

# Specifications

## Standards and Frequencies

DMR Analog FM	ETSI DMR Tier II, III 350-527 MHz
TETRA	350-470 MHz
LTE	3GPP LTE Rel 10 FDD-LTE: B1/B2/B3/B4/B5/B7/B8/B20/B26/B28 TDD-LTE: B38/B39/B40/B41
CDMA	CDMA 1xRTT BC0 CDMA2000 1xEV-DO BC0
WCDMA	B1/B8
TD-SCDMA	B34/B39
GSM	850/900/1800/1900MHz
Wi-Fi	802.11 b/g/n, 2.4GHz
NFC	13.56MHz
Dual BT	V4.2 LE+EDR
Positioning System	GPS, BDS, GLONASS
Sensors	Proximity Sensor Ambient Light Sensor 6-axis E-Compass Barometer Gyroscope Accelerometer

## General Specifications

Dimensions (H x W x D)	139.5 x 68 x 25.3mm
Weight (with antenna & battery)	≤375g
AP Processor	Qualcomm 8-core, 2.0GHz
Memory	<b>Broadband</b> RAM: 3GB ROM: 32GB eMMC Expandable to 128GB with Micro SD card <b>Narrowband</b> Expandable to 16GB with Micro SD card
Ports	USB 2.0 20PIN Accessory/Charging Port
Top Display	1.0" 128x96
Main Display	4.0" 800x480 Capacitive, Touch screen, Gloves Proofed
Front Camera	13MP Auto Focus
Rear Camera	13MP Auto Focus
Operating Voltage	7.4V(Rated)

## Battery

Standard	2900 mAh Li-polymer
Optional	4000 mAh
Battery Life	Standard Battery : 14hours Optional Battery : 20hours

## Transceiver

Item	DMR/Analog FM	TETRA
Channel Spacing	25/20/12.5kHz	25kHz
TX Power	1W/4W	1W(class 4) & 1.8W(class 3L)
RX Sensibility	≤-121dBm	≤-112dBm(-116dBm typ.)
Inter-modulation	≥65dB	≥62dB
Blocking	≥84dB	50 kHz to 100 kHz ≥69 dB 100 kHz to 200 kHz ≥74 dB 200 kHz to 500 kHz ≥79 dB > 500 kHz ≥84 dB
Suppression of Spurious Response	≥70dB	≥64dB
Frequency Stability	±0.5ppm	±0.5ppm
Antenna Impedance	50Ω	50Ω
Audio Output	2W(Rated)	2W(Rated)
Audio Distortion	≤3%	≤3%
Microphone	NRR: 30dB(Static), 20dB(Non-static) AEC: > 60dB	NRR: 30dB(Static), 20dB(Non-static) AEC: > 60dB

## Video and Imaging

Video File Types	3GPP(.3gp), MPEG-4(.mp4, .mov), WEBM(.webm), Windows Media(.asf, .wmv), RealMedia(.rmvb, .rm), MPEG-PS(.mpg, .mpeg), MPEG-TS(.ts), AVI(.avi), Matroska(.mkv)
Image File Types	JPEG(.jpg), GIF(.gif), PNG(.png), BMP(.bmp)
Video Recording Quality	Front Camera: 1080P HD up to 30 frames per second(fps) Rear Camera: 4K HD
Watermark	Video and imaging

## Audio

File Types	MP3(.mp3), WAV(.wav), 3GPP(.3gp), MPEG-4(.mp4, .m4a), ATDS raw AAC(.aac), MPEG-TS(.ts), FLAC(.flac), MIDI(.midi, .xmf, .mxmf), RTTTL/RTX(.rtttl, .rtx), OTA(.ota), iMelody(.imy), Ogg(.ogg), Matroska(.mka), QCELP(.qcp), RealMedia(.ra), Windows Media(.wma), AC3(.ac3)
Input	Triple Mic Noise Suppression Wind Noise Suppression Echo Cancellation

## Environment Performance

Dust and Water Proof	IEC 60529-IP67
Shock and Vibration	MIL STD 810 C,D,E,F,G
Operating Temperature	-20°C - 60°C
Storage Temperature	-40°C - 85°C

## Main Features(DMR/Analog FM)

Work Mode	Voice Service	Apps
Digital Conventional Analog Conventional Digital Trunking Public Network	Private Call Group Call All Call Broadcast Call Emergency Call	Call Queuing Call Priority Forced Insert/Clear Down Phone Call
Contacts Messaging Camera Gallery Sound Recorder File Manager		
Data Service	User Security	Others
Text Message Status Message MMS	Emergency Alarm Man Down Alarm	Positioning Scan and Roaming

## Optional



RVM with LCD



RVM



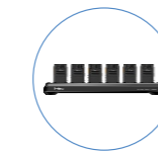
Remote Speaker  
Microphone



Wired Earset



MCU 6-unit Charger for  
Multi-mode Radio



MCU 6-unit Charger  
for RVM



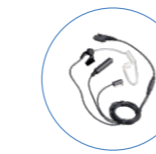
Convert Camera



4000mAh Smart  
Battery



Fast Charger



Transparent Earset



BT Heart Rate Earset



Carkit

## Standard Accessories

Battery (2900mAh Li-polymer)  
Belt Clip  
Charger

Standard Single Charger  
Antenna  
Rope

Color Circle  
Package Kit



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## Main Features(TETRA)

Work Mode	Voice Service	Apps
DMO TMO	Private Call Group Call All Call Broadcast Call Emergency Call	Call Queuing Call Priority Phone Call
Contacts Messaging Camera Gallery Sound Recorder File Manager		
Data Service	User Security	Others
Text Message Status Message MMS	Emergency Alarm Man Down Alarm	Positioning

# Hytera Multi-mode Advanced Radio



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

Keep up to date with Hytera on social media.



