SERIES

SPECIFICATIONS

Frequency RangeUHF: 400-470MHz; VHF: 136-174MHzChannel Capacity3Zone Capacity3Channel spacing12.5 / 25 KHzOperating Voltage13.6 V \pm 15%Standbyaround 0.3AReceive<1 ATransmitTransmitTransmitDimensions164 X 43 X 150 mmFrequency Stability±0.5 ppmAntenna ImpedanceSoQRECEIVERSensitivityTIA-603FORB @ 12.5/KHz / 70dB @ 25KHz"TIA-603TIA-603TIA-603TOdB @ 12.5/25KHz"Spurious Response RejectionTIA-603TOdB @ 12.5/25KHz"TIA-603TOdB @ 12.5/25KHz"			GENERAL		
Zone Capacity3Channel spacing $12.5 / 25 \text{ KHz}$ Operating Voltage $13.6 \text{ V} \pm 15\%$ Standbyaround 0.3AReceiveCurrent Drain $\frac{100}{125 / 25 \text{ KHz}}$ Transmit $25W$ $<3A$ $25W$ $<3A$ $25W$ $<3A$ $5W$ $<5A$ $45W$ $<12A$ WeightDimensions $164 \text{ X} 43 \text{ X} 150 \text{ mm}$ Frequency Stability $\pm 0.5 \text{ ppm}$ Antenna Impedance 50Ω RECEIVERSensitivity Δ nalog $0.3\mu V$ (12dB SINAD); $0.22\mu V$ (Typical) (12dB SINAD); $0.3\mu V$ /BER5%Selectivity $TIA-603$ $60dB @ 12.5KHz / 70dB @ 25KHz''TIA-603FouriousResponseTIA-603TIA-603TIA-603TIA-603TIA-603TIA-603TIA-603TIA-603TIA-603TIA-603TIA-603TIA-603TIA-603TIA-603TIA-603TIA-603TIA-603TIA-603TOdB @ 12.5/25KHz'$	Frequency Range		UHF: 400-470MHz; VHF: 136-174MHz		
Channel spacing $12.5 / 25 \text{ KHz}$ Operating Voltage $13.6 \text{ V} \pm 15\%$ Standbyaround 0.3AReceive< 1 A	<td colspan="2">Channel Capacity</td> <td colspan="2">48 (16 channels per zone)</td>	Channel Capacity		48 (16 channels per zone)	
Operating Voltage13.6 V ±15%Standbyaround 0.3AReceive<1 ACurrent DrainIW<3ATransmitIW<3A25W<3A25W<3A25W<3A25W<3A25W<3A25W<3A25W<3A25W<3A25W<3A25W<3A25W<3A25W<3A25W<3A25W<3A25W<3A25W<3A25W<3A25W<3A25W<3A25W<3A25W<3A25W<3A25W<3A25W<3A25W<3A25W<3A25W<2AMarceive televel25E </td <td colspan="2">Zone Capacity</td> <td colspan="2">3</td>	Zone Capacity		3		
Standbyaround 0.3AReceive<1 A	Channel spacing		12.5 / 25 KHz		
$\begin{tabular}{ c c c c } \hline Receive & <1 \ A & \\ \hline 1W & <3A & \\ \hline 25W & <8A & \\ \hline 5W & <5A & \\ \hline 45W & <12A & \\ \hline Weight & & \\ \hline 1100g & \\ \hline Dimensions & & 164 \ X \ 43 \ X \ 150 \ mm & \\ \hline Frequency \ Stability & \pm0.5 \ ppm & \\ \hline Antenna \ Impedance & & \\ \hline Sensitivity & & \\ \hline Digital & & \\ \hline Digital & & \\ \hline 0.3 \ \mu V \ (12dB \ SINAD); & \\ \hline 0.22 \ \mu V \ (Typical) \ (12dB \ SINAD); & \\ \hline 0.22 \ \mu V \ (Typical) \ (12dB \ SINAD); & \\ \hline 0.24 \ \mu V \ (20dB \ SINAD) & \\ \hline Digital & & \\ \hline 0.3 \ \mu V \ (BER5\% & \\ \hline Selectivity & & \\ \hline TIA-603 & & \\ \hline Odd B \ e \ 12.5 \ KHz \ / \ 70dB \ e \ 25 \ KHz' & \\ \hline Intermodulation & \\ \hline ETSI & & \\ \hline 65dB \ e \ 12.5 \ 25 \ KHz' & \\ \hline Spurious & \\ \hline Response & & \\ \hline TIA-603 & & \\ \hline 70dB \ e \ 12.5 \ 25 \ KHz' & \\ \hline \ Selectivity & \\ \hline TIA-603 & & \\ \hline TIA-603 & & \\ \hline 70dB \ e \ 12.5 \ 25 \ KHz' & \\ \hline \ Spurious & \\ \hline Response & & \\ \hline \ TIA-603 & & \\ \hline \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	Operating Voltage		13.6 V ±15%		
