Stability	± 0.5ppm
Antenna Impedance	50Ω
Display	BD352i: 0.91" OLED single-line display
Receiver	
Digital Sensitivity	0.22μV (BER 5%)
Analog Sensitivity	0.22μV (Typical) (12dB SINAD) 0.4μV (20dB SINAD)
Adjacent Selectivity	TIA-603: 60dB @ 12.5kHz, 70dB @ 25kHz
Spurious Response Rejection	TIA-603: 70dB @ 12.5/25kHz
Intermodulation	TIA-603: 65dB @ 12.5/25kHz
Hum and Noise	40dB @ 12.5kHz, 45dB @ 25kHz
Rated Audio Power Output	0.5W
Rated Audio Distortion	≤5%
Audio Response	+1 to -3dB
Conducted Spurious Emission	<-57dBm

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



HYT, Hytera are registered trademarks of Hytera Communications Co., Ltd.
© 2021 Hytera Communications Co., Ltd. All Rights Reserved.
Hytera retains right to change the product design and specification.
BD5i-DS-C 5/21

Transmitter	
RF Power Output	VHF High Power: 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 and Voice: 7K60FXW
Conducted/Radiated Emission	-36dBm <1GHz / -30dBm >1GHz
Modulation Limiting	±2.5kHz @ 12.5kHz ±5.0kHz @ 25kHz
FM Hum and Noise	40dB @ 12.5kHz, 45dB @ 25kHz
Adjacent Channel Power	60dB @ 12.5kHz, 70dB @ 25kHz
Audio Response	+1 to -3dB
Audio Distortion	≤3%
Digital Vocoder Type	AMBE++
Digital Protocol	ETSI-TS102 361-1,-2,-3
Environmental	
Operating Temperature	-22°F to +140°F (-30°C to +60°C)
Storage Temperature	-40°F to +185°F (-40°C to +85°C)
ESD	IEC 61000-4-2 (Level 4) ±8kV Contact, ±15kV Air
Dust and Water Ingress	IP54 Standard
Humidity	Per MIL-STD-810 C/D/E/F/G Standard
Shock and Vibration	Per MIL-STD-810 C/D/E/F/G Standard

Ordering Information

Part Number	Description
BD502i-V1	VHF 136-174MHz, 48 Channels
BD502i-U1	UHF 400-470MHz, 48 Channels
BD552i-V1	VHF 136-174MHz, 256 Channels, OLED display
BD552i-U1	UHF 400-470MHz, 256 Channels, OLED display
BD552i-BT-V1	VHF 136-174MHz, 256 Channels, OLED display, Bluetooth
BD552i-BT-U1	UHF 400-470MHz, 256 Channels, OLED display, Bluetooth



**Contact Us Online
Or Let's Talk!
866-547-4988**

