ENSURING SAFE COMMUNICATION, NO MATTER THE ELEMENT

APX 4000XH PORTABLE RADIO

When faced with challenging environment conditions such as heavy dust, powerful wind, harmful gas, and intense humidity in remote locations, you need an adaptable radio to keep you safe, protected and connected in any operation. The APX 4000XH is designed specifically for the Mining and Petrochemical industries with unique hazardous location requirements in mind. This easy to operate, tough as nails, unbeatable offering seamlessly connects workers while increasing operational efficiency and employee productivity.

LOUD AND CLEAR

The APX 4000XH leverages the leading attributes of the APX family of P25 TDMA portables like the 2-microphone design. Built to reduce background noise, you can speak and hear clearly over heavy equipment, diesel engines and drilling activities.

- New magnetic speaker grill has reduced magnetic force to deflect metallic dust and fibers from impacting audio quality.
- Dual microphone locates voice and cancels out ambient noise.
- Extreme Audio Profile reduces background noise and improves voice clarity.
- Equipped with the latest AMBE digital voice vocoder.

HAZLOC SAFE

A compact P25 Phase 2 capable portable, the APX 4000XH is built tough –inside and out to withstand harsh environments and tested to the US military standard MIL-STD Rated G. The skeleton design also helps protect the core from shock/impact and submersion.

- Highest hazardous classification rating offered on APX portfolio: CSA -157, IECEx.
- With the bright orange HAZLOC safe standard housing, this radio is easy to identify in hazardous conditions.
- Simplified, 2 knob controls provide easy access to channel switching and volume control when using gloves.
- Enhanced T-grip design provides better grip and control.

FUTURE-READY TECHNOLOGY

Motorola Solutions ASTRO 25 system, a Project 25 TDMA technology standards-based voice and data platform, provides the mission critical seamless communication network vital in keeping you connected in the most grueling environments.

- Provides twice the voice capacity.
- Backwards and forwards compatible with all Motorola mission critical radio systems.
- Meets current P25 standards and is future-ready to support new technology and data applications.

FEATURES AND BENEFITS

- Available in 800/900 MHz band
- Trunking standards supported:
- Clear or digital encrypted ASTRO 25 Trunked Operation
- Capable of SmartZone, SmartZone Omnilink, SmartNet
- Analog MDC-1200 and Digital APCO P25 Conventional
- System Configurations
- Narrow and wide bandwidth digital receiver
- (6.25 kHz equivalent / 12.5 kHz / 30 kHz / 25 kHz)1
- Embedded digital signaling (ASTRO & ASTRO 25)
- Lightbar with Intelligent Lighting
- Radio Profiles
- Unified Call List
- M3 – Orange Colored Housing Standard
- User programmable Voice Announcement
- Meets Applicable MIL-STD-810C, D, E, F and G
- Ships Standard Rugged
- ASTRO 25 Integrated Voice & Data
- Mission Critical Wireless Bluetooth® *

SUPERIOR AUDIO FEATURES

- 0.5 W high audio speaker
- 2-mic noise canceling technology
- Utilizes Windows XP, Vista and Windows 7 Customer
- Programming Software (CPS)
- Supports USB communications
- Built in FLASHport™ support
- Full portfolio of accessories including IMPRES batteries,chargers and audio devices

OPTIONAL FEATURES

- Geoselect
- Site Selectable
- Digital Tone Signal
- Integrated GPS Capable
- Man Down
- Text Messaging
- Programming Over Project 25
- ADP Software Only

* Compatible with BT 2.1 HSP, PAN, DUN and SPP BT Profiles

TYPICAL PERFORMANCE SPECIFICATIONS

Receiver Specifications		
Frequency		851-870 MHz 935-940 MHz
Audio output		500mW
Analog Sensitivity		0.247uV
Digital Sensitivity	1% BER 5% BER	0.335uV 0.232uV
Selectivity	25k 12.5k	TBD -67dB
Intermodulation	12.5k	-75dB
Spurious Rejection	12.5k	-75dB
FM Hum and Noise	12.5k	-46dB
Audio Distortion	12.5k	1.20%
Transmitter Specifications		
Frequency Range/Bandsplits	800 MHz 900 MHz	806-824, 851-870 MHz 896-901, 935-940 MHz
Channel Spacing	800 MHz 900 MHz	25/12.5 kHz 12.5 kHz
Maximum Frequency Separation		Full Bandsplit
Rated RF Output Power Adj	800 MHz 900 MHz	1-3 Watts Max 1-2.5 Watts Max
Frequency Stability (-30°C to +60°C; +25°C Ref.)		±0.00010 %
Modulation Limiting	800 MHz 900 MHz	±5 kHz / ±4 kHz / ±2.5 kHz ±2.5 kHz
Emissions (Conducted and Radiated)		-75 dB
Audio Response		+1, -3 dB
FM Hum & Noise	25 kHz 12.5 kHz	-51 dB -45 dB
Audio Distortion	25 kHz 12.5 kHz	1.00%

DIMENSIONS OF THE RADIO WITHOUT BATTERY

	Inches	MM
Length	5.86	148.8
Width PTT button	2.60	66.1
Depth PTT button	1.29	32.8
Width Top	2.93	74.4
Depth Top	1.39	35.2
Weight	11.04oz	313g

PORTABLE MILITARY STANDARDS 810 C, D, E , F & G

	MIL-STD 810C		MIL-STD 810D		MIL-STD 810E		MIL-STD 810F		MIL-STD 810G	
	Method	Proc./Cat.	Method	Proc./Cat.	Method	Proc./Cat.	Method	Proc./Cat.	Method	Proc./Cat.
Low Pressure	500.1	I	500.2	II	500.3	II	500.4	II	500.5	II
High Temperature	501.1	I, II	501.2	I/A1, II/A1	501.3	I/A1, II/A1	501.4	I/Hot, II/Basic Hot	501.5	I/A1, II/A2
Low Temperature	502.1	I	502.2	I/C3, II/C1	502.3	I/C3, II/C1	502.4	I/C3, II/C1	502.5	I/C3, II/C1
Temperature Shock	503.1	I	503.2	I/A1C3	503.3	I/A1C3	503.4	I	503.5	I/C
Solar Radiation	505.1	II	505.2	I	505.3	I	505.4	I	505.5	I/A1
Rain	506.1	I, II	506.2	I, II	506.3	I, II	506.4	I, III	506.5	I, III
Humidity	507.1	II	507.2	II	507.3	II	507.4	1 Proc	507.5	II/Aggravated
Salt Fog	509.1	I	509.2	I	509.3	I	509.4	1 Proc	509.5	1 Proc
Blowing Dust	510.1	I	510.2	I	510.3	I	510.4	I	510.5	I
Blowing Sand	1 Proc	1 Proc	510.2	II	510.3	II	510.4	II	510.5	II
Vibration	514.2	VIII/F, Curve-W	514.3	I/10, II/3	514.4	I/10, II/3	514.5	I/24	514.6	I/24
Shock	516.2	I, III, V	516.3	I, V, VI	516.4	I, V, VI	516.5	I, V, VI	516.6	I, V, VI
Shock (Drop)	516.2	II	516.2	IV	516.4	IV	516.5	IV	516.6	IV

Level of water protection – IPx7 and Delta-T (MIL-STD-810 C,D,E,F and G, Method 512.X Procedure I).

For more information please visit us at: www.motorolasolutions.com/apx4000XH