MOTOROLA SOLUTIONS

APX 8000XE

FIREFIGHTER

UNLIMITED MOBILITY. **EXTREME PERFORMANCE.**

XE200 11

VTOHOLOW

APX[™] 8000XE ALL-BAND P25 PORTABLE RADIO

Working together with firefighters around the world, we designed the APX™Extreme Series, asafe, and easy and efficient to use portfolio of ergonomically advanced, ultra-rugged radios and accessories. With overeighty years of experience in ergonomics, design and technology for publics afety, the APXXES eries is the culmination of cross-disciplines and user input.

Firefighters said they wanted equivalent extreme features as the APX Extreme Series including a larger display, exaggerated controlknobs, and the capability to communicate with surrounding municipalities with in an all-band radio solution. The APX 8000 XE brings together not only these requirements, but also the integration of WiFi^{*} for programming flexibility.

The APX 8000XE is redefining mission critical communications by delivering an ultra-durable radio that combines unlimited interoperability, loudaudio, and secure WiFiconnectivity. With adedicated channel knob and ability to with stand 500 degrees heat exposure, the APX XE500 Remote Speaker Microphone is the perfect companion to the APX 8000XE. When combined, the APX 8000XE All-Band Portable Radio and XE500 Remote Speaker Microphone create the ultimate mission critical solution designed for safety personnel in extreme environments.

KEY FEATURES

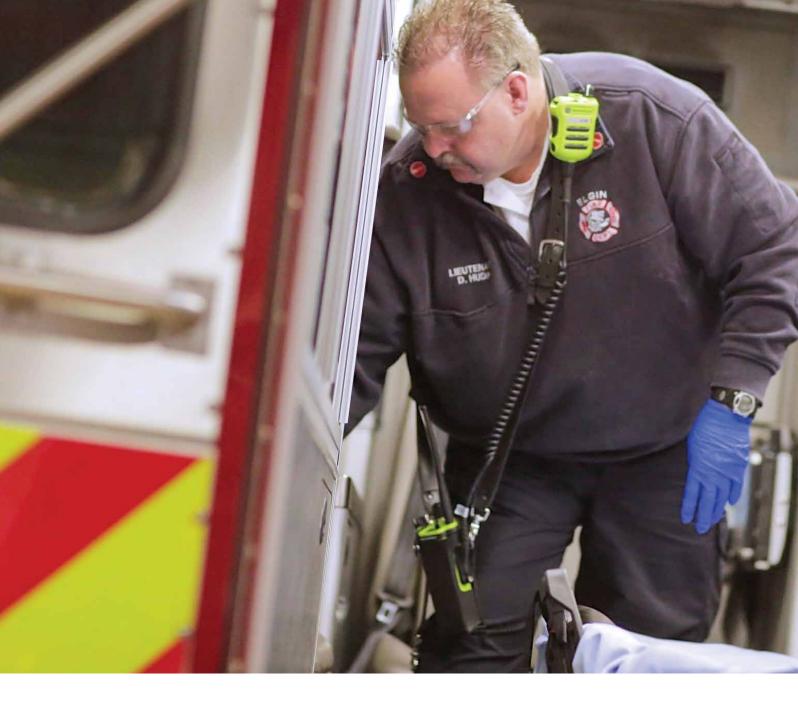
- Unlimited interoperability with one device
- Secure WiFi for seamless software updates
- Extra-large buttons for glove use
- IP68 submersion (2 meters, 4 hours)
- ANSI/ISA-12.12.01-2015 CAN/CSA C22.2
 NO. 213-15, Nonincendive Electrical Equipment for Use in Class I, Division 2, Groups A, B, C, D; Class II, Division 2, Groups F, G; Class III, Division 2
- Integrated GPS/GLONASS for outdoor location tracking
- Equipped with FIPS certified encryption hardware
- RFID volume knob for asset tracking (optional)
- Bluetooth-enabled APX radios capable of transmitting SCBA voice and data







UNLIMITED MOBILITY. EXTREME PERFORMANCE.



ALL-BAND

Unlimited mobility

With a 4-in-1 radio, you now have the ability to stay connected and expand voiceanddatacommunicationsacross multiple agencies with one device. Improve response time by instantly operatingondigitaloranalognetworks, in 700/800, VHF, UHF Range 1 and 2 bands at any given time.