IntermediationCurrent Drain1W<3A	Current Drain	Standby	around 0.3A		
Current DrainOutTransmit $25W$ <8A		Receive	< 1 A		
$\begin{tabular}{ c c c c c c } \hline $25W$ & <8A$ \\ \hline $5W$ & <5A$ \\ \hline $5W$ & <12A$ \\ \hline $45W$ & <100g$ \\ \hline $100g$ & \\ \hline $11A-603$ & $60dB @ 12.5KHz / 70dB @ 25KHz"$ \\ \hline $11A-603$ & $70dB @ 12.5/25KHz"$ \\ \hline $11A-603$ & $70dB @ 1$		Transmit	1W	<3A	
$\begin{tabular}{ c c c c c }\hline & 45W & <12A \\ \hline & 45W & <12A \\ \hline & 45W & <12A \\ \hline & 1100g \\ \hline & 1100g$			25W	<8A	
Weight1100gDimensions164 X 43 X 150 mmFrequency Stability $\pm 0.5 \text{ ppm}$ Antenna Impedance 50Ω RECEIVER 0.3µV (12dB SINAD); 0.2µV (Typical) (12dB SINAD); 0.2µV (Typical) (12dB SINAD); 0.4µV (20dB SINAD)Digital0.3µV /BER5%TIA-60360dB @ 12.5KHz / 70dB @ 25KHz"TIA-60360dB @ 12.5KHz / 70dB @ 25KHz"TIA-60370dB @ 12.5/25KHz"ETSI65dB @ 12.5/25KHz"TIA-60370dB @ 12.5/25KHz"TIA-60370dB @ 12.5/25KHz"Spurious ResponseTIA-60370dB @ 12.5/25KHz"			5W	<5A	
Dimensions 164 X 43 X 150 mm Frequency Stability ±0.5 ppm Antenna Impedance 50Ω RECEIVER Sensitivity Analog 0.3µV (12dB SINAD); 0.22µV (Typical) (12dB SINAD); 0.22µV (Typical) (12dB SINAD) 0.4µV (20dB SINAD) Digital 0.3µV /BER5% TIA-603 60dB @ 12.5KHz / 70dB @ 25KHz [#] Intermodulation TIA-603 70dB @ 12.5/25KHz [#] ETSI 65dB @ 12.5/25KHz [#] Spurious TIA-603 70dB @ 12.5/25KHz [#]			45W	<12A	
$\begin{tabular}{ c c c c c } \hline Frequency Stability & \pm 0.5 ppm \\ \hline Antenna Impedance & 50 \Omega \\ \hline RECEIVER \\ \hline \\ Sensitivity & Analog & 0.3 \mu V (12 dB SINAD); \\ 0.2 \mu V (12 dB SINAD); \\ 0.2 2 \mu V (Typical) (12 dB SINAD); \\ 0.2 \mu V (20 dB SINAD) \\ \hline \\ Digital & 0.3 \mu V / BER5 \% \\ \hline \\ Selectivity & TIA-603 & 60 dB @ 12.5 KHz / 70 dB @ 25 KHz" \\ \hline \\ ETSI & 60 dB @ 12.5 KHz / 70 dB @ 25 KHz" \\ \hline \\ Intermodulation & TIA-603 & 70 dB @ 12.5 / 25 KHz" \\ \hline \\ Spurious & TIA-603 & 70 dB @ 12.5 / 25 KHz" \\ \hline \\ \hline \\ Spurious & TIA-603 & 70 dB @ 12.5 / 25 KHz" \\ \hline \\ \hline \end{array}$	Weight		1100g		
Antenna Impedance 50Ω RECEIVER Sensitivity Analog 0.3µV (12dB SINAD); 0.2µV (Typical) (12dB SINAD); 0.4µV (20dB SINAD) Digital 0.3µV /BER5% Selectivity TIA-603 60dB @ 12.5KHz / 70dB @ 25KHz" Intermodulation TIA-603 70dB @ 12.5/25KHz" Spurious Response TIA-603 70dB @ 12.5/25KHz"	Dimensions		164 X 43 X 150 mm		
