



## BD305LF BUSINESS DIGITAL RADIO

SIMPLE, ROBUST, LICENCE FREE



Hytera's BD305LF two-way radio is the compact device that provides professional licence-free communication and easily operated.

Our users rely on our digital devices to provide clear audio, easy to understand voice communications. The long battery life ensures you are always connected, while the clever design is easy to grab and intuitive to operate.

Hytera understands our customer requirements, advanced features and enterprise level communications systems aren't always necessary. The BD305LF is ideal for users looking for Hytera digital push-to-talk technology, in a small, slim, robust device, licence-free and ready to respond when you need it.

### SLIM AND LIGHTWEIGHT

The BD305LF weighs just 140g, easily held, clipped or put in your pocket, making it the ideal companion for communicating throughout your shift.

### DIGITAL PERFORMANCE

Although limited to licence-free power output, the BD305LF still delivers excellent reception and talk range. Operational in either Analogue or Digital mode, using TDMA technology the radio can work for up to 16 hours in Digital.

### RUGGED AND RELIABLE

The BD305LF is designed and tested to meet Military Standards 810 G, including temperature shock, vibration, high & low temperature and humidity. IP54 dust and water-proof design guarantees the reliability in different environments.

### CLEAR AUDIO

With digital voice encoding and correction technology, the human voice is transmitted clearer with less background noise over a greater distance.





## PROFESSIONAL AND SIMPLE TO USE

**A/D ANALOGUE & DIGITAL DUAL MODES**  
The BD305LF can support both Analogue and Digital modes. You can switch between the two operations easily, ideal if using a mixed fleet of devices.

**ANALOGUE & DIGITAL AUTO DETECT**  
The BD305LF can detect the signal type when receiving a call, automatically switching between analogue mode and digital mode. During the call hang time, the user can reply by simply utilising the push-to-talk. This can greatly assist with migration from analogue to digital communications.

**EXTENDED TALK RANGE**  
Based on Hytera innovative technology, your talk range is extended.

**LONG BATTERY LIFE**  
The BD305LF in digital mode can work for up to 16 hours according to the 5-5-90 principal.

**CLEAR VOICE**  
The digital DMR technology delivers excellent audio quality, making communications more reliable.

**RELIABLE AND DURABLE**  
The BD305LF is compliant with MIL-STD-810 G and 1P54.

**ANTI-INTERFERENCE**  
The BD305LF adopts digital encoding and error correction, avoiding signal interference on the same frequency.

**DMR DMR SIGNALING**  
With DMR signaling, transmitting group calls, private calls and all calls with the PTT ID is simple.

**VOICE ANNOUNCEMENT**  
Channel number announcement helps you to switch channels quickly and accurately, ideal when visibility is low.

**DUAL CAPACITY DIRECT MODE**  
In direct mode, you can have two voice calls simultaneously utilising two DMR time slots. This feature can be used to increase the radio traffic capacity.

**VOX**  
When using a VOX earpiece, you can activate the microphone using your voice, freeing your hands from the PTT.

**SCANNING**  
Allows the BD305LF to listen to communication activity on other channels.



# ACCESSORIES

## STANDARD ACCESSORIES



**BL2202**  
2200mAh Li-ion  
Battery



**BC16**  
Belt clip



**RO03**  
Nylon hand strap



Power Adapter  
input: 100-240VAC,  
output: 5VDC/1A

UK/EU

## OPTIONAL ACCESSORIES



**ACS-01**  
PTT&MIC-only with 2.5mm jack  
*IP54*



**ES-01**  
Receive-only ear-bud



**ES-02**  
Receive-only surveillance  
earpiece



**EH-01**  
Receive-only C style earpiece



**EH-02**  
Receive-only earhook speaker



**EHS16**  
C-style Earpiece with  
in-line PTT & MIC



VOX earpiece coming soon



**CH10L22**  
BD305LF Standard Drop-In  
Single Unit Charger



**PV1002**  
Vehicle adapter (Input: 11-25V  
DC, Output: 5V DC & 1A)



**PC69**  
Data programming cable



# SPECIFICATION

General	
Frequency Range	UHF 446.0MHz, 446.1MHz
Channel Capacity	48
Zone Capacity	3
Channel Spacing	25/12.5KHz
Operating Voltage	3.8V
Battery	2200mAh (Li-Ion)
Battery Life (5/5/90)	Analogue/Digital: 12/16 hours (2200mAh)
Weight	140g (including battery)
Dimensions	101×49×26mm
Frequency Stability	± 0.5ppm
Antenna Impedance	50 Ω
Receiver	
Sensitivity (Digital)	0.22 μ V / BER 5%
Sensitivity (Analogue)	0.22 μ V (Typical) (12dB SIN AD) 0.4 μ V (20dB SIN AD)
Adjacent Selectivity	ETSI 65dB @ 12.5KHz
Spurious Response Rejection	ETSI 65dB @ 12.5KHz
Inter-modulation	ETSI 60dB @ 12.5KHz
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	0.5W
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 G Standard
Shock & Vibration	Per MIL-STD-810 G Standard

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