



## COVERT COMMUNICATION WITHOUT COMPROMISE

# APX™ 3000 PROJECT 25 PORTABLE RADIO

If you're working undercover or in special operations, you need secured communications and discretion. You need to connect instantly, and often covertly, from a backpack, bag or underneath your clothes. And coverage from all locations is essential. That's why you want the high-powered APX™ 3000 P25 portable radio for your team.

The APX™ 3000 P25 lets personnel remain inconspicuous when they are doing their job. It has a slim, lightweight design and Mission Critical Wireless accessories that guarantee unsurpassed security and discretion.

### DESIGNED TO BE DISCREET

The APX™ 3000 is designed for covert operations. Conventional components, such as keypads and displays, are removed to create a slim, compact radio that operates via accessories. If the connection to the accessory is ever lost, the radio's communications won't be compromised. To further minimize the risk of discovery, we dimmed the lights and eliminated the audio output.

APX™ 3000 has a wide variety of Mission Critical Wireless accessories that let agents choose how to wear the radio—on a belt, in a backpack or purse, on the body.

The comfortable, covert three-wire surveillance earpiece is ideal for personnel on protective detail. The Mission Critical Wireless Bluetooth® earbud headphones look as if you are simply talking on the phone or listening to music. The optional antenna can be worn on the body and hidden under clothes. There's even an optional Wireless Push-To-Talk pod that makes it easy to communicate wirelessly with the radio when it is concealed.

### STAY SAFE, IN TOUCH AND INCONSPICUOUS

The APX™ 3000 also improves situational awareness and enhances safety. Quick secure touch-pairing lets your team pair accessories with the radio while suiting up, in the van or on the go. Applications like GPS tracking and Man Down track their location in real time and send an alert if an operative is in trouble. And because it's forward and backward compatible with all Motorola mission critical radio systems, you can trust voice communications to be interoperable with existing devices and systems.



**FEATURES AND BENEFITS:**

- Available in 700-800 MHz, VHF, UHF Range 1 and UHF Range 2 bands
- Operational multiband operation
- 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)\*
- Embedded digital signalling (ASTRO & ASTRO 25)
- User programmable voice announcement

Meets applicable MIL-STD-810C, D, E, F and G

IP67 standard (submersible 1 metre, 30 minutes)\*\*

Utilises Windows XP, Windows 7, and Vista Customer Programming Software (CPS)

- Supports USB communications
- Built in FLASHport™ support

Full portfolio of accessories including IMPRES batteries, chargers, wired and wireless audio accessories\*\*\*

**OPTIONAL FEATURES:**

- Enhanced Encryption capability
- Programming Over Project 25
- Man Down
- Mission Critical Wireless<sup>4</sup>
- Integrated GPS

**CHOOSE HOW TO COMMUNICATE COVERTLY**

- Radio ships standard with a 3-wire surveillance kit (black or beige)
- Optional Mission Critical Wireless Covert Audio Accessory kit includes:
  - 2-wire earbud headphones (black and white)
  - Single-wire earbud headphones (black)
  - 3.5mm adapter that lets you connect to any off-the-shelf headphones
- Optional flexible antenna attaches to the body under clothing

\* Per the FCC Narrowbanding rules, new products (APX6000XE UHF1, UHF2) submitted for FCC certification after January 1, 2011 are restricted from being granted certification at 25KHz for United States - State & Local Markets only.  
 \*\*Radios meet industry standards (IPx7) for immersion  
 \*\*\*Chargers and batteries for the APX 3000 radios do not interoperate with the APX6000, 7000 and XE series radios  
 \*\*\*\*Compatible with BT 2.0 and HSP and PAN BT Profiles

**ACCESSORY BUNDLES FOR APX 3000**



**STANDARD CONFIGURATION INCLUDES:**  
1 IMPRES 3-Wire Surveillance Kit (black - PMLN6123 or beige - PMLN6124)



**MISSION CRITICAL WIRELESS COVERT AUDIO ACCESSORY KIT (NNTN8296) INCLUDES:** One black 2-wire earbud headphones, One white 2-wire earbud headphones, One black single-wire earbud headphones, 3.5mm adapter to connect to any consumer off-the-shelf headphones

**MISSION CRITICAL WIRELESS COVERT KIT IS AVAILABLE AS THE FOLLOWING BUNDLES:**

- 1. Enhanced Bundle includes:** Mission Critical Wireless Covert Audio Accessory Kit, one Mission Critical Wireless push-to-talk pod and one Remote Control Unit
- 2. Extra Life Bundle includes:** Mission Critical Wireless Covert Audio Accessory Kit and two Mission Critical Wireless push-to-talk pods to power the earbud headphones
- 3. Basic Bundle includes:** Mission Critical Wireless Covert Audio Accessory Kit and Mission Critical Wireless push-to-talk pod to power the earbud headphones

