

# EMPOWER YOUR OPERATION

## HP688 SERIES

NEXT GENERATION DIGITAL PORTABLE RADIO





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Small and light in style, the HP6 series delivers uncompromising clear audio and extended coverage together with powerful battery, exceptional ruggedness and abundant features. It is an ideal partner as well as an easy-to-use tool for customer-facing staff, enabling them to focus on their work and service at all times and places, thus increase the productivity and efficiency of the organization.

## HIGHLIGHTS

### Light and Stylish

The streamlined HP6 series is compact and light for easy carrying and wearing, at the meanwhile has stunning clear audio and long battery life, always ensuring the professional service of your staff and organization.

### Clear Audio

The HP6 series uses the cutting-edge AI-based noise cancellation technology to decrease the unwanted background noise and reduce howling, maintaining high audio clarity. Users can now hear and be heard regardless of any noise.

### Long Battery Life

The HP6 series allows users to enjoy easy carrying and wearing, it has a long battery life over 20 hours @ 5-5-90 standard as well. Users no longer need to charge the radio or change the battery until the full day work is finished.

### Rugged and Durable

Being manufactured as per the MIL-STD-810 G standard, the HP6 series is IP67 rated and resilient to 2-meter drop to stand up to a lot of wear and tear. Now the tough environment will no longer slow your staff and organization down.



Easy to Use

The HP6 series is designed for ease of use in a compact and discreet form. Tactile PTT, programmable buttons and keys allow professionals to respond positively. The integrated BT5.0 technology provides flexible wireless connection with accessories to keep their hands free.

Extended

Thanks to the improved receiver sensitivity, the HP6 series provides better connectivity both in marginal areas of coverage and indoors. This will deliver improved safety and operational benefits for operatives in the field.

Range



HP608

HP688

FEATURES

Operating Modes

- Digital Conventional
- Analog Conventional

Data Service

- Text Message
- Quick Text Message

Voice Service

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

Connection

- BT Audio
- BT Data
- GNSS
- GPS
- GLONASS
- Open API

Safety

- Emergency
- Man Down
- Lone Worker
- Authentication
- Air Interface Encryption
- End-to-End Encryption
- Disable/Enable

Supplementary

- Profiles
- Programmable Buttons
- Interface Switcher
- QR Code
- Roaming
- Remote Monitor
- Radio Check
- Alert Call

Analog Mode

- 2-Tone signaling
- HDC1200

SPECIFICATIONS

General	
Frequency Range	UHF: 400-527MHz VHF:136-174MHz
Channel Capacity	1024
Zone Capacity	64
Zone Channels	256
Channel Spacing	12.5kHz/20kHz/25kHz
Operating Voltage	7.7V (rated)
Battery	2000 mAh Li-polymer
Battery Life (5/5/90)	16h (GNSS on) 20h (GNSS off)
Frequency Stability	±0.5ppm
Antenna Impedance	50Ω
Dimensions (H x W x D)	HP60X: 122 x 55 x 30.5mm HP68X: 122 x 55 x 31.5mm
Weight (with antenna & battery)	HP60X: 265g HP68X: 280g
Display	HP60X: 0.91inch OLED Display HP68X: 160 x128pixels, 65536colors, 1.8inch, 6rows
BT	BT 5.0 BLE+EDR

Receiver	
Sensitivity	Analog: 0.18μV (12dB SINAD); 0.16μV (Typical) (12dB SINAD) Digital: 0.18μV/BER5%
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)
Dustproof & Waterproof	IEC60529-IP67
Humidity	MIL-STD-810 G
Shock and Vibration	MIL-STD-810 G

Location Services	
GNSS	GPS, GLONASS, GPS+GLONASS
TTFF(Time To First Fix) Cold Start	<1minute
TTFF(Time To First Fix) Hot Start	<10seconds
Horizontal Accuracy	<5meters
Accuracy specs are for long-term tracking (95th percentile values>5 satellites visible at a nominal -130dBm signal strength)	

\*Radio only - Battery -20°C

ACCESSORIES

Standard

- Charger CH10L27
- Adapter(12V/1A)
- Battery BP2002
- Antenna
- Belt Clip BC48
- Strap RO03

Optional



Wireless Earphone



Programming Cable  
(USB Port)



Wireless Finger PTT



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