

# VECTIQ

*A smarter way to talk.*

## **M100 Series    DMR Two-way Radio**

- \* 1,000 Contacts
- \* 1,000 Channels
- \* Field Programming
- \* Dual Modes (Digital+Analog)
- \* Remote Head Available
- \* Superior Digital Voice



### **M100/150**

The M100-Series mobile radios feature the most-requested digital innovations and are compatible with most modern two-way radio systems.



# M100 Series

# DMR Two-way Radio

## Key Features

### One Touch Quick Menu

Your most important contacts and channels available quickly and easily with a simple quick menu.

### Dual Priority Scan

### Kill/Revive

### Power Up Zone/Home Zone

### Digital/Analog Emergency

M100 Series radios support 32 Digital Emergency Systems and 4 Analog Emergency Systems

### Digital Encryption

M100 Series radios Support 16-bit basic encryption and 72-bit enhanced encryption

### CTCSS/DCS Encode & Decode

### DTMF/MDC1200/2-/5-Tone Encode & Decode

### Voice Auto Record

M100 Series radios support automatic recording after receiving 2-tone or 5-tone signalling. Four voice 15-second records standard.

### Channel Voice Annunciation

Changing channels is safe and easy when you let the M100 Series radio announce the channels.

### Operational Bands

M100 Series radios can be programmed to a wide frequency range. VHF: 136-174MHz (M100) or UHF:400-470MHz (M150).

## Specifications

### General (w/ Standard Li-Ion Battery)

|                             |                        |
|-----------------------------|------------------------|
| Power Supply                | 13.6V Dc±20%           |
| Frequencies-Full Band split | 136-174MHz, 400-470MHz |
| Number of Channels          | 1000 Channels          |
| Maximum Zones               | 250 Zones              |
| Maximum Channels Per Zone   | 16                     |
| Channel Spacing             | 12.5/25kHz             |
| Operating Temperature       | -30°C~+60°C            |
| Dimensions HxWxD (mm)       | 46x160x175             |
| Weight                      | 1315g                  |

### Transmitter

|  |   |
|--|---|
| Frequently Stability (-30°C -60°C, 25°C Ref) | 1.0 ppm   |
| Power Output                                 | 5W (L), 25W (M) 45W (H)   |
| Modulation Limiting                          | ±2.5kHz@12.5kHz/±5kHz@25kHz                                     |
| FM Hum & Noise                               | -40dB@12.5kHz/-45dB@25kHz                                       |
| Conducted/Radiated Emission                  | -36dBm<1GHz, -30dBm>1GHz  |
| Adjacent Channel Power                       | -60dB@12.5kHz/-70dB@25kHz                                       |
| FM Modulation Mode                           | 12.5kHz: 11K0F3E/25kHz: 16K0F3E                                 |
| 4FSK Digital Mode                            | 12.5kHz (data only): 7K60FXD<br>12.5kHz (data + voice): 7K60FXE |
| 4FSK Modulation Accuracy                     | 5%@25°C, 10%extreme temperature                                 |
| Audio Response (300-3000Hz)                  | +1~-3dB   |
| Digital Protocol                             | ETSI TS 102 361-1, -2, -3                                       |
| Audio Distortion                             | <3%   |
| Vocoder                                      | AMBE+2™   |
| Ext. Microphone Connector                    | DB15  |

### Receiver

|                              |  |
|------------------------------|--|
| Analog Sensitivity           | 0.35 μ V/-116dBm (20dB SINAD)<br>0.22 μ V/-120dBm (12dB SINAD)     |
| Digital Sensitivity          | 0.3 μ V/-120dBm (BER 5%)<br>0.7 μ V/-118dBm (BER 1%)               |
| Intermodulation              | TIA603 70dB' ETSI 65dB   |
| Adjacent Channel Selectivity | TIA603C 70dB; ETSI: 65dB@25kHz<br>TIA603C 60dB; ETSI: 60dB@12.5kHz |
| Spurious Rejection           | TIA603C: 75dB; ETSI: 70dB  |
| Blocking                     | 84dB   |
| Rated Audio/MAX Audio        | 2W/3W  |
| Audio Distortion@Rated Audio | 3%   |
| Audio Response (300-3000Hz)  | +1~-3dB  |
| Conducted Spurious Emission  | -57dBm<1GHz, -47dBm>1GHz ETS300086                                 |

## Your Local Dealer:

[www.vectiq.com](http://www.vectiq.com)

888-686-6731