

# APX™ SINGLE-BAND CONSOLETTTE

**UHF RANGE 1  
UHF RANGE 2**



## TRANSMITTER - TYPICAL PERFORMANCE SPECIFICATIONS

	UHF Range 1	UHF Range 2
Frequency Range/Bandsplits	380-470 MHz	450-520 MHz
Channel Spacing	25 / 12.5 kHz	25 / 12.5 kHz
Maximum Frequency Separation	Full Bandsplit	Full Bandsplit
Rated RF Output Power Adj*	10-40 W	10-45 W (450-485 MHz) 10-40 W (485-512 MHz) 10-25 W (512-520 MHz)
Frequency Stability* (-30 °C to +60 °C; +25 °C Ref.)	±0.0002%	±0.000%
Modulation Limiting*	±5 kHz / ±2.5 kHz	±5 kHz / ±2.5 kHz
Modulation Fidelity (C4FM) 12.5 kHz Digital Channel	±2.8 kHz	±2.8 kHz
Emissions*	Conducted+ -85 dBc	Radiated -20 dBm+
Audio Response*	+1, -3 dB (EIA)	+1, -3 dB (EIA)
FM Hum & Noise	25 & 20 kHz 12.5 kHz	-45 dB -40 dB
Audio Distortion*	2%	2%

## DIMENSIONS

Standard Model	16.0 x 18.0 x 4.2 in (406 x 457 x 107 mm), WxDxH 18.5 lbs (8.4 kg)
Full-Featured Model	16.0 x 18.8 x 4.2 in (406 x 476 x 107 mm), WxDxH 19.5 lbs (8.9 kg)

## RECEIVER - TYPICAL PERFORMANCE SPECIFICATIONS

	UHF Range 1	UHF Range 2
Frequency Range/Bandsplits	380-470 MHz	450-520 MHz
Channel Spacing	25 / 12.5 kHz	25 / 12.5 kHz
Maximum Frequency Separation	Full Bandsplit	Full Bandsplit
Audio Output at 3% Distortion*	2.5 W++	2.5 W++
Frequency Stability* (-30 °C to +60 °C; +25 °C Ref.)	±0.0002%	±0.0002%
Analog Sensitivity* (12 dB SINAD)	Pre-Amp 0.2 µV	Standard 0.3 µV
Digital Sensitivity	(1% BER) 0.25 µV	0.4 µV
	(5% BER) 0.2 µV	0.3 µV
Intermodulation	80 dB	85 dB
Spurious Rejection	90 dB	90 dB
Audio Distortion at rated*	3.00%	3.00%
Selectivity*	25 kHz 12.5 kHz 30 kHz	82 dB 82 dB 70 dB

## ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-22 °F to 140 °F (-30 °C to +60 °C)
Storage Temperature	-40 °F to 185 °F (-40 °C to +85 °C)
Humidity	95% relative humidity
Electrostatic Discharge (ESD)	Per IEC 61000-4-2
Duty Cycle	Per EIA/TIA Intermittent Duty Cycle

## FEATURES AND CAPABILITIES

STANDARD	OPTIONAL
UHF Band	Enhanced Encryption Software
Up to 50 W Output Power	Programming over Project 25 (POP25)
Clear or Encrypted Digital P25 Trunked Operation	Text Messaging
SmartZone®, SmartZone Omnilink, SmartNet® Analog Trunked Operation	Over the Air Rekeying (OTAR)
Digital P25 Conventional Operation	
Analog MDC-1200 Conventional Operation	Extended Dispatch Operation including: <ul style="list-style-type: none"> <li>• Emergency Alarm ACK Encode</li> <li>• Radio Inhibit/Uninhibit Encode</li> <li>• Radio Monitor Encode</li> <li>• Radio Check Encode</li> <li>• Status Query Encode</li> <li>• Status Query Response Decode</li> <li>• Status Update Decode</li> <li>• Message Update Decode</li> </ul>
Intelligent Lighting	
Unified Call List	
Tone Remote Control	
110/240 VAC power with battery revert capability	

## USER INTERFACE

STANDARD MODEL	FULL-FEATURED MODEL
4-line Tri-color LCD display <ul style="list-style-type: none"> <li>• 1 line radio status icons</li> <li>• 2 lines text, up to 14 characters per line</li> <li>• 1 line soft menu key legends</li> </ul>	Adds Auxiliary User Interface: <ul style="list-style-type: none"> <li>• Clock and VU Meter</li> <li>• Crosspatch Interface</li> <li>• Auxiliary Controls</li> <li>• Secondary Microphone Connector</li> </ul>
5 programmable soft keys	
Navigation Pad	
Volume knob	
Mode Selector	
Emergency Button	
Microphone Connector	

\* Measured in the analog mode per TIA/EIA 603 under nominal conditions  
Specifications subject to change without notice. All specifications shown are typical values

## ENCRYPTION

Supported Encryption Algorithms	ADP, 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	Keyboard command and tamper detection
Standards	FIPS 140-2 Level 3 FIPS 197

## INTERFACES

FRONT	REAR
Microphone Connector	Recorder
Secondary Microphone (Full-Featured Model)	Wireline
	Interface Port
	Crosspatch
	Power

For more information, please visit us on the web at: [www.motorolasolutions.com/APX](http://www.motorolasolutions.com/APX)



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