

EMPOWER YOUR OPERATION **HP78X**

NEXT GENERATION DIGITAL PORTABLE RADIO



NEW TECHNOLOGY, NEW EXPERIENCE, NEW FUTURE

As the leading supplier, Hytera has huge experience in R&D and manufacturing of professional digital radios, and received a large number of suggestions and ideas from users of all industries. Having analyzed and extracted users' need, we perceive that it is not enough to improve the status: the radio needs to be more future ready.

Taking inspiration from the feedback received from our users, we are continuously envisioning and exploring better communication within an eco-system of new standards, new technologies, new products and new applications across the innovation chain. The HP78X is our brand new professional digital radio, and represents the future on style and functions that refreshes the standards in digital radios, providing more efficient and more reliable communication with loud and clear audio, powerful battery, remarkable portability and ruggedness for ease of use across multiple environments and industries.



HIGHLIGHTS



THINNER AND LIGHTER

An optimized mechanical design and a compact lithium polymer battery are discreetly made to fit into the HP78X's design, making the radio only 29.5mm in thickness and 310g in weight. This easy to carry and minimalist design benefits officers by allowing them to keep their focus on the critical mission at hand.



LOUDER AND CLEARER AUDIO

The HP78X has louder and clearer audio through an optimized forward facing speaker and AI-based noise cancellation that decreases the unwanted background noise and howling. Water-porting technology is also used to drain out any water that gets into the speaker cavity, ensuring the audio clarity is maintained.



LONGER BATTERY LIFE

The latest in proven lithium polymer technology is used in the standard battery that is supplied with the HP78X. The battery is lighter and smaller than ever before, and still delivers a duty cycle of 5/5/90 on achieving a shift life of 24 hours on high transmit power. This powerful battery ensures a full day of delivering key information and calls.



MORE INTUITIVE AND EFFICIENT

The 2.4-inch colour display brings a brand new intuitive UI to make the HP78X more efficient. It has Quick Access Menu that allows users to set the radio faster. Messages are listed in conversation for quick reading and review. The Interface Switcher is added to the option of programmable buttons, allowing quick switch between up to four frequently accessed interfaces.



ENHANCED COVERAGE

The HP78X extends the operational range and improves the talk range through high receiver sensitivity and high transmit power, stretching communications into areas where it simply was not possible before. This enhanced coverage improves the user safety and reduces network cost as much as possible.



HIGHER LEVEL OF RUGGEDNESS

HP78X is designed as per the MIL-STD-810 G. It is IP68 rated, impervious to water jets and submersible to a depth of 2 meters for 4 hours, and also resilient to 2-meter drops onto concrete. No matter where the mission drives the officer, the HP78X is the partner to count on, because it can stand up to the toughest environment.



Sensitive Antenna



2.4-inch color display

Volume/Channel/Contact Knob

Dedicated Emergency Button



Programmable Buttons



Belt clip



Wear-resistant keys

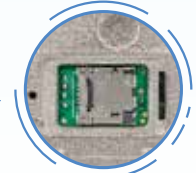


Superior Li-polymer battery

Loud and clear speaker



Water-porting design



Supports Micro SD card



2.4-inch color display



Loud and clear audio



Superior long battery life



AI based noise cancellation



Water-porting design



BT 5.0 audio and data



Micro SD Card

FEATURES

Supplementary

- Profiles
- QR Code
- Roaming
- Covert Mode
- Radio Check
- Remote Monitor
- Alert Call

Operating Modes

- Digital Conventional
- Analog Conventional
- Digital Trunking

Data Services

- Text Message
- Status Message
- Quick Text Message

Voice Service

- Private Call
- Group Call
- All Call
- PSTN/PABX Call
- Broadcast Call
- Emergency Call
- Call Priority

Connection

- BT Audio
- BT Data
- High Efficiency GNSS
 - GPS
 - GLONASS
- Wide Range of Accessories
- Open API

