





- Most Compact DMR Mobile Radio
- User-Friendly Microphone with Programmable Buttons and Display





# MD652

The MD652 is specifically designed with safety and ease-ofoperation 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**



## **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

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 CordMounting Bracket
- Fuse



External Speaker Microphone SM09D1



GPS Antenna (optional) GPS04



Programming Cable (USB Port) PC37

Foot Switch (External PTT) POA44

See website for full list

## **Specifications**

**Environmental Specs** 

GPS

Dust & Water Intrusion

Shock & Vibration

Horizontal Accuracy

TTFF (Time To First Fix) Cold Start

TTFF (Time To First Fix) Hot Start

Humidity

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%	
	Stand By	< 0.6A
Current Drain	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	
Operating Temperature	-22° F ~ +140° F -40° F~ +185° F IEC 61000 - 4 - 2 (level 4) ±8kV(contact) ; ±15kV (air) MIL-STD-810 C/D/E/F/G	
Storage Temperature		
ESD		
American Military Standard		

IP54 Standard

Per MIL-STD-810 C/D/E/F/G Standard

Per MIL-STD-810 C/D/E/F/G Standard

<1 minute

<10 seconds

<10 meters

RF Power Output	1-25W
FM Modulation (Analog Emissions Designator)	11К фF3E @ 12.5KHz ; 14КфF3E @ 20KHz ; 16КфF3E @ 25KHz
4FSK Digital Modulation (Digital Emissions Designator)	12.5KHz Data Only: 7КбфFXD 12.5KHz Data & Voice: 7КбфFXW
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

	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		
Receiver	Spurious Response Rejection TIA-603 ETSI	75dB @ 12.5/20/25KHz 70dB @ 12.5/20/25KHz		
Rece	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		



### **Hytera America**

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GSA Contract Holder



20KHz / 25KHz will not be available on new equipment in the U.S. after January  $1^{\rm st}$  , 2011

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