

# MD652

Digital Mobile Radio



- Compact design enables it to be put in any location with ease
- User-Friendly Microphone with Programmable Buttons and Display



## MD652

The MD652 is specifically designed with safety and ease-of-operation in mind, providing safe and reliable communications for numerous applications across various industries like Logistics, Taxi, Fleet, Agricultural, Construction and Tow-Trucks. This radio's compact design enables it to be put in any location with ease without obstructing view or movement within the vehicle. Extended features like programmable text, emergency, telemetry, and GPS (optional) can be used to communicate within the radio fleet or to a dispatch station.

## Applications

Taxi

Fleet

Agricultural

Tow Truck

Construction





# Product Features

- Lightweight, Sleek, & Stylish**  
 Only 6.5 x 1.81 x 5.5 inches in size and weighs a mere 2.31lbs (including smart microphone).
- Reliable Quality**  
 MD652 is compliant with the stringent MIL-STD-810 C/D/E/F/G and IP54 standards, ensuring outstanding performance even in harsh environments.
- Remote Control**  
 All operations are done via the microphone and are easy to use and control.
- Selectable RF Power Output**  
 Continuously adjustable from 1W to 25W.
- Superior Voice Quality**  
 Uses narrowband codec and digital error-correction technologies for superior voice clarity in noisy environments or at the edge of the coverage area. Also includes AGC technology for optimizing voice input and output.
- Advanced Signaling**  
 Supports multiple advanced analog signaling modes, including HDC1200, 2-Tone and 5-Tone, providing better integration into existing analog radio fleets.
- Versatile Services**  
 In addition to conventional communication services, MD652 features rich data services and selectable functions such as: Text Message, Telemetry, Emergency, OTAP and optional GPS.
- GPS Positioning (Factory Option)**  
 The built-in GPS module in the MD652G supports GIS applications.

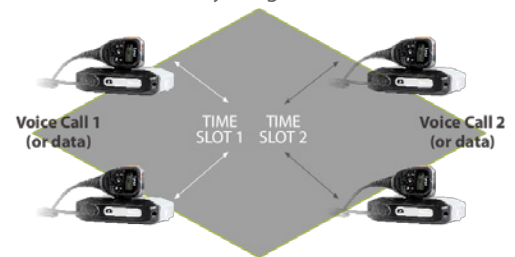
- DMO True 2-Slot / DMRA Direct Mode**  
 In DMO mode, Hytera provides 2-slot communication which allows for two talk channels on a single frequency.

Slot 1 is used for voice call, Slot 2 is used for voice call 2



- Dual-slot Pseudo Trunk**  
 With this feature, a free time slot can be allocated to a member who needs to communicate urgently, effectively enhancing frequency efficiency and allowing timely communication in emergency situations.

Slot 1, Slot 2 are automatically assigned to voice call 1 or voice call 2



## Accessories

- Included**
- Remote Speaker Microphone
  - Microphone Hanger
  - Power Cord
  - Mounting Bracket
  - Fuse

Optional



External Speaker Microphone SM09D1



GPS Antenna (optional) GPS04



Programming Cable (USB Port) PC37



Foot Switch (External PTT) POA44

See website for full list

# Specifications

General	Frequency Range	VHF: 136 - 174MHz UHF1: 400 - 470MHz		
	Channel Capacity	1024		
	Zone Capacity (each with a maximum of 16 channels)	64		
	Channel Spacing	25 / 20 / 12.5KHz		
	Operating Voltage	13.6V ± 15%		
	Current Drain	Stand By	< 0.6A	
		Receive	< 2.0A	
		Transmit	1W: <3A ; 25W: <8A	
	Frequency Stability	± 0.5ppm		
	Antenna Impedance	50 Ω		
	Dimensions (HxWxD)	6.5 x 1.81 x 5.5 inches		
	Weight	2.31lbs		
	FCC ID	See website for full list		
Industry Canada ID	See website for full list			