Hear and be heard

The APX8000XE is equipped with a 3-Watt speaker, 3 integrated microphones and Adaptive Audio Engine. This changes the level of noise suppression, microphone gain, windporting and speaker equalization to produce clear and loud audio in any environment.



Voice and data, all at once

Update your radio fleet with Integrated WiFi. This dramatically improves the speed of configuring new codeplugs, firmware and software features over-the-air with Radio Management without interrupting voice communications.Agenciescanprovisionupto 20securedWiFinetworkssotheirpersonnelcan easilyaccessupdatesatthefacilityorinthefield.





Designed for the mission

Theergonomicdesign of the APX8000XE is a wellthought out solution. Whether you're putting out fires, defending your country's coast line or working in other extreme conditions that require heavy gloves, the exaggerated control knobs are easy to gripand locate in eventhemost stress ful moments. From displaysize to button positioning, this radio is easy to access and operate.



FAST, SIMPLE, SECURE

Greater mobility

APXPersonnelAccountabilityallowsIncidentCommanderstoquicklyand accuratelyaccountforfirstrespondersthroughradiorollcallandaninteractive GUI. Real-time accountability allows incident commanders to focus on maintaining control of a chaotic fireground.

With BT standard on all APX XE radios, we are able to partner with SCBA industryleaderstoprovideclearin-maskcommunicationssoyoucanhearand beheard.CollaborationswithbothMSAandScottSafetyallowustodeliver clear voice and data communications.

PRODUCT DATA SHEET APX[™] 8000XE



Li-Ion IMPRES UL2054 DIV 2 Rugged 4850 mAh IP68

RF BANDS

• 700/800 MHz, VHF, UHF Range 1 & 2

OPERATION MODES

- 9600 Baud Digital APCO P25 Phase 1 FDMA and Phase 2 TDMA Trunking
- 3600 Baud SmartNet[®], SmartZone[®] **Omnilink Trunking**
- Digital APCO25, Conventional, Analog MDC 1200, Quick Call II System Configurations
- Narrow and wide bandwidth digital receiver (6.25 kHz equivalent/25/20/12.5 KHz)

STANDARD FEATURES

- Mission Critical Wireless Bluetooth*
- ASTRO 25 Integrated Voice & Data
- Integrated GPS/GLONASS for outdoor location tracking
- Software Key
- Text-Messaging
- Voice Announcements
- ISSI 8000 Roaming
- Radio Profiles, Dynamic Zone
- Intelligent Lighting

5" x 2 3" x 1 7"

- Single-key ADP Encryption
- IP68 submersion (2 meters, 4 hours)

* Compatible with BT4.0, BT2.1, HSP, PAN, DUN and SPPProfiles found in off-the-shelf BT accessories

- IMPRES Battery
- ANSI/ISA-12.12.01-2015 CAN/CSA C22.2 NO. 213-15, Nonincendive Electrical Equipment for Use in Class I, Division 2, Groups A, B, C, D; Class II, Division 2, Groups F, G; Class III, Division 2

ADAPTIVE AUDIO ENGINE

- 3 Watt Speaker with Adaptive Equalization
- Adaptive Dual-sided Operation
- Adaptive Noise Suppression Intensity
- Adaptive Gain Control
- Adaptive Windporting

PROGRAMMING

 UtilizesWindows7&8CustomerProgramming Software (CPS) with Radio Management

OPTIONAL FEATURES

- WiFi 802.11 b/g/n
- RFID Volume Knob
- Multikey for 128 keys and multi-algorithm
- Programming Over Project 25 (OTAP)
- Over the Air Rekey (OTAR)
- Digital Tone Signaling
- P25 Authentication
- Man Down Sensor

