# **Specification**

General		
Digital Protocol	ETSI TS102 361-1, -2, -3, -4(optional)	
Frequency	UHF1: 400-470MHz UHF3:350-400MHz VHF: 136-174MHz	
Channel Capacity	1024	
Zone Capacity	64	
Channel Spacing	12.5kHz/20KHz/25KHz	
Frequency Stability	±0.5ppm	
Operating Voltage	7.4V	
Battery Capacity	2600mAh(standard)	
Battery Life	Analog: 16 Hours Digital: 20 Hours (5: 5: 90 working cycle, high power transmission)	
Size (H x W x D)	100×54.5×36.5mm (without antenna)	
Weight	290g	
Screen	1.75-inch transflective LCD, 240×180	
Vocoder	AMBE++	
Bluetooth	BT2.1+EDR / 4.0 (optional)	
Location	GPS / Glonass (optional)	
Man down / Vibration	Support	
Real-time Clock	Support	
Encryption	Support 40bit basic encryption 128/256bit AES encryption is optional	

Environmental		•
Operating Temperature	-30°C ~ +60°C	
Storage Temperature	-40°C ~ +85°C	
ESD	IEC 61000-4-2 (level 4) $\pm 8$ kV (Contact) $\pm 15$ kV (Air)	
Dust and Water Resistance	IP68	
Reliability	MIL-STD-810G	

GPS	•
Accuracy specs are for long-term trace nominal -130 dBm signal strength)	cking (95th percentile values >5 satellites visible at
TTFF (Time to First Fix) - Cold Start	<60s
TTFF (Time to First Fix) - Hot Start	<10s
Horizontal Accuracy	<10m

Receiver	•	
Sensitivity (Analog)	0.18uV(12dB SINAD)	
Sensitivity (Digital)	0.18uV (5% BER)	
Adjacent Channel Selectivity	60 dB@12.5KHz/70 dB@20/25KHz (TIA603A) -1T	
	45dB@12.5KHz /70 dB@20/25KHz (TIA603D) -2T	
	60dB@12.5KHz /70 dB@20/25KHz ( ETSI )	
Intermodulation	70 dB (TIA603D)	
	65 dB (ETSI)	
Spurious Rejection	70 dB (TIA603D)	
Spurious Rejection	70 dB (ETSI)	
Blocking	80dB(TIA603D)	
	84dB(ETSI)	
Co-channel Rejection	-12~0 dB @12.5KHz/-8~0 dB @20/25KHz	
Hum and Noise	-40 dB@12.5KHz /-43 dB@20KHz /-45 dB@25KHz	
Rated Audio Power	0.5W	
Max Audio Power	2.0W	
Rated Audio Distortion	≤3% (typical value)	
Audio Response	+1~-3dB (TIA603D)	
Conducted Spurious Emission	-57 dBm (TIA603D)	

Transmitter		•
Power Output	1W/4W (UHF1/UHF3), 1W/5W (VHF)	
FM Modulation	12.5KHz: 11K0F3E / 20KHz: 14K0F3E / 25KHz: 16K0F3E	
4FSK Digital Modulation	12.5KHz Data Only: 7K60F1D&7K60FXD	
	12.5KHz Voice Only: 7K60F1E&7K60FXE	
	12.5KHz Voice And Data: 7K60F1W	
Conducted/ Radiated Emission	-36dBm ≤1GHz;-30dBm>1GHz	
Modulation Limiting	±2.5KHz @12.5KHz /±4KHz @20KHz /±5.0KHz @25KHz	
FM Hum and Noise	-40 dB@12.5KHz /-43dB@20KHz /-45 dB@25KHz	
Adjacent Channel Power	60 dB@12.5KHz /70 dB @20/25KHz	
Audio Distortion	≤3% (typical value)	
Audio Response	+1~-3dB(TIA603D)	

The specifications in this document are in accordance with the applicable standard test. Due to the continuous technology development, Caltta may change the specifications without notice.















and committed to protecting personal data in accordance with applicable laws and regulations and with technologies including anonymization and data encryption and necessary security management measures.



# Professional Digital Radio

Small in Size, Huge in Performance



Caltta Subgroup





# **Features**

## **Full Encryption**

Support 40bit basic encryption. 128/256bit AES encryption are optional. It also supports lone worker, alarm, man-down and other functions to protect users' safety.

#### **Loud and Clear Voice**

With a 2W speaker and optimized audio design, PH660 ensures clear communication even in a noisy environment.

#### **Compact Design**

Only 290g(antenna and battery included) in weight and 100mm in height. Portable and easy to operate. The surface is designed with anti-slip texture, making it comfortable to hold and anti-slip even in wet environments.

## **Military Standard**

MIL-STD-810G rated, PH660 is resistant to dropping and shocks at various levels.

## **Large-capacity Battery**

With a 2600mAh large-capacity battery and digital power reduction technology, PH660 can work for at least 20 hours in digital mode(5:5:90), meeting the needs of long work shifts.

#### **Complete Services**

In addition to basic DMR voice and data services, PH660 also supports many optional features such as GPS/BDS , Bluetooth , VOX , etc.

# Digital-and-analog Compatible

Digital-and-analog compatible, PH660 realizes the smooth evolution of the system. It also supports digital direct/repeater dual-time slots and automatic cross-site roaming.

#### **IP68 Protection**

IP68 rated, PH660 is resistant to water and dust, ensuring normal operation in extreme environments.

# **Scenarios**





Scenic Spot





# Accessories

#### Standard











2600mAh Li-ion Battery

Power Adapter

Antenna

## Optional















8-way Charger Bluetooth Earphone Bluetooth PTT Ring Transparent Tube Earphone C-Style Earphone Remote Microphone Programming Cable