$\begin{tabular}{ c c c c } \hline RECEIVER \\ \hline Sensitivity & Analog & 0.3 \mu V (12 dB SINAD); \\ 0.2 \mu V (12 dB SINAD); \\ 0.2 \mu V (2 0 dB SINAD) \\ \hline Digital & 0.3 \mu V / BER5\% \\ \hline Digital & 0.3 \mu V / BER5\% \\ \hline TIA-603 & 60 dB @ 12.5 KHz / 70 dB @ 25 KHz" \\ \hline ETSI & 60 dB @ 12.5 KHz / 70 dB @ 25 KHz" \\ \hline Intermodulation & TIA-603 & 70 dB @ 12.5 / 25 KHz" \\ \hline Spurious & TIA-603 & 70 dB @ 12.5 / 25 KHz" \\ \hline Spurious & TIA-603 & 70 dB @ 12.5 / 25 KHz" \\ \hline \end{array}$. ,	,	±0.5 ppm		
Sensitivity Analog 0.3µV (12dB SINAD); 0.22µV (Typical) (12dB SINAD); 0.4µV (20dB SINAD) Digital 0.3µV /BER5% Selectivity TIA-603 60dB @ 12.5KHz / 70dB @ 25KHz" ETSI 60dB @ 12.5KHz / 70dB @ 25KHz" Intermodulation TIA-603 70dB @ 12.5/25KHz" Spurious Response TIA-603 70dB @ 12.5/25KHz"	Antenna Impedance		50Ω		
Sensitivity Analog 0.22µV (Typical) (12dB SINAD); 0.4µV (20dB SINAD) Digital 0.3µV /BER5% Selectivity TIA-603 60dB @ 12.5KHz / 70dB @ 25KHz" ETSI 60dB @ 12.5KHz / 70dB @ 25KHz" Intermodulation TIA-603 70dB @ 12.5/25KHz" Spurious Response TIA-603 70dB @ 12.5/25KHz"			RECEIVER		
Selectivity TIA-603 60dB @ 12.5KHz / 70dB @ 25KHz" ETSI 60dB @ 12.5KHz / 70dB @ 25KHz" Intermodulation TIA-603 70dB @ 12.5/25KHz" Spurious Response TIA-603 70dB @ 12.5/25KHz"	Sensitivity	Analog	0.22µV (Typical) (12dB SINAD)	;	
Selectivity ETSI 60dB @ 12.5KHz / 70dB @ 25KHz" Intermodulation TIA-603 70dB @ 12.5/25KHz" ETSI 65dB @ 12.5/25KHz" Spurious Response TIA-603 70dB @ 12.5/25KHz"		Digital	0.3µV /BER5%		
ETSI 60dB @ 12.5KHz / 70dB @ 25KHz" Intermodulation TIA-603 70dB @ 12.5/25KHz" ETSI 65dB @ 12.5/25KHz" Spurious Response TIA-603 70dB @ 12.5/25KHz"	Selectivity	TIA-603	60dB @ 12.5KHz / 70dB @ 25KHz"		
Intermodulation ETSI 65dB @ 12.5/25KHz" Spurious TIA-603 70dB @ 12.5/25KHz"		ETSI	60dB @ 12.5KHz / 70dB @ 25KHz"		
ETSI 65dB @ 12.5/25KHz" Spurious Response TIA-603 70dB @ 12.5/25KHz"	Intermodulation	TIA-603	70dB @ 12.5/25KHz"		
Response		ETSI	65dB @ 12.5/25KHz"		
	Response	TIA-603	70dB @ 12.5/25KHz"		
		ETSI	70dB @ 12.5/25KHz		
TIA-603 90dB	Blocking	TIA-603	90dB		
ETSI 84dB		ETSI	84dB		
Hum and Noise 40dB @ 12.5KHz 45dB @ 25KHz"	Hum and Noise		_		
Rated Audio Power Output Internal (@16 ohm load) 4W	Rated Audio Power Output		Internal (@16 ohm load)	4W	
External (@8 ohm load) 8W			External (@8 ohm load)	8W	
Max Audio Power Output Internal (@16 ohm load) 6W	Max Audio Power Output		Internal (@16 ohm load)	6W	
External (@8 ohm load) 12W			External (@8 ohm load)	12W	
Rated Audio Distortion ≤3%	Rated Audio Distortion		≤3%		
Audio Response +1 ~ -3dB	Audio Response		+1~-3dB		
Conducted Spurious Emission <-57dBm	Conducted Spurious Emission		<-57dBm		