PMNN4505A

TRANSMITTER - TYPICAL PERFORMANCE SPECIFICATIONS					
		700/800	VHF	UHF Range 1	UHF Range 2
Frequency Range/Bandsplits		764-776, 794-806 MHz 806-825, 851-870 MHz	136-174 MHz	380-470 MHz	450-520 MHz
Channel Spacing		25/20/12.5 kHz	25/20/12.5 kHz	25/20/12.5 kHz	25/20/12.5 kHz
Maximum Frequency Separation		Full Bandsplit	Full Bandsplit	Full Bandsplit	Full Bandsplit
Rated RF Output Power Adj ¹		700 MHz: 1-2.5 Watts 800 MHz: 1-3 Watts	1-6 Watts	1-5 Watts	1-5 Watts
Frequency Stability ¹ (–30°C to +60°C; +25°C Ref.)		+/- 1.0 ppm	+/- 1.0 ppm	+/- 1.0 ppm	+/- 1.0 ppm
Modulation Limiting ¹	:	±5kHz/±4kHz/±2.5kHz	±5 kHz/±4 kHz/±2.5 kHz	\pm 5 kHz / \pm 4 kHz / \pm 2.5 kHz	±5 kHz / ±4 kHz / ±2.5 kHz
Emissions (Conducted and Radiated) ¹		-75 dBc	-75 dBc	-75 dBc	-75 dBc
Audio Response ¹		+1, -3 dB	+1, -3 dB	+1, -3 dB	+1, -3 dB
	00 MHz 00 MHz	-49 dB / -47 dB -49 dB / -46 dB	-51 dB/-51 dB	-51 dB / -51 dB	-51 dB / -47 dB
	00 MHz 00 MHz	0.90 % / 0.90 % 0.60 % / 0.90 %	0.50 % / 0.90 %	0.50 % / 0.90 %	0.60 % / 0.90 %
BATTERIES FOR APX 8000XE					
Battery Capacity / Type		Dimensions (HxWx	D) Weight	Battery Part Number	Battery Capacity
Li-Ion IMPRES UL2054 DIV 2 Rugged 3400	0 mAh IP68**	3.4" x 2.3" x 1.7"	6.5 oz	PMNN4504A	3400 mAh

KEY AUDIO ACCESSORIES [®]	****		
Name	Туре	Part Number	Features
IMPRES Display RSM	Wired	HMN4104	Windporting, Audio Jack, Channel Knob, Volume Control, Orange Button, IP68
IMPRES XE RSM BLACK	Wired	NNTN8575ABLK	Windporting, Audio Jack, Strobe Light, Volume Control, Orange Button, IP68
IMPRES XE RSM GREEN	Wired	NNTN8575	Windporting, Audio Jack, Strobe Light, Volume Control, Orange Button, IP68
IMPRES XE500 RSM BLACK	Wired	PMMN4106ABLK	Adaptive Audio Engine, Audio Jack, Strobe Light, Volume Control, Channel Knob, Orange Button, IP68
IMPRES XE500 RSM GREEN	Wired	PMMN4106	Adaptive Audio Engine, Audio Jack, Strobe Light, Volume Control, Channel Knob, Orange Button, IP68

10.07

4850 mAh

PRODUCT DATA SHEET APX[™] 8000XE

Explosive Atmosphere

Blowing Sand

Submersion

Shock (Drop)