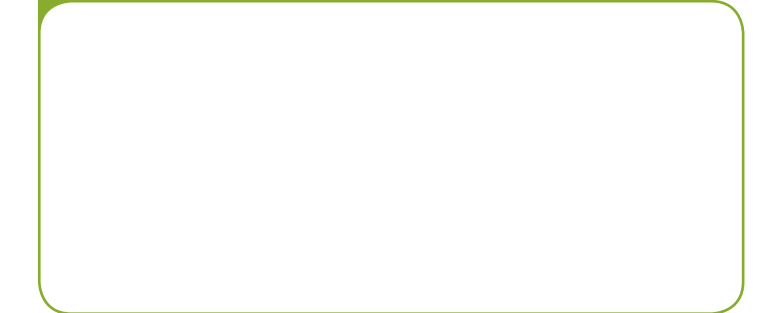
Environmental Specs	Operating Temperature	-22° F ~ +140° F
	Storage Temperature	-40° F ~ +185° F
	ESD	IEC 61000 - 4 - 2 (level 4) ± 8kV(contact) ; ± 15kV (air)
	American Military Standard	MIL-STD-810 C/D/E/F/G
	Dust & Water Intrusion	IP54 Standard
	Humidity	Per MIL-STD-810 C/D/E/F/G Standard
	Shock & Vibration	Per MIL-STD-810 C/D/E/F/G Standard

GPS	TTFF (Time To First Fix) Cold Start	<1 minute
	TTFF (Time To First Fix) Hot Start	<10 seconds
	Horizontal Accuracy	<10 meters

Transmitter	RF Power Output	1-25W
	FM Modulation (Analog Emissions Designator)	11K φF3E @ 12.5KHz ; 14KφF3E @ 20KHz ; 16KφF3E @ 25KHz
	4FSK Digital Modulation (Digital Emissions Designator)	12.5KHz Data Only: 7K6φFXD 12.5KHz Data & Voice: 7K6φFXW
	Conducted/Radiated Emission	-36dBm<1GHz -30dBm>1GHz
	Modulation Limiting	± 2.5KHz @ 12.5KHz ; ± 4.0KHz @ 20KHz ; ± 5.0KHz @ 25KHz
	FM Hum & Noise	40dB @ 12.5KHz ; 43dB @ 20KHz ; 45dB @ 25KHz
	Adjacent Channel Power	60dB @ 12.5KHz 70dB @ 20/25KHz
	Audio Response	+1 ~ -3dB
	Audio Distortion	≤ 3%
	Digital Vocoder Type	AMBE++ or SELP
Digital Protocol	ETSI-TS102 361-1, 2&3	

Receiver	Sensitivity	Analog	0.3 μ V (12dB SINAD) ; 0.22 μ V (Typical) (12dB SINAD) ; 0.4 μ V (20dB SINAD)
		Digital	0.3 μ V/BER5%
	Selectivity TIA-603 ETSI	65dB @ 12.5KHz / 75dB @ 20/25KHz 60dB @ 12.5KHz / 70dB @ 20/25KHz	
	Intermodulation TIA-603 ETSI	75dB @ 12.5/20/25KHz 70dB @ 12.5/20/25KHz	
	Spurious Response Rejection TIA-603 ETSI	75dB @ 12.5/20/25KHz 70dB @ 12.5/20/25KHz	
	Blocking TIA-603 ETSI	90dB 84dB	
	S/N	40dB @ 12.5KHz ; 43dB @ 20KHz ; 45dB @ 25KHz	
	Rated Audio Distortion	≤ 3%	
	Audio Response	+1 ~ -3dB	
	Conducted Spurious Emission	< -57dBm	

## Your Local Dealer



20KHz / 25KHz will not be available on new equipment in the U.S. after January 1<sup>st</sup>, 2011

Hytera reserves the right to change product designs or specifications at any time. If you have any questions regarding the accuracy of this information please contact your local sales representative or Hytera directly.

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