



BD302 BUSINESS DIGITAL RADIO

SIMPLE, ROBUST, CLEAR-VOICE



Hytera's BD302 two-way radio is the compact device that provides a professional communication in easy to operate way. Today, communication tool is the key to improve the efficiency. When we ask for clear voice, it means a reliable talk that's easy to hear and understand. Long battery life helps you to avoid losing contact. A rugged and robust device with high performance but simple to operate will make everything easier to handle.

Hytera understands customers' requirements and meets them all in one, with lightweight, easy-operation, excellent performance, long-time working and reliability. So we redefine a business radio with Hytera digital technology, quickly responding to what you need.

SUCH THIN AND LIGHT

BD302 weighs just 5oz., quite comfortable you hold it. Relief for you from busy communication in your daily work, by this pocket-sized radio.

EXCELLENT PERFORMANCE

Only 2W output power but BD302 still has amazing performance. Excellent receiving ability makes the talk range further extended. It has good performance of anti-interference in digital mode providing purely stable communication.

RUGGED AND RELIABLE

BD302 is designed and tested to meet Military Standards 810 C, D, E, F and G, including temperature shock, vibration, high & low temperature and humidity. IP54 dust- and water-proof design guarantees the reliability in multiple environments. And based on TDMA technology, the radio can work longer, up to 16 hours in digital mode.

CLEAR VOICE

With digital encoding and correction technology, human voice is transmitted much clearer without background noise, even from a rather far distance. This is a new experience of better audio quality.






PROFESSIONAL AND SIMPLE TO USE

- A/D ANALOG & DIGITAL DUAL MODES**
BD302 can support both analog and digital modes on the same hardware. You can switch between two operation modes very easily and it helps you to communicate with analog radios.
- ANALOG & DIGITAL AUTO DETECT**
BD302 can detect the signal type when receiving a call, then automatically switches between analog mode and digital mode to get the voice out of speaker. During the call hang time, user can easily reply the call by push-to-talk. This is a real migration technology from analog to digital.
- EXTENDED TALK RANGE**
Extend your talk range based on Hytera's innovative technology.
- LONG WORKING TIME**
Based on TDMA technology, BD302 in digital mode can as long as 16 hours in 5-5-90 mode.
- CLEAR VOICE**
Excellent audio quality comes from the DMR digital technology, which makes the communication more reliable.
- RELIABLE AND DURABLE**
BD302 is compliant with MIL-STD-810 C/D/E/F/G and IP54.


- ANTI-INTERFERENCE**
Adopted digital encoding and error correcting module, BD302 has a better ability to avoid signal interference on the same frequency.
- DMR DMR SIGNALING**
With DMR signaling, transmitting group calls, private calls and all calls with PTT ID becomes quite easy.
- REPEATER MODE OPERATION**
Utilize a DMR Tier II repeater to extend your communication range.
- VOICE ANNOUNCEMENT**
Channel number announcement helps you to switch channels quickly and correctly, even in blindness operation.
- DUAL CAPACITY DIRECT MODE**
In direct mode, you can have two voice calls simultaneously from DMR two time slots. This feature can be used to increase the radio capacity at no extra costs or frequency license.
- VOX**
When using VOX earpiece, this feature allows you to activate the microphone via speaking volume, and free your hand from PTT.
- SCANNING**
Allow BD302 listening to communication activities on other channels.

ACCESSORIES

STANDARD ACCESSORIES

| | | | | |
|---|---|---|--|---|
|  |  |  |  |  |
| <p>AN0435H19 Antenna, 400-470MHz, 9cm</p> | <p>BL2202 2200mAh Li-ion Battery</p> | <p>BC16 Belt clip</p> | <p>RO03 Nylon hand strap</p> | <p>Power Adapter input: 100-240VAC, output: 12VDC/1A</p> |
| <p>US/UK/AU/EU/CHINA/JAPAN/KOREA</p> | | | | |

OPTIONAL ACCESSORIES

| | | | | |
|---|---|---|--|---|
|  |  |  |  |  |
| <p>ACS-01 PTT&MIC-only with 3.5mm jack <i>IP54</i></p> | <p>ES-01 Receive-only ear-bud</p> | <p>ES-02 Receive-only surveillance earpiece</p> | <p>EH-01 Receive-only C style earpiece</p> | <p>EH-02 Receive-only earhook speaker</p> |
|  |  |  |  |  |
| <p>ESH16 C-style Earpiece with in-line PTT & MIC</p> | <p>VOX earpiece coming soon</p> | <p>CH10L22 Bd300 Standard Drop-In Single Unit Charger</p> | <p>PV1002 Vehicle adapter (Input: 11-25V DC, Output: 12V DC & 1A)</p> | <p>PC69 Data programming cable</p> |



SPECIFICATION

| General | |
|-----------------------|--|
| Frequency Range | UHF:400-470 MHz |
| Channel Capacity | 48 |
| Zone Capacity | 3 |
| Channel Spacing | 25/12.5KHz |
| Operating Voltage | 3.8V |
| Battery | 2200mAh (Li-Ion) |
| Battery Life (5/5/90) | Analog/Digital: 16/22 hours (2000mAh) |
| Weight | 5 oz. (with AN0435H19 and BL2202) |
| Dimensions | 101×49×25.8mm |
| Frequency Stability | ± 0.5ppm |
| Antenna Impedance | 50 Ω |

| Receiver | | |
|-----------------------------|---------|---|
| Sensitivity (Digital) | | 0.22 μ V / BER 5% |
| Sensitivity (Analog) | | 0.22 μ V (Typical) (12dB SIN AD) 0.4 μ 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 | | ≤5% |
| Audio Response | | +1 ~ -3dB |
| Conducted Spurious Emission | | <-57dBm |

| Transmitter | |
|-----------------------------|---|
| RF Power Output | High power: 2W 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 | ≤5% |
| Digital Vocoder Type | AMBE++ |
| Digital Protocol | ETSI-TS102 361-1,-2,-3 |

| Environmental | |
|------------------------|--|
| Operating Temperature | -30°C~ +60°C |
| Storage Temperature | -40°C~ +85°C |
| ESD | IEC 61000-4-2 (Level 4) ± 8kV (Contact) ± 15kV (Air) |
| Dustproof & Waterproof | Ip54 Standard |
| Humidity | Per MIL-STD-810 C/D/E/F/G Standard |
| Shock & Vibration | Per MIL-STD-810 C/D/E/F/G Standard |

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



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