

# PROFESSIONAL DMR PORTABLE TWO-WAY RADIO

# **HP5 SERIES**

**EMPOWER YOUR OPERATION** 





# **EMPOWER YOUR OPERATION**

Hytera HP5 Series is a new-gen professional portable two-way radio that provides reliable voice communications for high-end office buildings, stadiums, industrial parks, schools, hospitals, and more.

Effortless usability is reengineered. Two dedicated knobs for volume and channel controls improve your efficiency. The universal Type-C port makes programming, upgrading, and charging more convenient than ever before. The BT capability gives you more mobility you need to get the job done, without the hassle of wires and cords.

Reliability is redefined. Durable enough to withstand dust, heat, shock and water submersion, the HP5 Series is IP67 and MIL-STD-810H certified. The superior audio has never been compromised, thanks to the powerful speaker and the Al-based noise cancellation algorithm. The outstanding sensitivity ensures stable communications in challenging environments.





Purify your voice, and eliminate the noise. The HP5
Series delivers crystal-clear audio in any
environment, thanks to Al-based noise
cancellation. This technology suppresses any
annoying feedback howling and filters out the
unwanted ambient noises. So you can feel like
talking face to face in every call no matter where
you are.



When you go further out, you may encounter degraded communications due to weak radio signal. With the 0.18  $\mu$ V (–122 dBm) sensitivity, the HP5 Series provides exceptional communication coverage. It ensures reliable communications even at the far edge of coverage with weak signal. Wherever you go in the workplace, you can always keep connected.



## Versatile Type-C port

Just share the same USB data cable with your smartphone, then you can charge your radio with a power bank or car charger, or program and upgrade your radio. All of these benefit from the universal Type-C port.



# ((p)) BT, wirelessly, conveniently

The HP5 Series has optional BT 5.2 capability, so you can experience total freedom with no cords when using BT audio accessories. This feature also allows you to pair the radio with your smartphone, and then get radio programming done by the HyTool Radio Manager app on your smartphone.









# Track your people and device anywhere

Location tracking is crucial for personal safety especially in emergency situations. The HP5 Series provides location updates to the dispatcher, thanks to the optional GPS and GLONASS positioning systems. The dispatcher can receive the radio location that is automatically sent with the emergency call, and then allot resources for quick assistance or rescue.



#### **Easier to use**

The HP5 Series has dedicated dual knobs for volume and channel controls, improving your efficiency. The Ushaped slot on the back of the battery allows you to install or remove the belt clip more easily. The enlarged LED indicator makes you know radio status at a glance, no matter whether the radio is in your hand, on your shoulder or waist.





### **FEATURES**

#### Work Mode

- Digital Conventional
- Analog Conventional

#### Data Services (HP56X Only)

- Text Message
- Quick Text

#### **Voice Services**

- Private Call
- Group Call
- All Call
- Emergency Call
- Time-out Timer

#### Connectivity

- BT Voice
- GNSS
  - GPS
  - GLONASS
- Type-C Port

#### Security

- Emergency Alarm
- Lone Worker
- Authentication
- Basic Encryption
- Radio Disable/Enable

#### **Supplementary Services**

- Programmable Keys
- Roam
- Remote Monitor
- Radio Check
- Voice Broadcast
- Scan
- RRS
- Call Alert (HP56X Only)

#### **Special Services**

- Priority Interrupt
- Priority Call
- Mixed Channel
- Voice Buffer
- QR Code (HP56X Only)

