

# SPH6000 Series Digital Trunking Radios



■ SPH6000S 
 ■ SPH6000SK 
 ■ SPH6000

FC CE RoHS CTA MIL

## Product features

- Full features compliant to ETSI DMR Tier2 tier3\* and PDT\*
- All working mode: DMO, RMO, TMO\*
- Full duplex call
- Voice + Data services, and multi-level Encryption
- Higher RF sensitivity, better coverage
- Original battery cell, better working time
- Bigger loudspeaker and optimized Sound quality
- Standard TF card Encryption & Storage & User Config
- GPS and worldwide position tracking
- Vibration, man-down, Bluetooth\*
- IP67 and MIL-STD-810G
- Multiple accessories
- Friendly open API for 3rd party

Remark: \* optional



## Encryption & Storage

Provide hardware guarantee of Key, Certification and user Configuration, support mass storage.

Samhoo Sci & Tech Co.,LTD (Samhoo), is a worldwide success Digital PMR radio developer and manufacturer. The experienced team with more than 10 years have devoted most effort to develop DMR, TETRA and PDT radio products for public safety, transportation, public utilities, enterprise & business and commercial sectors. We understand our responsibility to support Mission Critical and Business Critical with robust and reliable professional mobiles. With continuous innovation spirit, we are trying our best to delivery most reliable Digital PMR radio products to our partners and customers.

## SPH6000 Series Product Specifications



General	
Communication protocol standards	DMR Digital trunking ETSI-TS102 361-1,-2,-3 PDT Digital trunking GA/T1056,1057,1058,1059
Frequency Band	136-174MHz; 350-400MHz; 400-470MHz; 450-520MHz
Channel Spacing	12.5KHz/20 KHz /25 KHz
Operating Voltage	7.4V
Battery	2000mAh(Li-Ion)
Battery Life(5-5-90 Duty Cycle,High TX Power)	Analog: >13h; Digital: >18h
Dimensions(standard battery, without antenna)	H*W*D: 128*54.5*35(mm)
Weight(standard battery and antenna)	355±1%g
LCD Display	Big colour display(SPH6000s Without LCD Display)
GPS	Standard
Encryption & Storage	Micro SD
Transmitter	
RF Power Output	VHF High-power: 5W; VHF Low-power: 1W UHF High-power: 4W; UHF Low-power: 1W
FM Modulation	11KΦF3E @ 12.5KHz; 14KΦF3E @ 20KHz; 16KΦF3E @ 25KHz;
4FSK Digital Modulation	12.5KHz Data Only: 7K60FXD 12.5KHz Data & 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 ~ -3dB
Audio Distortion	≤3%
Digital Speech Vocoder	AMBE++ or NVOC
Receiver	
Sensitivity	Analog 0.3 μV (12dB SINAD); 0.22 μV (Typical)( 12dB SINAD); Digital 0.4 μV (20dB SINAD)
Selectivity	TIA-603/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/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	1.0W
Rated Audio Distortion	≤3%
Audio Response	+1 ~ -3dB
Conducted Spurious Emission	< -57dBm
Environmental Specifications	
Temperature Operating/Storage	-30°C~+60°C/ -40°C~+85°C
ESD	EC 61000-4-2(level 4) ±8kV(contact);±15kV(air)
U.S. Military Standard(Temperature & Fall & Vibration)	MIL-STD-810 C/D/E/F/G
Dust & Water Proof	IP67

Remark:All specifications are subject to change without prior notice

