



## **P25 Public Safety Mobile**

### Guaranteed compatible with other P25 radios.

RCA's RPX6500 mobile radio is designed to meet Project 25 (P25) specifications for Police, Fire, Ambulance, and other emergency services. P25 radios meet Military Standard Spec 810F for durability, shock and humidity. RCA's P25 mobile radio has 25W of power for extended signal coverage with an optional upgrade to 110W. RCA's 3 Year Warranty is the best in the industry, giving you peace of mind when purchasing P25 equipment.

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**AMBE+2 Vocodor** 

DIGITAL VOICE SYSTEMS, INC.

### **Features:**

- MultiCom™ Technology Provides crossplatform P25 Conventional and P25 Trunking system capability, as well as Analog Conventional and MPT1327 Trunking system capability
- P25 Cross-Brand Compatibility Provides interoperability, integrating easily with any existing public safety analog, P25 Conventional and P25 Trunking Systems
- Mixed Mode Operation Auto Sense option enables radios to auto-detect incoming analog or P25 Digital signals
- AMBE+2TM Vocoder Advanced digital vocoder eliminates background noise, providing loud, crystal clear communication
- Encryption Options DES-OFB 128-bit or AES 256-bit encryption in P25 Digital mode or Scrambler voice encryption in analog mode
- Large Channel, Individual and Talkgroup Capacity Radios have up to 1500 channels and up to 250 Individual/ Talkgroup ID's
- Safety/Emergency Functions Stun/Kill/ Revive, Emergency Alarm and optional GPS or AVL
- Signaling Compatible with Legacy
  Public Safety Systems 2-Tone, 5-Tone,
  DTMF Encode/Decode and MDC1200
  Encode/Decode signaling systems
  capable of providing compatibility wiith
  essential legacy analog Public Safety
  functions





## **RPX6500 Specifications**

GENERAL			
Frequency	136 - 174 MHz ("V"); 335 - 400 MHz ("UR");		
Bands	400 - 480 MHz ("U"); 440 - 520 MHz ("U2")		
Dimensions	(H) 2.2 inches (56mm) x (W) 6.7 inches		
	(170mm) x (D) 6.5 inches (165mm)		
Weight	2 lbs 14 ounces (1.3kg)		
Power Supply	10.8 -16.3 V DC		
Channel Spacing	10, 12.5, 20 or 25 kHz		
Channel Stability	<1.5 ppm		
Inputs/ Outputs	Ignition-sense input; PTT; Carrier Detect; On/Off; Configurable output		
Antenna Connector	50 Ω BNC		
Modulation	Pre-emphasized FM, C4FM		
Conformance	EN 300 086, EN 300 113, EN 300 219, EN 300 279, AS4295, FCC, IC		
Environmental Protection	IP54		
Environmental	MIL-STD-810 F	Method	Procedure
Standards	Low Pressure (Altitude), Storage	500.4	ı
	Low Pressure (Altitude), Operational	500.4	II
	High Temp, Storage	501.4	I
	High Temp, Operating	501.4	II
	Low Temp, Storage	502.4	I
	Low Temp, Operating	502.4	II
	Thermal Shock	503.4	I
	Solar Radiation	505.4	I(A2)
	Relative Humidity	507.4	
	Dust	510.4	I
	Sand	510.4	II
	General Vibration: Truck/trailer/tracked - restrained cargo	514.5	I Cat 24
	General Vibration: Minimum Integrity	514.5	I Cat 24
	Shock - Transit Drop	516.5	IV
Operating Temperature	-22°F (-30°C) - 140°F (60°C)		

TRANSMITTER SPECIFICATION		
Power Output	1 - 25 Watts (3 programmable levels)	
Current Consumption	<7.5 A (UHF)	
Audio	+1 dB to -3 dB of pre-emphasized	
Frequency	300 to 3000 Hz on 25 kHz Channel	
Response	(300 to 2550 Hz on 12.5 kHz Channel)	
Duty Cycle	1 minute transmit, 4 minute receive	
Modulation	C4FM, FM	
Transmitter Power	1-25 W, 3 programmable levels	
Transmit Rise Time	<25 ms	
Hum and Noise	>40 dB (12.5 kHz); >45 dB (25 kHz)	
RECEIVER SPECIFICATION		
Sensitivity	<0.3 μV for 12 dB SINAD <0.3 μV for 5% BER	
Selectivity	>73 dB (25 kHz) >65 dB (12.5 kHz)	
Intermodulation	>70 dB	
Audio	+1 dB to -3 dB of de-emphasized	
Frequency	300 to 3000 Hz on 25 kHz Channel	
Response	(300 to 2550 Hz on 12.5 kHz Channel)	
Audio Output	4 W into 4 @ <5% distortion (link for 10 W into 8)	
Blocking	>95 dB at +/- 1 MHz	
Hum and Noise	>40 dB (12.5 kHz); >45 dB (25 kHz)	
ANALOG CONVENTIONAL		

• CTCSS • DCS • Sequential Tone (selcall) • FFSK • DTMF • 2-Tone Paging • MDC1200 • Status • 240 scan/vote groups • 250 entry phone book • Analog mode including scrambler

#### **ANALOG TRUNKED OPERATION**

- MPT1327 MPT1343 250 Entry Phonebook Diversion
- Normal, Priority, Emergency, Group, Broadcast Busy, Queued
- Status calls Abbreviated Dialling

#### **P25 CONVENTIONAL AND TRUNKING**

- 40 zones 1,500 channel pool
- Trunked Scanning Voting Individual Calls Emergency call
- DES OFB and AES 256 Bit Encryption CTCSS, DCS, DTMF
- AMBE+2 Vocoder





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Created in U.S.A.

For Sales, Warranty and Customer Support please contact: