Specification

General

Digital Protocol	ETSI TS102 361-1, -2, -3, -4
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	2000mAh(Standard)/3200mAh (Optional)
Battery Life	Analog: 13 Hours Digital: 16 Hours (5: 5: 90 working cycle, high power transmission)
Size (H x W x D)	130×54.5×37.5mm (without antenna)
Weight	360g (with antenna and battery)
Screen	2.0-inch LCD, 240×320, 6-line text
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) ±8kV (Contact) ±15kV (Air)
Dust and Water Resistance	IP68
Reliability	MIL-STD-810H

GPS

Accuracy specs are for long-term tracking (95th percentile values >5 satellites visible at nominal -130 dBm signal strength)	
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)
	70 dB (ETSI)
Blocking	97dB(TIA603D)
	94dB(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)

General Disclaimer
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 timely notice.

www.caltta.com   sales@caltta.com
12F/Building G2, International E-City, Nanshan, Shenzhen, China, 518052

Professional Digital Trunking Radio

More Professional, More Powerful

MODEL PH790

www.caltta.com

Features

Digital and Analog Compatible

PH790 meets DMR digital conventional/trunking standards, and compatible with analog conventional standard.

High-definition Large Screen

The 2.0-inch semi-transparent high-definition large screen is clearly visible in strong light.With 240 * 320 high resolution, PH790 supports 6-line text display and rich information display.

Clear and Loud

With 2W high-power loudspeaker combined-with excellent sound chamber and noise reduction design, PH790 provides a clear and loud voice even in noisy environments.

IP68 and Military Quality

IP68 and MIL-STD-810H rated, PH790 is resistant to dust, moisture, extreme weather and shocks and dropping at various levels.

Large-capacity Battery

The standard 2000mAh battery combined with the power-saving design of digital technology ensures that the radio can be used for more than 16 hours under high power (5:5:90 mode) to meet the long-term work needs of front-line personnel.

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.

Scenarios

Public Safety

Traffic Police

Large-scale Event

Urban Firefighting

Forest Firefighting

Emergency Rescue

Accessories

Standard

Desktop Charger

2000mAh Li-ion Battery

Power Adapter

Belt Clip

Antenna

Hand Rope

Optional

8-way Charger

Remote Microphone

Transparent Tube Earphone

C-Style Earphone

Bluetooth Earphone

Bluetooth PTT Ring

3200mAh Li-ion Battery

Programming Cable