Vibration

Shock

1 Proc

512.1

514.2

516.2

516.2

1 Proc

T

VIII/F,

Curve-W

I, III, V

Ш

510.2

512.2

514.3

516.3

516.2

Ш

I

I/10, II/3

I, V, VI

IV

510.3

512.3

514.4

516.4

516.4

Ш

Т

I/10, II/3

I, V, VI

IV

511.4

510.4

512.4

514.5

516.5

516.5

Т

Ш

Т

I/24

I, V, VI

IV

511.5,511.6

510.5

512.5

514.6

516.6

516.6

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П

Т

l/24

I, V, VI

IV

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Full bitmap color	or LCD display 14 characters f icons		
Keypad none Manual Status Sta			
LAStyport Memory 2 GB 2 GB <th2 gb<="" th=""> 2 GB 2 GB</th2>	keys vigation key ypad		
Totol Second Mitz (764-870 Mitz) H91TGD9PWGAN H91TGD9PWGAN VHF (761-724 Mitz) H91TGD9PWGAN H91TGD9PWGAN H91TGD9PWGAN UHF Range (1804-720 Mitz) Large PTT button - Angled On/Off Volume control - X-large orange emergency button - 16 position top-mounted rotary 2-position concentric switch - Glove accessible 3-position switch - 3 programmable side buttons Regulatory Information - A2489FT7061 FCC ID A2489FT7061 Industry Canada 1090-V9770041 Witt (764 870 Mitz) 1090-V977061 Emission Designators LMR: 8K10F1D, SK10F1E, SK10F1W, 11K0F3E, 16K0F3E***, 20K0F1E*** Bluetooth; SS2KF1D, 11M7F1D, 11M9F1D, 11M04F1D WMe101D ***InaccondencewtHFCCmandate.the/RX3000XEalliand+adioisretrictedto 1249texperationon/gandabe.N0Tsupport254Hatthe/WF and UHFBands/iockuding*Eand.ThisapRiestockud 380-2 Channel Spacing 25/20712.5 Mitz 25/20712.5 Mitz 25/20712.5 Mitz 25/20712.5 Mitz 25/20712.5 Mitz 25/20712.5 Mitz 380-2 Channel Spacing 25/20712.5 Mitz 25/20712.5 Mitz 37600 Mitz 340-174 Mitz 380-2 Speceh Loudness at 30cm 105 Phons 105 Phons 105 Phons 105 Phons 105 Phons <)0		
YHF (136-174 MHz) H91TGD9PWSAN H91TGD9PW6AN H91TGD9PW6AN UHF Range 1 (360-470 MHz) Large PTT button - Angled On/Off volume control - X-large orange emergency button - 16 position top-mounted rotary 2-position rotentric switch - 610ev accessible 3-porgrammable side buttons Regulatory Information - AZ499TT7061 FCC ID - AZ499T7061 Industry Canada 109U-98T7061 Emission Designators LME: 8K10F ID, 8K10F IE, 8K10F IL, 11K0F E, 15K0F 3E***, 20K0F IE*** Bluetooth; 852K7 ID, 11M17F ID, 11M04F ID MWA 100 WLAN (WHE); 33X7 ID, 11M17F ID, 11M04F ID MWHF 10 WLAN (WHE); 13M7G ID, 11M19F ID, 11M04F ID MWA 100 Namismum Frequency Separation F64-776 MHz 851-870 MHz 136-174 MHz 380- 105 Phons Specie Loudness at 30cm 105 Phons 105 Phons 105 Phons 105 Phons 105 Specie Loudness at 30cm 105 Phons 105 Phons 105 Phons 105 104 144 3441/5 Specie Loudness at 30cm 105 Phons 105 Phons 105 105 105 105 105 105 105 104 144	ıB		
YHF (136-174 MHz) H91TGD9PWSAN H91TGD9PWGAN H91TGD9PWGAN UHF Range 1 (380-470 MHz) Large PTT button - Angled On/Off volume control - X-large orange emergency button - 16 position top-mounted rotary 2-position concentric switch - 60ev accessible 3-porgrammable side buttons Buttons & Switches Large PTT button - Angled On/Off volume control - X-large orange emergency button - 16 position top-mounted rotary 2-position concentric switch - 61eve accessible 3-porgrammable side buttons FCC ID AZ499TT7061 Industry C anada 109U-98FT7061 Emission Designators LME: 8K10F1D, 8K10F1E, K1K0F3E, FK0F3K1F1E*** Bluetootis, 632KF1D, 1M17F1D, 1M04F1D MM4F1D WLAN (WHE): 13407E1D, 1M19F1D, 1M04F1D WM4F1D TraccordancewthFCCmandate,the/AVX8000KEallbandradiosestricted to 12.5k1/20012.5 kHz 25/20/12.5 kHz Frequency Range/Bandspilts 764-776 MHz 851-870 MHz 136-174 MHz 380- 105 Phons Specie Loudness at 30cm 105 Phons 105 Phons 105 Phons 105 Phons 105 Specie Loudness at 30cm 105 Phons 105 Phons 105 104 14/12 Specie Loudness at 30cm 105 Phons 105 Phons 105 105 104 14/12			