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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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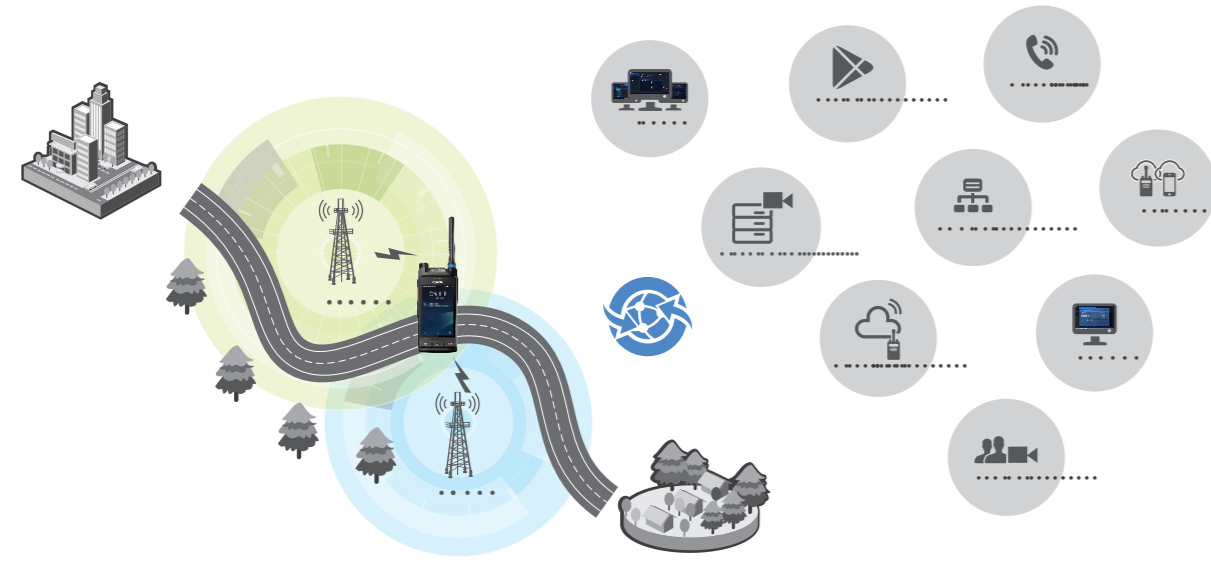
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## New Convergent Solution

The Hytera Multi-mode Advanced Radio is a revolutionary device in the private radio network industry. The first of its kind to offer a truly convergent platform for critical voice and broadband data services, this innovative development is a significant milestone. The radio supports multi-mode communication in different scenarios, whether it's daily business operations or emergency response, broadband or narrowband, utilising the public or private network.

Offering the user a truly unified communication experience. The rich applications and high-level data security ensures the radio calmly handles any critical situation, improving co-operation and seamless communication.

The ergonomic design combined with the rugged chassis and touch-screen supports a new sensory experience to meet your diversified requirements. You can listen and see clearly, operate and transmit securely and utilise your improved situational awareness to respond and achieve quickly and effectively.



## Product Overview



### Sense

The Hytera Multi-mode Advanced Radio delivers excellent situational awareness, smartly detecting the surrounding environment, providing alerts and acquiring data in real time. Communicating continuously with back-end systems, you can improve your operational effectiveness with instant feedback and informed decision making. The device will become the extension of your senses, assuring your safety and enhancing your response with on-demand services.



### Seamless

Whenever and wherever you are operating, the Hytera Multi-mode Advanced Radio is by your side offering a great voice communication experience. Seamlessly switching between networks, the intelligent device manages multiple communication modes, presented in a dedicated, user-friendly interface, to ensure that you can enjoy a seamless communication experience while the handset takes care of network transitions.



### Supervision

Security of personnel and your voice or data transmissions is critical no matter the application. The Hytera Multi-mode Advanced Radio is designed to provide holistic secure control of your communications, adopting an effective link between the radio and back-end systems. There is no need to worry about data security, device loss, evidence management or command availability as the handset delivers a brand-new encrypted control system.

## Interactive Design Features

### Mission Critical UI Design

One hand operation  
Quick press to view critical information  
Rich information on Home page, customize your favorites



## Function & Technical Features

### Open Secondary Development Interface to Enrich Services and Applications

Provides application development kit (ADK) based on the radio for the third party to customize their own applications. Consequently, it would integrate all mobile resources to build a modern work platform. Now it is not only a radio, but a smart mobile device.



Government and Public Security



Public Utilities



Airport



Port



Metro and Railway



### Broadband and Narrowband Converged

The narrowband switches between digital and analog, the broadband supports all mobile networks, and the two systems collaborate to guarantee a smooth communication.



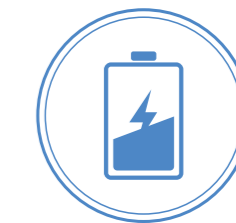
### Clear and Pleasant Critical Voice

The radio adopts advanced audio technology, such as multi-mic noise suppression, acoustic echo cancellation and wind noise suppression, to ensure the receiver hear clear voice even in noisy environment.



### Multiple Security Assurances

Support authentication, software and hardware encryption to prevent voice and data theft. The management system real-time monitors the radio. Radio stunning, killing or data erasing are available in case of abnormality.



### Quick Charging

The smart battery supports a charging which is three times faster than the common one: 80% in 30 minutes, while 100% in one hour.