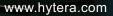


# Professional DMR Mobile Two-way Radios HM6 series EMPOWER YOUR OPERATION

0

HM68X

HM65X



Hytera

The Hytera HM6 series is a new generation of entry-level professional DMR mobile two-way radios designed to provide reliable voice and data communications in mobile devices anytime, anywhere. You can stay connected with your teammates wherever the action takes you. The HM6 series is your best partner in transportation, business, utilities, and more.

Compact and lightweight, the HM6 series is easy to install. Thanks to the handheld control head (HHCH), you can install the radio unit anywhere in your vehicle such as in the trunk and still control the radio. With the ergonomic design, the four piano-style buttons make operations effortless. The AI-based noise cancellation ensures the HM6 series to deliver superb clear audios without ambient noise. With the higher RX sensitivity, the HM6 series provides you smoother communication. The built-in BT 5.0 module enables you to use various BT audio accessories and program the HM6 series conveniently without the hassles of cables.

# ((•)) Smooth Communication

• Thanks to the high RX sensitivity, the HM6 series can deliver clear and dependable communications even in the area where the signal is unstable or weak.

# Digital and Analog Compatibility

• The HM6 series can operate in either analog or digital mode, which is the ideal solution for you to migrate from analog to digital with minimal disruption and investment.

# III Crystal-clear Audio

 The HM6 series delivers superb audio in noisy streets or highways. The Al-based noise cancellation filters out echoes and background noises such as horn and engine sounds, make your communication more efficient. The howling suppression prevents the screeching or howling feedback between two radios in the same vehicle, ensuring clear and uninterrupted communication on the move.



# **Innovative Design**

• Compact and lightweight, the HM6 series is easy to install, remove, or operate in the vehicle. The front panel adopts two-shot molding to make the operation area more recognizable. The transflective display is readable even in the dark or direct sunlight. At the bottom of the display, the four piano-style keys offer great haptic feedback when pressed.

# (m) Wireless Connection

• With the built-in BT 5.0 module, the HM6 series can work with the BT audio accessories to boost your safety and productivity during in-vehicle communications. And these radios can be programmed through BT, saving time and resource.

# Handheld Control Head

• With the HHCH connected, the HM65X can be installed under the seat, in the trunk, or anywhere in the vehicle, making the installation more flexible. Also, the HHCH helps you turn on or off the HM65X, switch channels or contacts, adjust volumes, or view messages.

\* This function is only supported by HM65X.

# **Q** Unrivaled Versatility

• In addition to reliable voice calls, the HM6 Series provides various data services including text message, clarity transmission, emergency alarm, radio enable/disable, GPS location, and more. These services dramatically enhance your safety and productivity.

# Superior Durability

• The HM6 series withstands harsh temperatures, shock, and vibration, and meets MIL-STD-810H standards, and IP54 for dust and water intrusion. The connection between the palm microphone and 10pin aviation connector keep very tight and is difficult to loosen. The drawstring of the palm microphone has the excellent stretching ability to protect the palm microphone to get the maximum service life.