UHF Range 1 (380-470 MHz) H91TGD9PWSAN H91TGD9PWSAN H91TGD9PWSAN UHF Range 2 (450-520 MHz) Large PTT button - Angled On/Off volume control - X-large energency button - 16 position top-mounted rotary 2-position concentric switch - Glove accessible 3-position switch - 3 programmable side buttons Regulatory Information FCC ID AZ469FT7061 Industry Canada 109U-89FT7061 Emission Designators LME: 8K10F IV, 1K0F3E, 1K0F3			
UHF Range 2 (450-520 MHz) Large PTT button - Angled On/Off volume control - X-large orange emergency button - 16 position top-mounted rotary 2-position concentric switch - Glove accessible 3-position switch - 3 programmable side buttons Regulatory Information X2499FT7061 FCC ID AZ489FT7061 Industry Canada 109U-89F77061 Emission Designators LME: 8K10F1D, 8K10F1E, 8K10F1W, 11K0F3E, 16K0F3E***, 20K0F1E*** Buttoon's 832KF1D, 1117/F1D, 1110F1D,	H91TGD9PW7AN		
Buttons & Switches Large PTT button - Angled On/Off volume control - X-large orange emergency button - 16 position top-mounted rotary 2-position concentric switch - Glove accessible 3-position switch - 3 programmable side buttons Regulatory Information X-large PTT button - Angled On/Off volume control - X-large orange emergency button - 16 position top-mounted rotary 2-position concentric switch - Glove accessible 3-position switch - 3 programmable side buttons Regulatory Information X-large PTT button - Angled On/Off volume control - X-large orange emergency button - 16 position top-mounted rotary 2-position concentric switch - Glove accessible 3-position switch - 3 programmable side buttons Regulatory Information X-large PTT button - Angled On/Off volume control - X-large orange emergency button - 16 position top-mounted rotary 2-position concentric switch - Glove accessible 3-position switch - 3 programmable side buttons Regulatory Information X-large PTT button - Angled On/Off volume control - X-large orange emergency button - 16 position top-mounted rotary Buttons & X-large X-			
Part of a synthetic switch - Glove accessible 3-position switch - 3 programmable side buttons Regulatory Information FCC ID Azd489FT7061 Industry Canada 109U-89FT7061 Emission Designators LMLB: 6K10F1D; 8K10F1E, 8K10F1D; 111K0F3E; 16K0F3E***, 20K0F1E*** ButtootD:: 552K2F1D; 11117F1D, 11149F1D, 11140F1F2D, 11149F1D, 11149F1			
FCC ID ZZ499F7061 Industry Canada COPU-89F77061 Emission Designators LMR: 8K10F1D, 8K10F1D, 8K10F1D, 1M10F1D, 1M10F1D, 1M04F1D ""Inaccordance/with/CCmandate_the/PK8000/Ealbandradioisestricte/to 12.8k10erpations/yand/desNOTsupport28k1dintH+RanUHFBand/sedsockuloingTBandx1Disestricte/to 12.8k10erpations/yand/desNOTsupport28k1dintH+RanUHFBand/sedsockuloingTBandx1Disestricte/to 12.8k12 comport28k1dintH+RanUHFBand/sedsockuloingTBandx1Disestricte/to 28k1207012.5 kHz 25202012.5 kHz	otary switch		
FCC ID AZ499F7061 Industry Canada ISC ID9U-89F77051 Emission Designators LMR: 8K 10F1D, 8K 10F1D, 8K 10F1D, 11M 0F1D, 10M			
