

SPH6000 Series Digital Trunking Radios



- Full features compliant with European ETSI DMR Tier II & III & PDT standards
- Support conventional and trunking modes; support analog and digital modes
- UHF & VHF
- High-performance processor, large volume battery for extra-long standby time
- Standard embedded Micro SD card for voice recording and encryption
- GPS, Bluetooth
- Mandown function for more security
- High sensitivity receiving for enhanced communication distance
- Flexible and practical data services and operations
- Big loudspeaker and noise reduction for high quality voice communication
- Friendly open API for third party development



SPH6000S

SPH6000

SPH6000SK

CE FCC RoHS MIL-STD SRRC

Shenzhen Samhoo Sci & Tech Co., Ltd. (**Stock code: 834963**) is a worldwide professional wireless digital trunking terminals developer and manufacturer. The team with more than ten years' experience in this field has devoted its effort to develop DMR, PDT, and TETRA radio products for public safety, transportation, public utilities, enterprises and other commercial sectors. Samhoo understands the needs of reliable and trustable emergency communication of Mission Critical and Business Critical and endeavors to provide our clients with the most reliable professional wireless communication equipment with continuous innovation spirit.

General

Communication protocols & standards	PDT digital trunking GA / T1056, 1057, 1058, 1059
	DMR tier 3 digital trunking ETSI-TS102 361-1, -2, -3, -4
	Analog trunking MPT 1327 / MPT1343
Frequency Bands	136-174MHz; 350-400MHz; 400-470MHz; 450-520MHz
Channel Spacing	12.5KHz / 20KHz / 25KHz
Operating Voltage	7.4V
Battery Volume	2250mAh (Lithium battery)
Working Time (5-5-90 duty cycle, high TX power)	Analog: > 13h; Digital: > 18h
Dimensions (standard battery, not including antenna)	128*55*35.5(H*W*D)
Weight (standard battery, including antenna)	355 ± 1%g
Frequency Stability	± 0.5ppm
LCD Display	160*128pixel, 65535 color, 1.8 inches color screen (SPH6000S non-display)
GPS	Accuracy < 10m, TTFF cold start 1 min / hot start 10 sec
Encryption & Storage	Standard Micro SD

Transmitter

RF Power Output	VHF High power: 5W; VHF Low power: 1W
	UHF High power: 4W; UHF Low power: 1W
FM Modulation	11KOF3E@12.5KHz; 14KOF3E@20KHz; 16KOF3E@20KHz
4FSK Digital Modulation	12.5khz Data: 7F60FXD
	12.5khz Data& voice: 7F60FXW
Conducted / Radiated Emission	-36dBm < 1GHz ; -30dBm > 1GHz
Modulation Limiting	± 2.5KHz@12.5KHz ; ± 4.0KHz@20KHz ; ± 5.0KHz@25KHz
FM 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 Voice Vocoder	AMBE++ or NVOC

Receiver

Sensitivity	Analog	0.3 μ V(12dB SINAD); 0.22 μ V(Typical value)(12dB SINAD)
		0.4 μ V(20dB SINAD)
	Digital	0.3 μ V / BER5%
Sensitivity TIA-603 / ETSI	60dB@ 12.5KHz / 70dB@20 & 25KHz	
Intermodulation	TIA-603	70dB@12.5 / 20 / 25 KHz
	ETSI	65dB@12.5 / 20 / 25 KHz
Spurious Response Rejection TIA-603 / ETSI	70dB@12.5 / 20 / 25 KHz	
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

Operation temperature/ Storage temperature	-30°C~+60°C / -40°C~+85°C
ESD	IEC 61000-4-2 (level 4); ± 8KV(contact); ± 15KV(air)
Environment Test Standard (Temperature & Fall & Vibration)	MIL-STD-810 C / D / E / F / G
IP Rating	IP67

Remark: The above specifications comply with standard tests accordingly, and due to continuous technical development, they are subject to changes without prior notice.
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Accessories:



Battery



Belt clip



Charger



Power adapter



Antenna



Strap



Shoulder microphone
(Optional)



Leather case
(Optional)



Earphone
(Optional)



Bluetooth
(Optional)



ISO9001:2008 & ISO14001:2004



Type 1 core member of the DMR association
Council member of the PDT association