**BATTERIES FOR APX 3000**

Battery Capacity / Type	Dimensions (HxWxD)	Weight	Battery Part Number
IMPRES Li-Ion IP67, 1250 mAh	114.5 x 55.04 x 13.80 mm	106 grams	NNTN8305AR
IMPRES Li-Ion IP67, 1900 mAh	114.5 x 55.04 x 17.85 mm	150 grams	NNTN8128BR
IMPRES Li-Ion IP67, 2300 FM mAh	114.5 x 55.04 x 23.15 mm	160 grams	NNTN8129A <sup>2</sup>
IMPRES Li-Ion IP67, 2300 mAh	114.5 x 55.04 x 23.15 mm	160 grams	PMNN4424AR

**CHARGERS FOR APX 3000**

WPLN4253 (US) WPLN4254 (UK) WPLN4255 (EU)	IMPRES Single-Unit Charger
WPLN4219 (US) WPLN4220 (EU) WPLN4221 (UK)	IMPRES Multi-Unit Charger with six displays
WPLN4212 (US) WPLN4213 (EU) WPLN4214 (UK)	IMPRES Multi-Unit Charger - with one display
NNTN8169	Battery Insert for XTS Single Unit Chargers (WPLN4111/NTN1873)
NNTN8170	Battery Insert for XTS Multi-Unit Chargers (WPLN4108/WPLN4130)

**PRODUCT SPEC SHEET**  
APX™ 3000



**RADIO MODELS**

MODEL 1	
Channel Capacity	512
FLASHport Memory	64 MB
700/800 MHz (763-870 MHz)	H59UCD9PW4AN
VHF (136-174 MHz)	H59KGD9PW4AN
UHF Range 1 (380-470 MHz)	H59QDD9PW4AN
UHF Range 2 (450-520 MHz)	H59SDD9PW4AN
Buttons	3 programmable side buttons ■ 1 programmable top button

**TRANSMITTER CERTIFICATION**

700/800 (764-869 MHz)	AZ489FT5860
VHF (136-174 MHz)	AZ489FT3830
UHF Range 1	AZ489FT4911
UHF Range 2	AZ489FT4912

**FCC EMISSIONS DESIGNATORS**

FCC Emissions Designators	11K0F3E, 16K0F3E, 8K10F1D, 8K10F1E, 8K10F1W, 20K0F1E*
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**POWER SUPPLY**

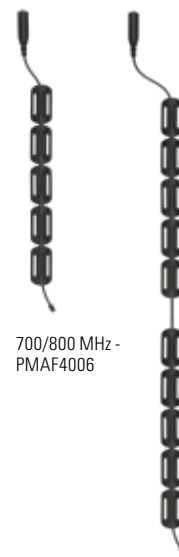
Power Supply	Two rechargeable IMPRES Li-Ion 1250 mAh Ultra Slim Battery standard, or optional IMPRES Li-Ion 1900 mAh Slim Battery; or IMPRES Li-Ion 2300 mAh High Cap Battery
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\* Per the FCC Narrowbanding rules, new products (APX 3000, UHF R1 ) submitted for FCC certification after January 1, 2011 are restricted from being granted certification at 25KHz for United States - State & Local Markets only.

**OPTIONAL FLEXIBLE ANTENNAS**



VHF FLEXI ANTENNA  
PMAD4125



700/800 MHz -  
PMAF4006

UHF (380-520MHz) -  
PMAE4080

**TRANSMITTER - TYPICAL PERFORMANCE SPECIFICATIONS**

	700	800	VHF	UHF Range 1	UHF Range 2	
Frequency Range/Bandsplits	764-775; 793-806 MHz	806-824; 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	25/20/12.5 KHz	
Maximum Frequency Separation	Full Bandsplit	Full Bandsplit	Full Bandsplit	Full Bandsplit	Full Bandsplit	
Rated RF Output Power Adj <sup>1</sup>	1-2.5 Watts	1-3 Watts	1-5 Watts Max	1-5 Watts Max	1-5 Watts Max	
Frequency Stability <sup>1</sup> (-30°C to +60°C; +25°C Ref.)	±0.00010 %	±0.00010 %	±0.00010 %	±0.00010 %	±0.00010 %	
Modulation Limiting <sup>1</sup>	±5 kHz / ±4 kHz / ±2.5 kHz	±5 kHz / ±4 kHz / ±2.5 kHz	±5 kHz / ±4 kHz / ±2.5 kHz	±5 kHz / ±4 kHz / ±2.5 kHz	±5 kHz / ±4 kHz / ±2.5 kHz	
Emissions (Conducted and Radiated) <sup>1</sup>	-75 dB	-75 dB	-75 dB	-75 dB	-75 dB	
Audio Response <sup>1</sup>	+1, -3 dB	+1, -3 dB	+1, -3 dB	+1, -3 dB	+1, -3 dB	
FM Hum & Noise	25 kHz 12.5 kHz	-50 dB -45 dB	-50 dB -45 dB	-51 dB -45 dB	-51 dB -45 dB	-53 dB -47 dB
Audio Distortion <sup>1</sup>	25 kHz 12.5 kHz	1.00%	1.00%	1.00%	1.00%	1.00%

