

BORN FOR SAFETY

Intrinsically Safe DMR Portable Two-way Radio

HP71XEx Series



SPECIFICATIONS

General	
Frequency Range	400-480MHz 136-174MHz
Channel Capacity	1024
Zone Capacity	64
Channel Spacing	12.5kHz/20kHz/25kHz
Operating Voltage	7.4V (rated)
Battery	2,150 mAh IIC intrinsically safe Li battery (Typical)
Battery Life (5/5/90)	24h (GNSS OFF) 21h (GNSS ON)
Frequency Stability	±0.5ppm
Antenna Impedance	50Ω
Dimensions (H x W x D)	130 x 55 x 37mm
Weight (with antenna & battery)	about 385g
Display	1.47 inch LCD, 172 x320 pixel, 262144 colors
Connectivity	BT 5.3 BLE+EDR/WLAN 2.4G/NFC: ISO/IEC 15693

Receiver	
Sensitivity	Analog: 0.16uV(12dB SINAD) 0.14uV(Typical)(12dB SINAD) Digital: 0.16uV/BER5%
Adjacent Channel 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	2W/1W
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 to -3dB
Audio Distortion	≤3%
Digital Vocoder Type	AMBE+2™
Digital Protoca	ETSITS102 361-1, -2, -3

Environmental	
Operating Temperature	-30°C to +60°C (in non-hazardous area) -25°C to +60°C (in hazardous area)
Storage Temperature	-40°C~ +85°C
ESD	IEC 61000-4-2 (Level 4) ±8kV (contact); ±15kV (air)
Dustproof & Waterproof	IP64/IP65/IP66/IP67/IP68 per IEC-60079-0:2017 & IEC-60529
Humidity	MIL-STD-810H
Shock and Vibration	MIL-STD-810H

Location Services	
GNSS	GPS, BDS, GLONASS, Galileo
TTFF(Time To First Fix) Cold Start	<35 seconds
TTFF(Time To First Fix) Hot Start	<1 second
Horizontal Accuracy	1 m (dual-frequency GNSS, 95% probable, -130 dBm, ≥ 22 operational satellites)

Accuracy specs are for long-term tracking (95th percentile values>5 satellites visible at a nominal -130dBm signal strength)

Standard Accessories



Optional Accessories