LMR: 8K10F1D, 8K10F1E, 8K10F1W, 11K0F3E, 16K0F3E***, 20K0F1E*** Bluetooth; 825K4FD, 1M17F1D, 1M19F1D, 1M04F1D ***naccordancewithFCCmandate.theAPX8000xEallbandradioisrestrictedto 12.5kHzoperationonlyandoesN0Tsupport25kHzinthv4HFandslexeLudingT-Band).Thisapplestocutor TOO<800 VHF Trequency Range/Bandsplits 700<800 VHF Trequency Range/Bandsplits 764-776 MHz 851-870 MHz 136-174 MHz 2820/2 Channel Spacing 25/20/12.5 kHz			
Emission Designators Bluetooth: 825K10.1 M17F10.1 M19F10.1 M49F1D. WLAN.WMED: 13M7G10.1 7M00D10.1 8M1D1D ****naccordancewthFCCmandate.the APX8000XEallbandradioisrestrictedto 12.5kHztoperationonlyanddoes/NOTsupport/25kHztnthe/HFands/lecdudingT-Band).Thiaspeliestocutor RECEIVER TYPICAL PERFORMANCE SPECIFICATIONS 700 800 VHF Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2" 700 VHF Colspan="2" Colspan="2" Colspan="2" Colspan="2" Colspan="2" Colspan="2" Colspan="2" X100 X100 VHF Colspan="2" Colspan="2" Colspan="2" Colspan="2" Colspan="2" X100 Colspan="2" Colspan="2" Colspan="2" Colspan="2" Colspan="2" Colspan= Colspan="2"			
Image: Second	LMR: 8K10F1D, 8K10F1E, 8K10F1W, 11K0F3E, 16K0F3E***, 20K0F1E*** Bluetooth [*] : 852KF1D, 1M17F1D, 1M19F1D, 1M04F1D		
700 800 VHF Frequency Range/Bandsplits 764-776 MHz 851-870 MHz 136-174 MHz 380- Channel Spacing 25/20/12.5 kHz 105 Phons 105 Phon	ocustomersunderRuleF		
TOO 800 VHF Frequency Range/Bandsplits 764-776 MHz 851-870 MHz 136-174 MHz 380- Channel Spacing 25/20/12.5 kHz 22/20/12.5 kHz 105 Phons 105 Audio Output Power at Rated/Max 3 Watt/5 Watt 3 Watt/5 Wa			
Channel Spacing 25/20/12.5 kHz 52/20/12.5 kHz 52/20/20/20/20/20/20/20/20/20/20/20/20/20	UHF		
Maximum Frequency Separation Full Bandsplit	380-520 MHz		
Speech Loudness at 30cm 105 Phons 105	25/20/12.5 kHz		
Audio Output Power at Rated/Max 3 Watt/5 Watt 1 S Watt/5 Watt 1	Full Bandsplit		
Frequency Stability' (-30°C to +60°C; +25°C Ref.) +/- 1.0 ppm PD 1.0 ppm Dission 1.0 ppm	105 Phons		
(-30°C to +60°C; +25°C Ref.) +/- 1.0 ppm 0.0	3 Watt/5 Watt		
Analog Sensitivity1 1% BER 0.316 uV 0.316 uV 0.251 uV	+/- 1.0 ppm		
Analog Sensitivity1 1% BER 0.316 uV 0.316 uV 0.251 uV	0.199 uV		
Digital Sensitivity ² 5% BER 5% BER faded 0.211 uV 0.562 uV 0.211 uV 0.562 uV 0.149 uV 0.562 uV 0.1 Selectivity (25 kHz / 12.5 kHz) ^{1.5} 79 dB / 72 dB 78 dB / 72 dB 82 dB / 77 dB 80 dB Intermodulation Rejection ¹ 81 dB 80 dB 82 dB 79 dB / 25 dB 80 dB 82 dB 99 dB 98 dB 92 dB 99 dB 95 dB / 55 dB -55 dB / 55 dB -56 dI -56 dI Audio Distortion at Rated 1.2% 1.3% 1.3% 1.3% 1	0.282 uV		
Selectivity (25 kHz / 12.5 kHz) ^{1.5} 79 dB / 72 dB 78 dB / 72 dB 78 dB / 72 dB 82 dB / 77 dB 80 dB 82 dB 99 dB 99 dB 99 dB 98 dB 98 dB 92 dB 99 dB 92 dB 99 dB 92 dB 99 dB 92 dB 99 dB 92 dB 95 dB -55 dB / -53 dB -54 dB / -52 dB -57 dB / -55 dB -56 dB -	0.202 UV		
Intermodulation Rejection ¹ 81 dB 80 dB 82 dB 8 8 8 9 8 9 8 9	0.158 uV		
Spurious Rejection ¹ 98 dB 98 dB 92 dB 93 dB 92 dB 93 dB 92 dB 92 dB 93 dB 92 dB 93 dB 92 dB 93 dB 92 dB 93 dB 92 dB 95 dB -55 dB -56 dB -56 dB -57 dB -55 dB -56 dB -57 dB -55 dB -56 dB <th< td=""><td></td></th<>			
FM Hum and Noise (25 kHz / 12.5 kHz)1 -55 dB / -53 dB -54 dB / -52 dB -57 dB / -55 dB -56 dI Audio Distortion at Rated 1.2% 1.3% 1.3% 1 PORTABLE MILITARY STANDARDS 810 C, D, E, F & G MIL-STD 810C MIL-STD 810D MIL-STD 810E MIL-STD 810F MIL-STD 810F Method Proc./Cat. Method Proc./Cat. <th< td=""><td>0.158 uV</td></th<>	0.158 uV		