T	RANSMITTER	
RF Power Output	Low power version: 1-25W (UHF/VHF) High power version: 5-45W(UHF) / 5-50W(VHF)	
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 ^e	
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+2 TM	
Digital Protocol	ETSI-TS102 361-1,-2,-3	
ENVIF	RONMENTAL	
Operating Temperature	-30°C~ +60°C	
Storage Temperature	-40°C~ +85°C	
ESD	IEC 61000-4-2 (Level 4) ±8kV (Contact) ±15kV (Air)	
American Military Standard	MIL-STD-810 G	
Dustproof & Waterproof	IP54 Standard	
Humidity	MIL-STD-810 G Standard	
Shock & Vibration	MIL-STD-810 G Standard	

²20KHz/25KHz will not be available on new equipment in the U.S. after 2011-01-01. All specifications are subject to change without notice due to continuous development.



MD612 SERIES

FC (E O



Hytera America

3315 Commerce Parkway, Miramar, FL 33025, United States Telephone: +1(954)846-1011

8 Whatney, Suite 200, Irvine, CA 92618, United States Telephone: +1(949)326-5740

1916 Wright Boulevard, Schaumburg, IL 60193, United States Telephone: +1 (213) 262-3578



Hytera retains right to change the product design and specification. Should any printing mistake occur, Hytera doesn't bear relevant responsibility. Little difference between real product and product indicated by printing materials will occur by printing reason.

HYT, Hytera are registered trademarks of Hytera Communications Corp., Ltd. © 2018 Hytera Communications Corp., Ltd. All Rights Reserved.

- > Analog & Digital Dual Modes > Clear Voice
- ► Remote Control Head

➤ GPS and Bluetooth Option









www.hytera.us



PROFESSIONAL AND SIMPLE TO USE

A&D Auto Detect A/D

Compatible with analog conventional and digital conventional modes. Allow MD612i to simultaneously monitor analog and digital modes and automatically respond in each mode. It is an easy way for migration to digital from analog.

INCREASED COVERAGE RANGE ?

With a high RF power output up to 50W, MD612i can dramatically increase your communication range.

R GPS POSITIONING (Optional)

With an external GPS module and GPS antenna, MD612i can upload its real-time position to AVL applications.

REMOTE CONTROL HEAD(Coming soon)

Remote control head kit reduces your concerns of installation, and offers you a flexible solution for various vehicle types.

ANALOG SIGNALING alleala*

Support DTMF and HDC1200(coming soon) signaling in analog mode.



RELIABLE AND DURABLE

MD612i is compliant with MIL-STD-810 C/D/E/F/G and IP54.

PSEUDO TRUNK

Several talk groups share the same frequency, and each one of them can dynamically chose to use one of the slots to talk. This is a two-slot-trunked mode. While time-slot 1 is busy, MD612i will use time-slot 2 to transmit.

RADIO REGISTRATION SERVICE RRS

RRS allows MD612i working in Smart Dispatch and SmartOne Dispatch, for online/offline presence.

SUPPLEMENTARY FEATURES (Optional)

MD612i supports radio Enable/Disable, Remoter Monitor and Priority Interrupt.

EMERGENCY ALARM/CALL

Use the orange emergency button to initiate an emergency alarm and call to other radios.

BUILT-IN BLUETOOTH (Factory Optional) *)

Built-in Bluetooth supports MD612i to support wireless audio accessories and PTT devices to provide hands-free operation.



PRIVACY

Basic end-to-end Encryption secures your voice and data transmission.

ROAMING

It allows MD612i to be used in a large multisite network.

TARGET MARKETS



ACCESSORIES