HM68×

in the

# **APPEARANCE**



# **SPECIFICATIONS**

| GENERAL Frequency Range  | 400~470MHz   |
|--|--|
| Channel Capacity   | 512  |
| Zone Capacity  | 16   |
| Channel Spacing  |  |
| Operating Voltage  | 12.5kHz/20kHz/25kHz<br>13.6V±15%   |
| Operating voltage  |  |
| Current Drain  | Standby: <0.5A<br>Receive: <2.0A   |
|  | 5W: <4A  |
|  | Transmit 25W: <8A  |
| 5 6 L Hu   | 45W: <12A  |
| Frequency Stability  | ±0.5ppm  |
| Antenna Impedance  | 50Ω  |
| Dimensions (H x W x D)   | HM68X:164 x 159 x 42 mm<br>HM65X:164 x 154 x 42 mm   |
| Weight   | HM68X : 1150g  |
| Weight   | HM65X : 1100g  |
| LCD Display(only HM68X)  | 1.45", 4Line   |
| RECEIVER   |  |
| Sensitivity  | Analog 0.18μV (12dB SINAD)<br>0.16μV (12dB SINAD) (Typical)  |
|  | Digital 0.18µV/BER5%   |
|  | TIA-603: 65dB@12.5kHz / 75dB@20/25kHz  |
| Selectivity  | ETSI: 60dB@12.5kHz / 70dB@20/25kHz   |
|  |  |
| Inter-modulation   | TIA-603: 75dB@12.5/20/25kHz<br>ETSI: 70dB@12.5/20/25kHz  |
|  |  |
| Spurious Response Rejection  | TIA-603: 75dB@12.5/20/25kHz<br>ETSI: 70dB@12.5/20/25kHz  |
|  | TIA-603: 90dB  |
| Blocking   | TIA-603: 90dB<br>ETSI: 84dB  |
| 11 INI 1   |  |
| Hum and Noise  | 40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz   |
| Rated Audio Power Output   | Internal (20 Ohm load): 3W<br>External (8 Ohm load): 6W  |
| Max Audio Power Output   | Internal (20 Ohm load): 7.5W   |
|  | External (8 Ohm load): 20W   |
| Rated Audio Distortion   | ≤3%  |
| Audio Response   | +1 to -3dB   |
| Conducted Spurious Emission  | <-57dBm  |
| TRANSMITTER  |  |
| RF Power Output  | Low power: 5-25W   |
| •  | High power:5-45W   |
|  |  |
|  | 11K0F3E@12.5kHz  |
| FM Modulation  | 14K0F3E@20kHz  |
| FM Modulation  |  |
|  | 14K0F3E@20kHz  |
|  | 14K0F3E@20kHz<br>16K0F3E@25kHz   |
| 4FSK Digital Modulation  | 14K0F3E@20kHz<br>16K0F3E@25kHz<br>12.5kHz Data Only: 7K60FXD   |
| 4FSK Digital Modulation<br>Conducted/Radiated Emission   | 14K0F3E@20kHz<br>16K0F3E@25kHz<br>12.5kHz Data Only: 7K60FXD<br>12.5kHz Data and Voice: 7K60FXW  |
| 4FSK Digital Modulation<br>Conducted/Radiated Emission<br>Modulation Limiting  | 14K0F3E@20kHz<br>16K0F3E@25kHz<br>12.5kHz Data Only: 7K60FXD<br>12.5kHz Data and Voice: 7K60FXW<br>-36dBm<1GHz;-30dBm>1GHz   |
| 4FSK Digital Modulation<br>Conducted/Radiated Emission<br>Modulation Limiting<br>FM Hum & Noise  | 14K0F3E@20kHz<br>16K0F3E@25kHz<br>12.5kHz Data Only: 7K60FXD<br>12.5kHz Data and Voice: 7K60FXW<br>-36dBm<1GHz;-30dBm>1GHz<br>±2.5kHz@12.5kHz; ±4.0kHz@20kHz; ±5.0kHz@25kHz  |
| 4FSK Digital Modulation<br>Conducted/Radiated Emission<br>Modulation Limiting<br>FM Hum & Noise<br>Adjacent Channel Power  | 14K0F3E@20kHz<br>16K0F3E@25kHz<br>12.5kHz Data Only: 7K60FXD<br>12.5kHz Data and Voice: 7K60FXW<br>-36dBm<1GHz;-30dBm>1GHz<br>±2.5kHz@12.5kHz; ±4.0kHz@20kHz; ±5.0kHz@25kHz<br>40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz  |
| 4FSK Digital Modulation<br>Conducted/Radiated Emission<br>Modulation Limiting<br>FM Hum & Noise<br>Adjacent Channel Power<br>Audio Response  | 14K0F3E@20kHz<br>16K0F3E@25kHz<br>12.5kHz Data Only: 7K60FXD<br>12.5kHz Data and Voice: 7K60FXW<br>-36dBm<1GHz;-30dBm>1GHz<br>±2.5kHz@12.5kHz; ±4.0kHz@20kHz; ±5.0kHz@25kHz<br>40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz<br>60dB@12.5kHz; 70dB@20/25kHz<br>+1 to -3dB   |