(25 kHz / 12.5 kHz)1 -55 dB / -53 dB -54 dB / -52 dB -57 dB / -55 dB -56 dB -56 dB Audio Distortion at Rated 1.2% 1.3% 1.3% 1 PORTABLE MILITARY STANDARDS 810 C, D, E, F & G MIL-STD 810C MIL-STD 810D MIL-STD 810E MIL-STD 810F MIL-STD 810F Method Proc/Cat. Method Pr	0.158 uV 0.530 uV		
Mulic Distortion at Rated 1.2% 1.3% 1.3% 1.3% 1 PORTABLE MILITARY PORTABLE MILITARY Method STANDARDS 810 C, D, E, F & G MIL-STD 810C	0.158 uV 0.530 uV 80 dB / 74 dB		
MIL-STD 810 C, D, E, F & G MIL-STD 810 C	0.158 uV 0.530 uV 80 dB / 74 dB 80 dB 98 dB		
MIL-STD 810C MIL-STD 810D MIL-STD 810E MIL-STD 810F MIL-STD 810F<	0.158 uV 0.530 uV 80 dB / 74 dB 80 dB 98 dB -56 dB / -54 dB		
Method Proc./Cat.	0.158 uV 0.530 uV 80 dB / 74 dB 80 dB 98 dB		
Low Pressure 500.1 I 500.2 II 500.3 II 500.4 II 500.5 High Temperature 501.1 I, II 501.2 I/A1, II/A1 501.3 I/A1, II/A1 501.4 I/Hot, II/Hot 501.5 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 Temperature Shock 503.1 I 503.2 I/A1C3 503.3 I/A1C3 503.4 I 503.5 Solar Radiation 505.1 II 505.2 I 505.3 I 505.4 I 505.5	0.158 uV 0.530 uV 80 dB / 74 dB 80 dB 98 dB -56 dB / -54 dB		
High Temperature 501.1 I, II 501.2 I/A1, II/A1 501.3 I/A1, II/A1 501.4 I/Hot, II/Hot 501.5 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 Temperature Shock 503.1 I 503.2 I/A1C3 503.3 I/A1C3 503.4 I 503.5 Solar Radiation 505.1 II 505.2 I 505.3 I 505.4 I 505.5	0.158 dV 0.530 dV 80 dB / 74 dB 80 dB 98 dB -56 dB / -54 dB 1.2% MIL-STD 810G		
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 Temperature Shock 503.1 I 503.2 I/A1C3 503.3 I/A1C3 503.4 I 503.5 Solar Radiation 505.1 II 505.2 I 505.3 I 505.4 I 505.5	0.158 dV 0.530 dV 80 dB / 74 dB 80 dB 98 dB -56 dB / -54 dB 1.2% MIL-STD 810G od Proc./Cat		
Temperature Shock 503.1 I 503.2 I/A1C3 503.3 I/A1C3 503.4 I 503.5 Solar Radiation 505.1 II 505.2 I 505.3 I 505.4 I 505.5	0.158 uV 0.530 uV 80 dB / 74 dB 80 dB 98 dB -56 dB / -54 dB 1.2% MIL-STD 810G od Proc./Cat 5 II		
Solar Radiation 505.1 II 505.2 I 505.3 I 505.4 I 505.5	0.158 uV 0.530 uV 80 dB / 74 dB 80 dB 98 dB -56 dB / -54 dB 1.2% MIL-STD 810G od Proc./Cat 5 II 5 I/A1, II/A		
	0.158 uV 0.530 uV 80 dB / 74 dB 80 dB 98 dB -56 dB / -54 dB 1.2% MIL-STD 810G od Proc./Cat 5 II 5 I/A1, II/A 5 I/C3, II/C		
nam 500.1 i, ii 500.2 i, ii 500.5 i, ii 500.4 i, iii 500.5	0.158 uV 0.530 uV 80 dB / 74 dB 80 dB 98 dB -56 dB / -54 dB 1.2% MIL-STD 810G od Proc./Cat 5 II 5 I/A1, II/A 5 I/C3, II/C		
Humidity 507.1 II 507.2 II 507.3 II 507.4 1 Proc 507.5	0.158 uV 0.530 uV 80 dB / 74 dB 80 dB 98 dB -56 dB / -54 dB 1.2% MIL-STD 810G od Proc./Cat 5 I/A1, II/A 5 I/C3, II/C 5 I/A1		
Salt Fog 509.1 I 509.2 I 509.3 I 509.4 1 Proc 509.5	0.158 uV 0.530 uV 80 dB / 74 dB 80 dB 98 dB -56 dB / -54 dB 1.2% MIL-STD 810G od Proc./Cat 5 II 5 I/A1, II/A 5 I/C 5 I/A1 5 I, III		
Blowing Dust 510.1 I 510.2 I 510.3 I 510.4 I 510.5	0.158 uV 0.530 uV 80 dB / 74 dB 80 dB 98 dB -56 dB / -54 dB 1.2% MIL-STD 810G od Proc./Cat 5 II 5 I/A1, II/A 5 I/C 3, II/C 5 I/A1 5 I/A1 5 I, III 5 I/A1		
Explosive Atmosphere - - - - 510.5 1 510.4 1 510.5	0.158 uV 0.530 uV 80 dB / 74 dB 80 dB 98 dB -56 dB / -54 dB 1.2% MIL-STD 810G od Proc./Cat 5 II 5 I/A1, II/A 5 I/C3, II/C 5 I/A1 5 I/A1 5 I/A1 5 I/A1 5 I/A1 5 I/A1		

