

PH790/PH700

DMR Portable Radio

- Digital and Analog Compatible
- Excellent Man-Machine Interface
- Loud and Clear Sound
- Rich Services
- Long Battery Life
- IP68



Technical Specifications

General	
Digital Protocol	ETSI TS102 361-1,-2,-3,-4
Frequency	UHF1:400-470 MHz UHF3:350-400 MHz VHF: 136-174 MHz
Channel Capacity	1024 (PH790) / 32 (PH700)
Zone Capacity	64 (PH790) / 2 (PH700)
Channel Spacing	12.5KHz / 20KHz / 25KHz
Frequency Stability	±0.5 ppm
Operating Voltage	7.4 V
Battery Capacity	2000mAh(Standard)/3200mAh (Optional)
Battery Life (5:5:90)	Analog: 13 hrs Digital: 16 hrs
Size (HxWxD)	PH790 : 130x54.5x37.4mm(Without Antenna) PH700 : 130x54.5x36.5mm(Without Antenna)
Weight	About360g(PH790)/340g(PH700),with Antenna and Battery
Screen	2.0"Transflective LCD, 240x320, 6 Lines (PH790)
Vocoder	AMBE++
Bluetooth	Support BT2.1 +EDR/4.0
Location	GPS
Man down	Support
Vibration	Support
Encryption	Support SW and HW Encryption(Optional)
Receiver	
Sensitivity (Analog)	0.3 μV (12dB SINAD)
Sensitivity (Digital)	0.25 μV (5% BER)
Adjacent Channel Selectivity	60 dB @ 12.5KHz / 70 dB @ 20 / 25KHz (TIA603A) -1T
	45 dB @ 12.5KHz / 70 dB @ 20 / 25KHz (TIA603D) -2T 60 dB @ 12.5KHz / 70 dB @ 20 / 25KHz (ETSI)
Intermodulation	70 dB (TIA 603D)
	65 dB (ETSI)
Spurious Rejection	70 dB (TIA 603D)
	70 dB (ETSI)
Blocking or desensitization	80 dB (TIA 603D)
	84 dB (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	0.5 W
Max Audio Power	2.0 W
Audio Distortion @ Rated Audio	≤3% (Typical)
Audio Response	+1~-3dB (TIA 603D)
Conducted Spurious Emission	-57 dBm (TIA 603D)

Transmitter	
Low Power Output	1W
High Power Output	4W (UHF1 / UHF3) / 5W (VHF)
FM Modulation	12.5KHz: 11K0F3E / 20KHz: 14K0F3E / 25KHz: 16K0F3E
	12.5 KHz Data Only : 7K 60 F1D & 7K 60 FXD
4FSK Digital Modulation	12.5 KHz Voice Only : 7K 60F1E & 7K 60 FXE
	12.5 KHz Voice And Data : 7K 60F 1W
Conducted / Radiated Emission	-36 dBm ≤ 1GHz ; -30 dBm >1 GHz
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%
Audio Response	+1~- 3 dB (TIA603D)
Environmental	
Operating Temperature	-30 °C ~ + 60 °C
Storage Temperature	-40 °C ~ + 85 °C
ESD	IEC 61000 - 4 - 2 (level 4) ± 8 kV (Contact) ±15 kV (Air)
Dust and Water Resistance	IP68
Reliability	MIL - STD - 810 G
GPS	
Accuracy specs are for long-term tracking (95th percentile values > 5satellites visible at nominal - 130 dBm signal strength)	
TTF (Time To First Fix) - Cold Start	< 60 s
TTF (Time To First Fix) - Hot Start	< 10 s
Horizontal Accuracy	< 10 m

Standard Accessories