| 4FSK Digital Modulation<br>Conducted/Radiated Emission<br>Modulation Limiting<br>FM Hum & Noise<br>Adjacent Channel Power<br>Audio Response<br>Audio Distortion  | 14K0F3E@20kHz<br>16K0F3E@25kHz<br>12.5kHz Data Only: 7K60FXD<br>12.5kHz Data and Voice: 7K60FXW<br>-36dBm<1GHz;-30dBm>1GHz<br>±2.5kHz@12.5kHz; ±4.0kHz@20kHz; ±5.0kHz@25kHz<br>40dB@12.5kHz; 44.0kHz@20kHz; ±5.0kHz@25kHz<br>60dB@12.5kHz; 70dB@20/25kHz<br>+1 to -3dB<br>≤3%  |
| 4FSK Digital Modulation<br>Conducted/Radiated Emission<br>Modulation Limiting<br>FM Hum & Noise<br>Adjacent Channel Power<br>Audio Response<br>Audio Distortion<br>Digital Vocoder Type  | 14K0F3E@20kHz<br>16K0F3E@25kHz<br>12.5kHz Data Only: 7K60FXD<br>12.5kHz Data and Voice: 7K60FXW<br>-36dBm<1GHz;-30dBm>1GHz<br>±2.5kHz@12.5kHz; ±4.0kHz@20kHz; ±5.0kHz@25kHz<br>40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz<br>60dB@12.5kHz; 70dB@20/25kHz<br>+1 to -3dB   |
| 4FSK Digital Modulation<br>Conducted/Radiated Emission<br>Modulation Limiting<br>FM Hum & Noise<br>Adjacent Channel Power<br>Audio Response<br>Audio Distortion<br>Digital Vocoder Type<br>ENVIRONMENTAL   | 14K0F3E@20kHz<br>16K0F3E@25kHz<br>12.5kHz Data Only: 7K60FXD<br>12.5kHz Data and Voice: 7K60FXW<br>-36dBm<16Hz;-30dBm>1GHz<br>±2.5kHz@12.5kHz; ±4.0kHz@20kHz; ±5.0kHz@25kHz<br>40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz<br>60dB@12.5kHz; 70dB@20/25kHz<br>+1 to -3dB<br>≤3%<br>AMBE+2™   |
| 4FSK Digital Modulation<br>Conducted/Radiated Emission<br>Modulation Limiting<br>FM Hum & Noise<br>Adjacent Channel Power<br>Audio Response<br>Audio Distortion<br>Digital Vocoder Type<br>ENVIRONMENTAL<br>Operating Temperature  | 14K0F3E@20kHz<br>16K0F3E@25kHz<br>12.5kHz Data Only: 7K60FXD<br>12.5kHz Data and Voice: 7K60FXW<br>-36dBm<1GHz-30dBm>1GHz<br>±2.5kHz@12.5kHz; ±4.0kHz@20kHz; ±5.0kHz@25kHz<br>40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz<br>60dB@12.5kHz; 70dB@20/25kHz<br>+1 to -3dB<br>≤3%<br>AMBE+2™<br>-30°C~ +60°C  |
| 4FSK Digital Modulation<br>Conducted/Radiated Emission<br>Modulation Limiting<br>FM Hum & Noise<br>Adjacent Channel Power<br>Audio Response<br>Audio Distortion<br>Digital Vocoder Type<br>ENVIRONMENTAL   | 14K0F3E@20kHz<br>16K0F3E@25kHz<br>12.5kHz Data Only: 7K60FXD<br>12.5kHz Data and Voice: 7K60FXW<br>-36dBm<1GHz; -30dBm>1GHz<br>±2.5kHz@12.5kHz; ±4.0kHz@20kHz; ±5.0kHz@25kHz<br>40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz<br>60dB@12.5kHz; 70dB@20/25kHz<br>+1 to -3dB<br>≤3%<br>AMBE+2™<br>-30°C~+60°C<br>-40°C~ +85°C   |
| 4FSK Digital Modulation<br>Conducted/Radiated Emission<br>Modulation Limiting<br>FM Hum & Noise<br>Adjacent Channel Power<br>Audio Response<br>Audio Distortion<br>Digital Vocoder Type<br>ENVIRONMENTAL<br>Operating Temperature<br>Storage Temperature<br>ESD  | 14K0F3E@20kHz<br>16K0F3E@25kHz<br>12.5kHz Data Only: 7K60FXD<br>12.5kHz Data and Voice: 7K60FXW<br>-36dBm<1GHz-30dBm>1GHz<br>±2.5kHz@12.5kHz; ±4.0kHz@20kHz; ±5.0kHz@25kHz<br>40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz<br>60dB@12.5kHz; 70dB@20/25kHz<br>+1 to -3dB<br>≤3%<br>AMBE+2™<br>-30°C~ +60°C  |
