

## **BD5 SERIES** BUSINESS DIGITAL RADIO

# SIMPLE, ROBUST, CLEAR-VOICE

Hytera's BD5 series two-way radios are compact devices providing professional communications with ease of use. Today's communications devices provide improved efficiency with audio clarity. BD5 are rugged and robust radios enabling use anywhere communications are needed. BD505

BD555

Hyter

CH D3

#### **EXCELLENT PERFORMANCE**

With innovative design, the BD5 delivers enhanced performance in comparison to analogue radios. DMR digital radios with extended talk range, reliable performance and negligible interference provide the stable communication platform organisations seek.

#### **RUGGED AND RELIABLE**

BD505/BD555 have been designed and tested to meet MIL-5TD-810G, which include temperature shock, vibration, high & low temperature/humidity and also IP54 rating providing protection against dust and water ingress, guaranteeing reliable communications in various working environments.

#### **CLEAR AUDIO**

The digital encoding and correction technology incorporated in the radio gives greater clarity for voice transmission. This allows greater distance coverage with clearer audio signal.



BD505

BD555

#### **PROFESSIONAL AND SIMPLE TO USE**

#### A/D ANALOGUE & DIGITAL DUAL MODES

BD505 and BD555 can support both analogue and digital modes on the same hardware. It can quickly switch between the two operation modes.



#### **ANALOGUE & DIGITAL AUTO DETECT**

BD505/BD555 radios can detect the signal type when receiving a call and automatically, switch between the two operating modes; Analogue and Digital.



#### **EXTENDED COVERAGE**

Hytera's innovative technology, allows extended coverage for radio users.



#### LONG BATTERY LIFE

Based on TDMA technology, BD5 series in digital mode can work upto 16 hours @1500mAh or 22 hours @2000mAh in 5-5-90 mode.

#### **CLEAR AUDIO**

DMR digital technology provides excellent audio quality, enabling clearer and reliable communications.

#### **RELIABLE AND DURABLE**

BD505/BD555 are 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 enables ease of use.



#### **REPEATER MODE OPERATION**

Utilising a DMR Tier II repeater extends the communication range.



#### CHANNEL ANNOUNCEMENT (only for BD505)

Channel number announcement allows switching of channels quickly, and correctly, even in adverse conditions.

#### 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.



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

#### **SCANNING**

Allows the BD5 series to listen to communication activities on other channels.

## ACCESSORIES



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

② AN0435H13:400-470MHz,9cm AN01 AN0435W09:400-470MHz,16cm AN01

AN0141H06: 136-147MHz, 17cm AN0 AN0153H07: 147-160MHz, 17cm AN0

AN0167H06: 160-174MHz, 17cm AN0160H13: 146-174MHz, 15cm AN0153H08: 147-160MHz/1575MHz, 12cm AN0167H07: 160-174MHz/1575MHz, 12cm

## **SPECIFICATION**

General		
Frequency Range		UHF:400-470 MHz VHF:136-174 MHz
Channel Capacity		BD505: 48, BD555: 256
Zone Capacity		BD505: 3, BD555: 16
Channel Spacing		25/12.5KHz
Operating Voltage		7.2V
Display		BD505 without display BD555 with display (0.91
Battery		) 1500mAh (Li-Ion) 2000mAh (Li-Ion)
Battery Life (5/5/90 )		Analogue/Digital: 12/16 hours (1500mAh) 16/22 hours (2000mAh)
Weight		BD505: 240g, BD555: 250g (With AN0435W09 and BL1506)
Dimensions		BD505:108×54×28mm BD555: 11 0×59×30mm
Frequency Stability		±0.5ppm
Antenna Impedance		50Ω
	F	Receiver
Sensitivity (Digital)		0.22µV / BER 5%
Sensitivity (Analogue)		0.22μV (Typical) (12dB SIN AD) 0.4μV (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 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	
Envir	onmental	
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	

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

Further information can be found at: www.hytera.co.uk

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Encryption features are optional and have to be configured separately. They are also subject to European export regulations.

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