## **SPECIFICATIONS**

| General  |   |
|--|---|
| Frequency Range  | UHF: 400-470MHz, 350-400MHz;<br>VHF: 136-174MHz   |
| Channel Capacity   | HP50X: 256 HP56X: 512   |
| Zone Capacity  | HP50X: 16 HP56X: 32   |
| Zone Channels  | HP50X: 16 HP56X: 32   |
| Channel Spacing  | 12.5kHz/20kHz/25kHz   |
| Operating Voltage  | 7.4V (rated)  |
| Battery  | 1500 mAh Li-ion; 3000mAh Li-Polymer (optional)  |
| Battery Life<br>(5/5/90)   | 1500mAh: 3000mAh:<br>15h (GNSS OFF) 30h (GNSS OFF)  |
|  | 13h (GNSS ON) 26h (GNSS ON)   |
| Frequency Stability  | ±0.5ppm   |
| Antenna Impedance  | 50Ω   |
| Dimensions (H x W x D)   | 1500mAh: 3000mAh:<br>HP50X: 119 x 55 x 30.5mm<br>HP56X: 119 x 55 x 30.5mm<br>HP56X: 119 x 55 x 36m  |
| Weight (with antenna & battery)  | 1500mAH: HP50X: 265g, HP56X:270g  |
| Display  | 3000mAH: HP50X: 310g, HP56X:315g<br>HP56X: 1.45 inch LCD, 240 x320 pixels, colorful   |
| BT   | BT 5.2  |
| Receiver   |   |
| neceivei   | A = 1 = 0.40 (M/42 ID CINAD)  |
| Sensitivity  | Analog: 0.18µV (12dB SINAD);<br>0.16µV (Typical) (12dB SINAD)<br>Digital: 0.18µV/BER5%  |
| Adjacent Channel Selectivity   | TIA-603: 60dB@12.5kHz; 70dB@20/25kHz<br>ETSI: 60dB@12.5kHz; 70dB@20/25kHz   |
| Intermodulation  | TIA-603: 70dB@12.5/20/25kHz<br>ETSI: 65dB@12.5/20/25kHz   |
| Spurious Response Rejection  | TIA-603: 70dB@12.5/20/25kHz<br>ETSI: 70dB@12.5/20/25kHz   |
| Blocking   | TIA-603: 80dB ETSI: 84dB  |
| Hum and Noise  | 40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz  |
| Rated Audio Power Output   | 0.5W  |
| Rated Audio Distortion   | ≤3%   |
| Audio Response   | +1 ~ -3dB   |
| Conducted Spurious Emission  | <-57dBm   |
| Transmitter  | UHF: 1W/4W VHF: 1W/5W   |
|  | OHF. IW/4W VHF. IW/3W   |
| RF Power Output FM Modulation  | 11K0F3E@12.5kHz<br>14K0F3E@20kHz<br>16K0F3E@25kHz   |
| ·  | 14K0F3E@20kHz   |
| FM Modulation  | 14K0F3E@20kHz<br>16K0F3E@25kHz<br>12.5kHz Data Only: 7K60FXD  |
| FM Modulation  4FSK Digital Modulation   | 14K0F3E@20kHz<br>16K0F3E@25kHz<br>12.5kHz Data Only: 7K60FXD<br>12.5kHz Data and Voice: 7K60FXW<br>-36dBm<1GHz; -30dBm>1GHz   |
| FM Modulation  4FSK Digital Modulation  Conducted/Radiated Emission  | 14K0F3E@20kHz<br>16K0F3E@25kHz<br>12.5kHz Data Only: 7K60FXD<br>12.5kHz Data and Voice: 7K60FXW<br>-36dBm<1GHz; -30dBm>1GHz   |
| FM Modulation  4FSK Digital Modulation  Conducted/Radiated Emission  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<br>±2.5kHz@12.5kHz; ±4.0kHz@20kHz; ±5.0kHz@25   |
| FM Modulation  4FSK Digital Modulation  Conducted/Radiated Emission  Modulation Limiting  FM Hum & Noise  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@25l<br>40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz   |
| FM Modulation  4FSK Digital Modulation  Conducted/Radiated Emission  Modulation Limiting  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@25l<br>40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz<br>60dB@12.5kHz; 70dB@20/25kHz   |
| FM Modulation  4FSK Digital Modulation  Conducted/Radiated Emission Modulation Limiting FM Hum & Noise Adjacent Channel Power 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@25l<br>40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz<br>60dB@12.5kHz; 70dB@20/25kHz<br>+1 to -3dB<br>≤3%   |