| 4FSK Digital Modulation<br>Conducted/Radiated Emission<br>Modulation Limiting<br>FM Hum & Noise<br>Adjacent Channel Power<br>Audio Response<br>Audio Distortion<br>Digital Vocoder Type<br>ENVIRONMENTAL<br>Operating Temperature<br>Storage Temperature<br>ESD<br>American Military Standard  | 14K0F3E@20kHz<br>16K0F3E@25kHz<br>12.5kHz Data Only: 7K60FXD<br>12.5kHz Data and Voice: 7K60FXW<br>-36dBm<1GHz; -30dBm>1GHz<br>±2.5kHz@12.5kHz; ±4.0kHz@20kHz; ±5.0kHz@25kHz<br>40dB@12.5kHz; 70dB@20/25kHz<br>40dB@12.5kHz; 70dB@20/25kHz<br>+1 to -3dB<br>≤3%<br>AMBE+2 <sup>™</sup><br>-30°C~ +60°C<br>-40°C~ +85°C<br>IEC 61000-4-2(Level 4)   |
| 4FSK Digital Modulation<br>Conducted/Radiated Emission<br>Modulation Limiting<br>FM Hum & Noise<br>Adjacent Channel Power<br>Audio Response<br>Audio Distortion<br>Digital Vocoder Type<br>ENVIRONMENTAL<br>Operating Temperature<br>Storage Temperature<br>ESD  | 14K0F3E@20kHz         16K0F3E@25kHz         12.5kHz Data Only: 7K60FXD         12.5kHz Data and Voice: 7K60FXW         -36dBm<1GHz; -30dBm>1GHz         ±2.5kHz@12.5kHz; ±4.0kHz@20kHz; ±5.0kHz@25kHz         40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz         60dB@12.5kHz; 70dB@20/25kHz         +1 to -3dB         ≤3%         AMBE+2™         -30°C~ +60°C         -40°C~ +85°C         IEC 61000-4-2(Level 4)         ±8kV (Contact); ±15kV (Air)   |
| 4FSK Digital Modulation<br>Conducted/Radiated Emission<br>Modulation Limiting<br>FM Hum & Noise<br>Adjacent Channel Power<br>Audio Response<br>Audio Distortion<br>Digital Vocoder Type<br>ENVIRONMENTAL<br>Operating Temperature<br>Storage Temperature<br>ESD<br>American Military Standard  | 14K0F3E@20kHz         16K0F3E@25kHz         12.5kHz Data Only: 7K60FXD         12.5kHz Data and Voice: 7K60FXW         -36dBm         -36dBm         40dB@12.5kHz; ±4.0kHz@20kHz; ±5.0kHz@25kHz         40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz         60dB@12.5kHz; 70dB@20/25kHz         +1 to -3dB         ≤3%         AMBE+2 <sup>™</sup> -30°C~ +60°C         -40°C~ +85°C         IEC 61000-4-2(Level 4)         ±8kV (Contact); ±15kV (Air)         MIL-STD-810G  |
| 4FSK Digital Modulation<br>Conducted/Radiated Emission<br>Modulation Limiting<br>FM Hum & Noise<br>Adjacent Channel Power<br>Audio Response<br>Audio Distortion<br>Digital Vocoder Type<br>ENVIRONMENTAL<br>Operating Temperature<br>Storage Temperature<br>ESD<br>American Military Standard<br>Dustproof & Waterproof  | 14K0F3E@20kHz         16K0F3E@25kHz         12.5kHz Data Only: 7K60FXD         12.5kHz Data and Voice: 7K60FXW         -36dBm         -36dBm         40dB@12.5kHz; ±4.0kHz@20kHz; ±5.0kHz@25kHz         40dB@12.5kHz; 7ddB@20kHz; 45dB@25kHz         60dB@12.5kHz; 70dB@20/25kHz         +1 to -3dB         ≤3%         AMBE+2™         -30°C~ +60°C         -40°C~ +85°C         IEC 61000-4-2(Level 4)         ±8kV (Contact); ±15kV (Air)         MIL-STD-810G         IP54   |
| 4FSK Digital Modulation<br>Conducted/Radiated Emission<br>Modulation Limiting<br>FM Hum & Noise<br>Adjacent Channel Power<br>Audio Response<br>Audio Distortion<br>Digital Vocoder Type<br>ENVIRONMENTAL<br>Operating Temperature<br>Storage Temperature<br>ESD<br>American Military Standard<br>Dustproof & Waterproof<br>Humidity  | 14K0F3E@20kHz         16K0F3E@25kHz         12.5kHz Data Only: 7K60FXD         12.5kHz Data and Voice: 7K60FXW         -36dBm<1GHz;-30dBm>1GHz         ±2.5kHz@12.5kHz; ±4.0kHz@20kHz; ±5.0kHz@25kHz         40dB@12.5kHz; 70dB@20/25kHz         #0dB@12.5kHz; 70dB@20/25kHz         +1 to -3dB         ≤3%         AMBE+2 <sup>™</sup> -30°C~ +60°C         -40°C~ +85°C         IEC 61000-4-2(Level 4)         ±8KV (Contact); ±15kV (Air)         MIL-STD-810G         IP54         Per MIL-STD-810H Standard   |
