



BD5 SERIES BUSINESS DIGITAL RADIO

SIMPLE, ROBUST, CLEAR-VOICE



Hytera's BD5 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 to 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.



BD50X

BD55X

EXCELLENT PERFORMANCE

With innovative design, BD5 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

BD50X/BD55X is designed and tested to meet MIL-STD - 810 G, including temperature shock, vibration, high & low temperature and humidity. IP54 dust and water-proof design guarantees the reliability in different environments.

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

BD50X/BD55X 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 MIXED CHANNEL

BD50X/BD55X 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

BD5 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

BD50X/BD55X is compliant with MIL-STD-810 G and IP54.

ANTI-INTERFERENCE

Adopted digital encoding and error correcting module, BD5 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 MODE OPERATION

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

VOICE ANNOUNCEMENT (only for BD50X)

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 BD5 series listening to communication activities on other channels.

BT BUILT-IN BT (Factory Optional for BD55X)




















Built-in BT supports BD55X to have wireless audio accessories and other BT transmission.

ACCESSORIES

STANDARD ACCESSORIES

| | | | | | |
|---|---|---|---|---|---|
|  |  |  |  |  |  Power Adapter input: 100-240VAC, output: 12VDC/1A US/UK/AU/EU/CHINA/JAPAN /KOREA |
| Whip Antenna | 1500mAh Li-ion battery | Rapid-rate charger | Belt clip | Nylon hand strap | |

OPTIONAL ACCESSORIES

| | | | | |
|---|---|---|--|--|
|  |  |  |  |  |
| MIC&PTT cable finished <i>Without VOX, use with Receive-Only Earpiece</i> | Receive-only C style earpiece | Receive-Only Adjustable Earhook with Swivel Speaker | Receive-only ear-bud | Receive-Only Earpiece with Transparent Acoustic Tube |
|  |  |  |  |  |
| D-style earpiece with in-line PTT & MIC <i>VOX switch</i> | C-style earpiece with in-line PTT & MIC <i>VOX switch</i> | Remote speaker microphone | Waterproof Remote Speaker Microphone <i>IP54, with 2.5mm audio jack</i> | Receive-Only Earpiece with Transparent Acoustic Tube <i>for waterproof speaker microphone</i> |
|  |  |  |  |  |
| 2000mAh Li-ion battery | Data programming cable | Vehicle power adapter | Nylon carrying jacket | Multi-unit charger |
|  |  |  |  | |
| Universal nylon chest Pack | Waterproof Bag | BT wireless ring PTT (for BD55X) | Wireless earpiece with adapter (for BD55X) | |

SPECIFICATION

| General | | |
|-----------------------------|---------|---|
| Frequency Range | | UHF:400-470 MHz VHF:136-174 MHz |
| Channel Capacity | | BD50X: 48, BD55X: 256 |
| Zone Capacity | | BD50X: 3, BD55X: 16 |
| Channel Spacing | | 25/12.5KHz |
| Operating Voltage | | 7.2V |
| Display | | BD50X without display BD55X 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 | | BD50X: 236g, BD55X: 250g (with antenna and battery) |
| Dimensions | | BD50X: 108.6 x 54.5 x 32 mm BD55X: 109 x 54 x 32 mm |
| Frequency Stability | | ±0.5ppm |
| Antenna Impedance | | 50Ω |
| BT | | BT4.0(BD55X, Optional) |
| Receiver | | |
| Sensitivity (Digital) | | 0.18μV / BER 5% |
| Sensitivity (Analog) | | 0.18μV (Typical) (12dB 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 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 & 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++ |
| 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 G Standard |
| Shock & Vibration | Per MIL-STD-810 G Standard |

*Radio only - Battery -20°C

BD50X/BD55X, X=0, 2, 5, 6 or 8, model number varies geographically. For details, please contact our regional sales representatives.

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



Hytera Communications Corporation Limited
Stock Code: 002583.SZ

Address: Hytera Tower, Hi-Tech Industrial Park North, 9108# Beihuan Road, Nanshan District, Shenzhen, P.R.C.

Tel: +86-755-2697 2999 **Fax:** +86-755-8613 7139 **Post:** 518057

Http: //www.hytera.com **marketing@hytera.com**



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 Corp., Ltd.
©2024 Hytera Communications Corp., Ltd. All Rights Reserved.