XTS4000

The XTS4000 is the ideal solution to help maintain order and ensure secure communications in surveillance covert type operations. Designed to resemble the appearance of today's consumer communication devices, the XTS4000 allows agents to blend right into the crowd. Our digital, Project 25 portable radio delivers high quality communication in a light and discrete package for those critical undercover applications.

Features and Benefits:

- Consumer look and feel
- Color Display
- APCO P25 Digital
- Supports 9600cc Trunking, 3600cc Trunking, Astro Conventional
- 512 Channel Capability
- UCM Type 3 FIPS Encryption
- Includes multikey and OTAR (Over the Air ReKey)
- VHF frequency (136 - 174 MHz)
- Supports vibrate mode and silent mode
- Conventional Call Features (ASTRO)
  - Channel & Zone Selection
  - Talk & Listen Talk group calls
  - Emergency
  - Secure (ADP and DES)
  - Text Messaging
- Audio Accessories
- AC/DC charging accessories
- Meets Mil Specs 810 C, D, E and F
- Utilizes Windows-Based Customer Programming Software (CPS)
  - Supports USB and RS-232 communications
  - Built in FLASHport support

Transmitter – Typical Performance Specifications

	VHF
Operating Frequency Range	136-174 MHz
Channel Spacing	12.5 kHz
Maximum Frequency	Subject to antenna
Separation *	Operating band
Rated RF Output Power**	1 to 2 W
Operating Frequency Accuracy**	
(-30°C to +60°C; +25°C Ref.)	±0.00020%
Modulation Fidelity**	
Deviation	1750 Hz
Carrier Frequency Offset	±0.00020%
Error Vector Magnitude	1.5%
Emissions**	
(Conducted & Radiated)	-75 dBc
Symbol Rate Accuracy**	0%
Adjacent Channel Power Ratio**	-69 dB

Receiver – Typical Performance Specifications

	VHF
Operating Frequency Range	136-174 MHz
Channel Spacing	12.5kHz
Maximum Frequency	Subject to antenna
Separation *	Operating band
Rated Audio Output Power**	500 mW
Frequency Stability**	
(-30°C to +60°C; 25°C Ref.)	±0.00020%
Reference Sensitivity**	
1% BER	0.25 uV
5% BER	0.22 uV
Selectivity**	
12.5 kHz channel	-63 dB
Intermodulation**	-73 dB
Spurious Rejection**	-75 dB
Residual Audio Noise Ratio (silence)**	-65 dB
Residual Audio Noise Power (mute)**	-65 dBm
Audio Distortion**	1%

* Refer to XTS4000 ANTENNA List
** Measured in DIGITAL mode per TIA/EIA IS 102.CAAA
Specifications subject to change without notice.

Radio Models

	Displays	Keypad	Channel Capacity	VHF (136-174 MHz)
XTS4000		3x7	512	H18KCN9PW9_N
	Caller ID Display			
	• 1 line of icons			
	• 1 line of text			
	• 14 characters per line			
	Main Display			
	• RGB Color			
	• 2 lines of icons			
	• Dim & Auto-Light Timer (Display brightness settings – High, Low and Off)			
	• 4 lines of text (including menu line)			
	• 14 characters per line w/ dynamic resizing			
FCC Designation	AZ489FT3814			
FCC Emissions Designators	20K0F1E, 16K0F3E, 11K0F3E, 8K10F1D, 8K10F1E			
Power Supply	One rechargeable Lithium-Ion (Li-Ion)			
Dimensions without battery (HxWxD)	5.77" x 2.17" x 1.12"			
Weight without battery	6.7 oz			

Batteries for Astro Digital XTS4000

Battery Capacity / Type	Dimensions (HxWxD)	Weight	Battery Part Number	Minimum Rated Capacity	Duty Cycle
Standard Li-Ion	5.77" x 2.17" x 0.43"	2.1 oz	NNTN6944	630mAh	5-5-90/4hr.

Antennas for Astro Digital XTS4000

Antenna Frequency Range	Length	Antenna Part Number
136 - 151 MHz	1.89"	NAD6582
145 - 166 MHz	1.69"	NAD6581
162 - 174 MHz	1.49"	NAD6583

Encryption

Supported Encryption Algorithms	ADP, AES, DES, DES-XL and DES-OFB, DVP-XL
Encryption Keys per Radio	48 common Key Reference (CKR) Encryption Keys 16 Physical Identifier (PID) Encryption Keys
Encryption Frame Re-sync Interval	P25 CAI 360 msec
Encryption Keying	Key Loader
Synchronization	CFB – Cipher Feedback 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	Keyboard command and tamper detection
Standards	• FIPS 46-2 • FIPS 140-2 • FIPS 197

Environmental Specifications

Operating Temperature	-10°C to +60°C
Storage Temperature	-40°C / +85°C
Humidity	Per MIL-STD
ESD	IEC 801-2KV
Water & Dust Intrusion	IP54, MIL-STD

Portable Military Standards 810 C, D, E & F

	MIL-STD 810C		MIL-STD 810D		MIL-STD 810E		MIL-STD 810F	
	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
High Temperature	501.1	I, II	501.2	I/A1, II/A1	501.3	I/A1, II/A1	501.4	I/Hot, II/Hot
Low Temperature	502.1	I	502.2	I/C3, II/C1	502.3	I/C3, II/C1	502.4	I/C3, II/C1
Temperature Shock	503.1	I*	503.2	I/A1C3	503.3	I/A1C3	503.4	I
Solar Radiation	505.1	II	505.2	I	505.3	I	505.4	I
Rain	506.1	I, II	506.2	I, II	506.3	I, II	506.4	I, III
Humidity	507.1	II	507.2	II	507.3	II	507.4	I*
Salt Fog	509.1	I*	509.2	I*	509.3	I*	509.4	I*
Blowing Dust/Sand	510.1	I	510.2	I, II	510.3	I, II	510.4	I, II
Vibration	514.2	VIII/F, Curve-W, XI	514.3	I/10, II/3	514.4	I/10, II/3	514.5	I/24
Shock	516.2	I, II	516.3	I, IV	516.4	I, IV	516.5	I, IV

* Military Standards specify a single procedure for this test.

MOTOROLA