PRODUCT DATA SHEET

APX[™] 8000XE

	Inches	Millimeters
Length	6.15	156.2
Width Push-To-Talk button	2.39	60.7
Depth Push-To-Talk button	1.40	35.5
Width Top	3.32	84.3
Depth Top	2.13	54.1
Depth Bottom of Battery	1.24	31.5
Weight of the radios without battery	13.9 oz	394.1 g

Supported Encryption Algorithms	ADP, AES, DES, DES-XL, DES-OFB, DVP-XL, Localized Algorithm
Encryption Algorithm Capacity	8
Encryption Keys per Radio	Module capable of storing 1024 keys. Programmablefor 128Common Key Reference (CKR) or 16 Physical I dentifier (PID)
Encryption Frame Re-sync Interval	P25 CAI 360 mSec
Encryption Keying	Key Loader and Over the Air Rekeying (OTAR)
Synchronization	XL – Counter Addressing OFB – Output Feedback
Vector Generator	National Institute of Standards and Technology (NIST) approved random number generator
Encryption Type	Digital and SecureNet
Key Storage	Tamper protected volatile or non-volatile memory
Key Erasure	Keyboard command and tamper detection
Standards	FIPS 140-2 Level 3 FIPS 197

GPS/GNSS SPECIFICATIONS	
Constellations	GPS & GLONASS
Tracking Sensitivity	–164 dBm
Accuracy ³	<5 meters (95%)
Cold Start ³	<60 seconds (95%)
Hot Start ³	<5 seconds (95%)
Mode of Operation	Autonomous(Non-Assisted)

RUGGED SPECIFICATIONS

Leakage

(submersion)

MIL-STD-810 C, D, E, F and G Method 512.X Procedure I, IP68 (2 meters, 4 hours)

ENVIRONMENTAL SPECIFICATIONS Operating Temperature⁴ -30°C / +60°C Storage Temperature⁴ -50°C / +85°C Humidity Per MIL-STD IEC 801-2 KV ESD Water and Dust Intrusion IP68(2meters,4hours)

Black (Standard), Public Safety Yellow, and High Impact Green

Frequency Range/Bandsplits: Bluetooth: 2402 - 2480 MHz, WLAN (WiFi): 2400 - 2483.5 MHz

- WLAN (WiFi) 802.11 b/g/n supports WPA-2, WPA, WEP security protocols; radio can be pre-provisioned with up to 20 SSIDs⁶ $Mission Critical Wireless Blue to oth 2.1\,uses 96 bit encryption for pairing \& 128 bit encryption for voice, signaling and data. The radio of the second s$
- BT supports up to 6 data connections and 1 audio connection

Bluetooth 4.0 Low Energy uses 128-bit AES-CCM encryption

¹ Measured conductively in analog mode per TIA / EIA 603 under nominal conditions.
² Measured conductively in digital mode perTIA / EIA IS 102.CAAA under nominal conditions.

- ³ Measured conductively with >6 satellites visible at a nominal 130dBm signal strength. Specs provided are 95th percentile values.
 ⁴ Temperatures listed are forradios pecifications. Battery storage is recommended at 25°C, ±5°C to
- ensure best performance.

⁵ Measured using the TIA-603 single-tone method.

⁶2400-2483.5MHzforEMEA region and includes guardband. Channels 1-11 used for FCC/IC region. Specifications subject to change without notice.

All specifications shown are typical.

Radio meets applicable regulatory requirements.

For more information, please visit: www.motorolasolutions.com/apx

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MICROPHONE With its ultimate usability and extreme performance, the APX XE500 Remote Speaker Microphone(RSM)istheperfect companion to the APX 8000XE.

ULTIMATE USABILITY. EXTREME PERFORMANCE.



