

# PH790/PH700

## DMR Portable Radio

- Digital and Analog Compatible
- Loud and Clear Sound
- Long Battery Life
- Excellent Man-Machine Interface
- Rich Services
- 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 ( H×W×D )	PH790 : 130×54.5×37.4mm(Without Antenna) PH700 : 130×54.5×36.5mm(Without Antenna)
Weight	About360g(PH790)/340g(PH700),with Antenna and Battery
Screen	2.0" Transflective LCD, 240×320, 6 Lines ( PH790 )
Vocoder	AMBE++
Bluetooth	BT2.1+EDR/4.0 (optional)
Location	GPS/Glonass (optional)
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 )

TTFF ( Time To First Fix ) - Cold Start	< 60 s
TTFF ( Time To First Fix ) - Hot Start	< 10 s
Horizontal Accuracy	< 10 m

## Standard Accessories

		
2000mAh Li-ion Battery×1	Charger×1	Power Adapter×1
		
Belt Clip×1	Antennax1	