| 4FSK Digital Modulation<br>Conducted/Radiated Emission<br>Modulation Limiting<br>FM Hum & Noise<br>Adjacent Channel Power<br>Audio Distortion<br>Digital Vocoder Type<br>ENVIRONMENTAL<br>Operating Temperature<br>Storage Temperature<br>ESD<br>American Military Standard<br>Dustproof & Waterproof<br>Humidity<br>Shock & Vibration<br>GPS  | 14K0F3E@20kHz         16K0F3E@25kHz         12.5kHz Data Only: 7K60FXD         12.5kHz Data and Voice: 7K60FXW         -36dBm<1GHz;-30dBm>1GHz         ±2.5kHz@12.5kHz; ±4.0kHz@20kHz; ±5.0kHz@25kHz         40dB@12.5kHz; 70dB@20/25kHz         #0dB@12.5kHz; 70dB@20/25kHz         +1 to -3dB         ≤3%         AMBE+2 <sup>™</sup> -30°C~ +60°C         -40°C~ +85°C         IEC 61000-4-2(Level 4)         ±8KV (Contact); ±15kV (Air)         MIL-STD-810G         IP54         Per MIL-STD-810H Standard   |
| 4FSK Digital Modulation<br>Conducted/Radiated Emission<br>Modulation Limiting<br>FM Hum & Noise<br>Adjacent Channel Power<br>Audio Response<br>Audio Distortion<br>Digital Vocoder Type<br>ENVIRONMENTAL<br>Operating Temperature<br>Storage Temperature<br>Storage Temperature<br>ESD<br>American Military Standard<br>Dustproof & Waterproof<br>Humidity<br>Shock & Vibration<br>GPS<br>GNSS | 14K0F3E@20kHz         16K0F3E@25kHz         12.5kHz Data ONJy: 7K60FXD         12.5kHz Data and Voice: 7K60FXW         -36dBm<1GHz; -30dBm>1GHz         ±2.5kHz@12.5kHz; ±4.0kHz@20kHz; ±5.0kHz@25kHz         40dB@12.5kHz; +4.0kHz@20kHz; ±5.0kHz@25kHz         60dB@12.5kHz; 70dB@20/25kHz         +1 to -3dB         ≤3%         AMBE+2 <sup>™</sup> -30°C~ +60°C         -40°C~ +85°C         IEC 61000-4-2(Level 4)         ±8kV (Contact); ±15kV (Air)         MIL-STD-810G         IP54         Per MIL-STD-810H Standard         Per MIL-STD-810H Standard |
| 4FSK Digital Modulation<br>Conducted/Radiated Emission<br>Modulation Limiting<br>FM Hum & Noise<br>Adjacent Channel Power<br>Audio Response<br>Audio Distortion<br>Digital Vocoder Type<br>ENVIRONMENTAL<br>Operating Temperature<br>Storage Temperature<br>ESD<br>American Military Standard<br>Dustproof & Waterproof<br>Humidity<br>Shock & Vibration                                       | 14K0F3E@20kHz<br>16K0F3E@25kHz<br>12.5kHz Data only: 7K60FXD<br>12.5kHz Data and Voice: 7K60FXW<br>-36dBm<1GHz; >30dBm>1GHz<br>±2.5kHz@12.5kHz; ±4.0kHz@20kHz; ±5.0kHz@25kHz<br>40dB@12.5kHz; 143dB@20kHz; 45dB@25kHz<br>60dB@12.5kHz; 70dB@20/25kHz<br>+1 to -3dB<br>≤3%<br>AMBE+2™<br>-30°C~ +60°C<br>-40°C~ +85°C<br>IEC 61000-4-2(Level 4)<br>±8kV (Contact); ±15kV (Air)<br>MIL-STD-810G<br>IP54<br>Per MIL-STD-810H Standard<br>Per MIL-STD-810H Standard<br>GPS, GPS+BDS  |

(95th percentile values>5 satellites visible at a nominal -130dBm signal strength)

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# **ACCESSORIES**



• Remote Speaker Microphone Without Display(HM68X)



Power Cord



GNSS Antenna

(For radio with the GNSS feature)





• External power supply



• Bluetooth remote speaker microphone

• External Speaker

Antenna

 Standard Optional



 Back to back data cable

Ignition cable



• DB26 Programming and data Cable



• USB Programming/ downloading firmware upgrading cable



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• Remote Speaker