| FM Modulation  4FSK Digital Modulation  Conducted/Radiated Emission Modulation Limiting FM Hum & Noise Adjacent Channel Power Audio Response Audio Distortion 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@25l<br>40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz<br>60dB@12.5kHz; 70dB@20/25kHz<br>+1 to -3dB   |
| FM Modulation  4FSK Digital Modulation  Conducted/Radiated Emission  Modulation Limiting  FM Hum & Noise  Adjacent Channel Power  Audio Response  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@25l<br>40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz<br>60dB@12.5kHz; 70dB@20/25kHz<br>+1 to -3dB<br>≤3%   |
| FM Modulation  4FSK Digital Modulation  Conducted/Radiated Emission  Modulation Limiting  FM Hum & Noise  Adjacent Channel Power  Audio Response  Audio Distortion  Digital Vocoder Type  Environmental  | 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@25l 40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz 60dB@12.5kHz; 70dB@20/25kHz +1 to -3dB ≤3%  AMBE+2™/SELP  |
| FM Modulation  4FSK Digital Modulation  Conducted/Radiated Emission  Modulation Limiting  FM Hum & Noise  Adjacent Channel Power  Audio Response  Audio Distortion  Digital Vocoder Type  Environmental  Operating Temperature   | 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@25l 40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz 60dB@12.5kHz; 70dB@20/25kHz +1 to -3dB ≤3%  AMBE+2™/SELP  -30°C*~+60°C   |
| FM Modulation  4FSK Digital Modulation  Conducted/Radiated Emission Modulation Limiting FM Hum & Noise Adjacent Channel Power Audio Response Audio Distortion Digital Vocoder Type Environmental Operating Temperature Storage Temperature   | 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@25l 40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz 60dB@12.5kHz; 70dB@20/25kHz +1 to -3dB ≤3%  AMBE+2™/SELP  -30°C* ~ +60°C -40°C~ +85°C IEC 61000-4-2 (Level 4) ±8kV (contact);   |
| FM Modulation  4FSK Digital Modulation  Conducted/Radiated Emission Modulation Limiting FM Hum & Noise Adjacent Channel Power Audio Response Audio Distortion Digital Vocoder Type Environmental Operating Temperature Storage Temperature  ESD  Dustproof & Waterproof  | 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@25l 40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz 60dB@12.5kHz; 70dB@20/25kHz +1 to -3dB ≤3%  AMBE+2™/SELP  -30°C* ~ +60°C -40°C~ +85°C IEC 61000-4-2 (Level 4) ±8kV (contact); ±15kV (air) IEC60529-IP67  |
| FM Modulation  4FSK Digital Modulation  Conducted/Radiated Emission Modulation Limiting FM Hum & Noise Adjacent Channel Power Audio Response Audio Distortion Digital Vocoder Type Environmental Operating Temperature Storage Temperature  ESD  Dustproof & Waterproof Humidity   | 14K0F3E@20kHz 16K0F3E@25kHz  12.5kHz Data and Voice: 7K60FXW 12.5kHz Data and Voice: 7K60FXW -36dBm<1GHz; -30dBm>1GHz ±2.5kHz@12.5kHz;±4.0kHz@20kHz;±5.0kHz@25l 40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz 60dB@12.5kHz; 70dB@20/25kHz +1 to -3dB ≤3%  AMBE+2™/SELP -30°C* ~ +60°C -40°C~ +85°C IEC 61000-4-2 (Level 4) ±8kV (contact); ±15kV (air) IEC60529-IP67 MIL-STD-810H  |
| FM Modulation  4FSK Digital Modulation  Conducted/Radiated Emission Modulation Limiting FM Hum & Noise Adjacent Channel Power Audio Response Audio Distortion Digital Vocoder Type Environmental Operating Temperature  Storage Temperature  ESD  Dustproof & Waterproof Humidity Shock and Vibration  | 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@25l 40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz 60dB@12.5kHz; 70dB@20/25kHz +1 to -3dB ≤3%  AMBE+2™/SELP  -30°C* ~ +60°C -40°C~ +85°C IEC 61000-4-2 (Level 4) ±8kV (contact); ±15kV (air) IEC60529-IP67  |