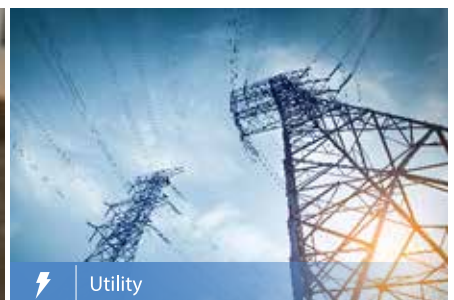
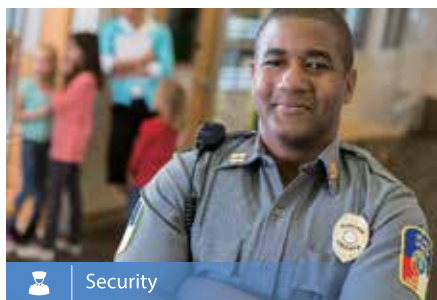
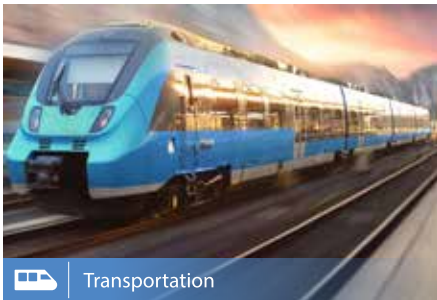
Safety

- Emergency
- Man Down
- Lone Worker
- Authentication
- Air Interface Encryption
- End-to-End Encryption
- Scrambler
- Disable/Enable
- Micro SD Card

Analog Mode

- 2-Tone signaling
- HDC1200

APPLICATIONS



SPECIFICATIONS

| General | |
|------------------------------|--|
| Frequency Range | UHF: 350~470MHz VHF: 136~174MHz |
| Channel Capacity | 1024 |
| Zone Capacity | 64 |
| Zone Channel | 256 |
| Channel Spacing | 12.5kHz/20kHz/25kHz |
| Operating Voltage | 7.7V (rated) |
| Battery | 2400 mAh Li-polymer |
| Battery Life | 24h (GNSS disabled) 20h (GNSS enabled) |
| Frequency Stability | ±0.5ppm |
| Antenna Impedance | 50Ω |
| Dimensions (H x W x D) | 132 x 55 x 29.5mm |
| Weight(with antenna&battery) | 310g |
| Display | LCD, 320x240 pixel, 262000 colors, 2.4 inch, 10 rows |
| BT | BT 5.0 BLE+EDR |
| Receiver | |
| Sensitivity | Analog: 0.18μV (12dB SINAD); 0.16μV (Typical) (12dB SINAD) Digital: 0.18μV/BER5% |
| Adjacent Channel Selectivity | TIA-603: 60dB@12.5kHz / 70dB@20/25kHz ETSI: 60dB@12.5kHz / 70dB@20/25kHz |
| Intermodulation | TIA-603: 70dB@12.5/20/25kHz ETSI: 65dB@12.5/20/25kHz |
| Spurious Response Rejection | TIA-603: 70dB@12.5/20/25kHz 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 | |
|--|---|
| RF Power Output | UHF:1W/4W VHF:1W/5W |
| FM Modulation | 11K0F3E@12.5kHz 14K0F3E@20kHz 16K0F3E@25kHz |
| 4FSK Digital Modulation | 12.5kHz Data Only: 7K60FXD 12.5kHz Data and Voice: 7K60FXW |
| 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+2™ |
| Digital Protocol | ETSI-TS102 361-1,-2,-3 |
| Environmental | |
| Operating Temperature | -30°C~+60°C |
| Storage Temperature | -40°C~+85°C |
| ESD | IEC 61000-4-2 (Level 4) ±8kV (contact); ±15kV (air) |
| Dust and Water Protection | IEC60529- IP68 |
| Humidity | MIL-STD-810 G |
| Shock and Vibration | MIL-STD-810 G |
| Location Services | |
| Accuracy specs are for long-term tracking(5 satellites visible at nominal -130dBm) | |
| GNSS | GPS, GLONASS,BDS |
| TTFF(Time To First Fix) Cold Start | <1 min (Typical) |
| TTFF (Time To First Fix) Hot Start | <10 sec (Typical) |
| Horizontal Accuracy | <5m (probable at -130dBm) |

*Radio only - Battery -20°C

OPTIONAL ACCESSORIES

Standard

- Charger CH10L27
- Adapter(12V/1A)
- Battery BP2403
- Antenna
- Belt Clip BC39
- Strap RO03

Optional



Wireless Earphone



Programming Cable
(USB Port)



Wireless Finger PTT



Hytera Communications Corporation Limited

Address: Hytera Tower, Hi-Tech Industrial Park North,Beihuan Rd.,
Nanshan District,Shenzhen,China

Tel: +86-755-2697 2999 **Fax:** +86-755-8613 7139 **Post:** 518057

Http://www.hytera.com **Stock Code:** 002583.SZ



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 Co.,Ltd.
© 2021 Hytera Communications Co.,Ltd. All Rights Reserved.