**RECEIVER - TYPICAL PERFORMANCE SPECIFICATIONS**

	700	800	VHF	UHF Range 1	UHF Range 2	
Frequency Range/Bandsplits	764-775 MHz	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	25/20/12.5 KHz	
Maximum Frequency Separation	Full Bandsplit	Full Bandsplit	Full Bandsplit	Full Bandsplit	Full Bandsplit	
Frequency Stability <sup>1</sup> (-30°C to +60°C; +25°C Ref.)	±0.00010 %	±0.00010 %	±0.00010 %	±0.00010 %	±0.00010 %	
Analog Sensitivity <sup>3</sup>	12 dB SINAD	0.266µV	0.200µV	0.234µV	0.224µV	
Digital Sensitivity <sup>4</sup>	1% BER (800 MHz) 5% BER	0.400µV 0.266µV	0.400µV 0.266µV	0.285µV 0.207µV	0.305µV 0.205µV	
Selectivity <sup>1</sup>	25 kHz channel 12.5 kHz channel	-76 dB -67 dB	-76 dB -67 dB	-79 dB -70 dB	-77 dB -67 dB	-78 dB -68 dB
Intermodulation		-75 dB	-75 dB	-79 dB	-77 dB	-78 dB
Spurious Rejection		-76.6 dB	-76.6 dB	-78 dB	-80.3 dB	-80.3 dB
FM Hum and Noise	25 kHz 12.5 kHz	-53 dB -47 dB	-53 dB -47 dB	-54 dB -45 dB	-50 dB -45 dB	-51 dB -46 dB
Audio Distortion <sup>1</sup>		1.00%	1.00%	1.00%	1.00%	1.00%

**PRODUCT SPEC SHEET**  
APX™ 3000

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

DIMENSIONS OF THE RADIOS WITHOUT BATTERY		
	Inches	Millimeters
Length	5.57	141.5
Width Top	2.35	59.8
Depth Top	1.06	27.0
Weight of the radios without battery	6.84 oz	194 g

ENCRYPTION	
Supported Encryption Algorithms	ADP, 256-bit AES, DES, DES-XL, DES-OFB, DVP-XL
Encryption Algorithm Capacity	8
Encryption Keys per Radio	Module capable of storing 1024 keys. Programmable for 128 Common Key Reference (CKR) or 16 Physical Identifier (PID)
Encryption Frame Re-sync Interval	P25 CAI 300 mSec
Encryption Keying	Key Loader
Synchronization	XL – Counter Addressing OFB – Output Feedback
Vector Generator	National Institute of Standards and Technology (NIST) approved random number generator
Encryption Type	Digital
Key Storage	Tamper protected volatile or non-volatile memory
Key Erasure	Tamper detection
Standards	FIPS 140-2 Level 3; FIPS 197

GPS SPECIFICATIONS	
Channels	12
Tracking Sensitivity	-159 dBm
Accuracy <sup>5</sup>	<10 meters (95%)
Cold Start	<60 seconds (95%)
Hot Start	<10 seconds (95%)
Mode of Operation	Autonomous (Non-Assisted) GPS

ENVIRONMENTAL SPECIFICATIONS	
Operating Temperature <sup>5</sup>	-30°C / +60°C
Storage Temperature <sup>6</sup>	-40°C / +85°C
Humidity	Per MIL-STD
ESD	IEC 801-2 KV
Water and Dust Intrusion	IP67
Housing Availability	Black only

<sup>1</sup> Measured in the analog mode per TIA / EIA 603 under nominal conditions

<sup>2</sup> When used with an FM approved intrinsically safe radio

<sup>3</sup> Measured conductively in analog mode per TIA / EIA 603 under nominal conditions.

<sup>4</sup> Measured conductively in digital mode per TIA / EIA IS 102.CAAA under nominal conditions.

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

<sup>6</sup> Temperatures listed are for radio specifications. Battery storage is recommended at 25°C, ±5°C to ensure best performance.

Specifications subject to change without notice. All specifications shown are typical. Radio meets applicable regulatory requirements.

**PRODUCT SPEC SHEET**  
**APX™ 3000**

**REGULATORY COMPLIANCE**

Radio (R&TTE Article 3.2)	Directive 1999/5/EC RTTE EN 300 086-2 v1.3.1
	EN 300 113-2 v1.5.1
	EN 300 328 v1.7.1
EMC (R&TTE Article 3.1.b)	EN 301 489-1 V1.9.2
	EN 301 489-5 V1.3.1
	EN 300 086-2 v1.3.1 (rad. emissions)
	EN 301 489-17 V2.1.1
Electrical Safety (R&TTE Article 3.1.a)	EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011 + AC:2011
	ICNIRP(1998) Occupational Controlled Environment
Environmental	Directive 2002/96/EC WEEE
	Directive 2011/65/EU RoHS-2
Year of first application of CE Mark	2013 (136-174MHz) ; 2013 (380-470MHz)
Type Designator	PMUE302BE (136-174MHz) ; PMU502BE (380-470MHz)

Motorola Solutions Ltd. Nova South, 160 Victoria Street, London, SW1E 5LB, UK. [motorolasolutions.com](http://motorolasolutions.com)

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