| FM Modulation  4FSK Digital Modulation  Conducted/Radiated Emission Modulation Limiting FM Hum & Noise Adjacent Channel Power Audio Response Audio Distortion Digital Vocoder Type Environmental Operating Temperature  Storage Temperature  ESD  Dustproof & Waterproof Humidity Shock and Vibration Location Services  | 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@25l 40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz 60dB@12.5kHz; 70dB@20/25kHz +1 to -3dB ≤3%  AMBE+2™/SELP  -30°C* ~ +60°C -40°C~ +85°C IEC 61000-4-2 (Level 4) ±8kV (contact); ±15kV (air) IEC60529-IP67 MIL-STD-810H MIL-STD-810H   |
| FM Modulation  4FSK Digital Modulation  Conducted/Radiated Emission Modulation Limiting FM Hum & Noise Adjacent Channel Power Audio Response Audio Distortion Digital Vocoder Type Environmental Operating Temperature  Storage Temperature  ESD  Dustproof & Waterproof Humidity Shock and Vibration Location Services GNSS                                   | 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@25l 40dB@12.5kHz; 70dB@20/25kHz +1 to -3dB ≤3%  AMBE+2™/SELP  -30°C* ~ +60°C -40°C~ +85°C IEC 61000-4-2 (Level 4) ±8kV (contact); ±15kV (air) IEC60529-IP67 MIL-STD-810H MIL-STD-810H GPS, GLONASS, GPS+GLONASS   |
| FM Modulation  4FSK Digital Modulation  Conducted/Radiated Emission Modulation Limiting FM Hum & Noise Adjacent Channel Power Audio Response Audio Distortion Digital Vocoder Type Environmental Operating Temperature Storage Temperature  ESD  Dustproof & Waterproof Humidity Shock and Vibration Location Services GNSS TTFF(Time To First Fix) Cold Start | 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@25l 40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz 60dB@12.5kHz; 70dB@20/25kHz +1 to -3dB ≤3%  AMBE+2 <sup>™</sup> /SELP  -30°C* ~ +60°C -40°C~ +85°C IEC 61000-4-2 (Level 4) ±8kV (contact); ±15kV (air) IEC60529-IP67 MIL-STD-810H MIL-STD-810H GPS, GLONASS, GPS+GLONASS <1minute |
| FM Modulation  4FSK Digital Modulation  Conducted/Radiated Emission Modulation Limiting FM Hum & Noise Adjacent Channel Power Audio Response Audio Distortion Digital Vocoder Type Environmental Operating Temperature  Storage Temperature  ESD  Dustproof & Waterproof Humidity Shock and Vibration Location Services GNSS                                   | 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@25l 40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz 60dB@12.5kHz; 70dB@20/25kHz +1 to -3dB ≤3%  AMBE+2™/SELP  -30°C* ~ +60°C -40°C~ +85°C IEC 61000-4-2 (Level 4) ±8kV (contact); ±15kV (air) IEC60529-IP67 MIL-STD-810H MIL-STD-810H GPS, GLONASS, GPS+GLONASS                       |

<sup>\*</sup>Radio only - Battery -20°C



#### S and J Telecommunications (Pty) Ltd

Address: 8 Dawnlea Rd, Malvern, Queensburgh, South Africa

Phone: 0658016732

E-Mail: jaden@sandjtelecoms.co.za

# **ACCESSORIES**

- Standard
- Optional



Charger



Adapter(12V/1A)



Li-ion battery 1500mAh



Antenna



Belt clip



Strap



BT Wireless earpiece



BT wireless ring PTT



• Programming cable (USB port)



 BT Wireless remote speaker microphone





Wired earpiece



Multi-unit charger



• Li-Polymer battery 3000mAh