

## RPX6500



DIGITAL VOICE SYSTEMS, INC.  
The Speech Compression Specialists  
**AMBE+2 Vocoder**

## P25 Public Safety Mobiles





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. RPX6500 uses an advanced MultiCom™ software system that enables each unit to conform to today's standards as well as future requirements. This heavy-duty mobile radio is highly customizable and will meet or exceed the needs of demanding public safety users.

## P25 CAP



### CONTROLLER MICROPHONES

	 CTR6500	 KDH6500	 MM6500CMD	 MM6500CM
<b>Control</b>	Control Head and Mic	Keypad Display Handset	Controller Mic	Controller Mic
<b>Channels</b>	1000/1500 P25	1000/1500 P25	100	10
<b>Display</b>	102X64 Pixels	102X64 Pixels	6 Characters	1 Digit
<b>MPT1327 Trunked</b>	Yes	Yes	Yes	Yes
<b>P25 Compatible</b>	Yes	Yes	No	No
<b>Function Buttons</b>	12 button keypad +6 programmable buttons and 2 dedicated call buttons	12 button keypad +4 programmable buttons	4	1
<b>CTCSS/DCS PTT, Re PTT Timers</b>	Yes	Yes	Yes	Yes
<b>User/Fixed Scan Groups</b>	4/240x16 channels	4/240x16 channels	4/240x16 channels	0/10x16 channels
<b>Selcall</b>	8 Dec/250 Enc	8 Dec/250 Enc	Yes	Yes
<b>DTMF</b>	Yes	Yes	2 fixed strings	No
<b>Ignition-Sense switch on/off</b>	Yes	Yes	Yes	Yes
<b>VOX Handsfree</b>	Option	No	No	No
<b>Internal GPS</b>	Option	Option	Option	Option
<b>IO Expansion Interface</b>	Option	Option	Option	Option
<b>Voting</b>	Yes	Yes	Yes	Yes

### Features:

- ❑ RPX6500's will work with your existing radios, no matter if they are from Motorola, Vertex, Kenwood, Icom or other manufacturers
- ❑ RCA's MultiCom™ software integrates radios with conventional analog, MPT1327 analog trunking, P25 conventional and P25 trunking systems
- ❑ Proven interoperability through P25 CAP
- ❑ Available control console, keypad handset or control microphones
- ❑ 4 Year Platinum Warranty - best in the business
- ❑ DES/AES 256 bit digital encryption standard. Custom encryption available
- ❑ AMBE+2 Vocoder reduces background noise
- ❑ Rugged design meets Military Specs (MIL-STD-810C/D/E/F)

### RPX6500 Specifications

GENERAL			
<b>Frequency Bands</b>	136 - 174 MHz ("V"); 335 - 400 MHz ("UR"); 400 - 480 MHz ("U"); 440 - 520 MHz ("U2")		
<b>Dimensions</b>	(H) 2.2 inches (56mm) x (W) 6.7 inches (170mm) x (D) 6.5 inches (165mm)		
<b>Weight</b>	2 lbs 14 ounces (1.3kg)		
<b>Power Supply</b>	10.8 -16.3 V DC		
<b>Channel Spacing</b>	10, 12.5, 20 or 25 kHz		
<b>Channel Stability</b>	<1.5 ppm		
<b>Inputs/Outputs</b>	Ignition-sense input; PTT; Carrier Detect; On/Off; Configurable output		
<b>Antenna Connector</b>	50 Ω BNC		
<b>Modulation</b>	Pre-emphasized FM, C4FM		
<b>Conformance</b>	EN 300 086, EN 300 113, EN 300 219, EN 300 279, AS4295, FCC, IC P25CAP Compliant		
<b>Environmental Protection</b>	IP54		
Environmental Standards	MIL-STD-810 F	Method	Procedure
	Low Pressure (Altitude), Storage	500.4	I
	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	
<b>Operating Temperature</b>	-22°F (-30°C) - 140°F (60°C)		

TRANSMITTER SPECIFICATION	
<b>Power Output</b>	1 - 25 Watts (3 programmable levels)
<b>Current Consumption</b>	<7.5 A (UHF)
<b>Audio Frequency Response</b>	+1 dB to -3 dB of pre-emphasized 300 to 3000 Hz on 25 kHz Channel (300 to 2550 Hz on 12.5 kHz Channel)
<b>Duty Cycle</b>	1 minute transmit, 4 minute receive
<b>Modulation</b>	C4FM, FM
<b>Transmitter Power</b>	1-25 W, 3 programmable levels
<b>Transmit Rise Time</b>	<25 ms
<b>Hum and Noise</b>	>40 dB (12.5 kHz); >45 dB (25 kHz)
RECEIVER SPECIFICATION	
<b>Sensitivity</b>	<0.3 μV for 12 dB SINAD <0.3 μV for 5% BER
<b>Selectivity</b>	>73 dB (25 kHz) >65 dB (12.5 kHz)
<b>Intermodulation</b>	>70 dB
<b>Audio Frequency Response</b>	+1 dB to -3 dB of de-emphasized 300 to 3000 Hz on 25 kHz Channel (300 to 2550 Hz on 12.5 kHz Channel)
<b>Audio Output</b>	4 W into 4 @ <5% distortion (link for 10 W into 8 )
<b>Blocking</b>	>95 dB at +/- 1 MHz
<b>Hum and Noise</b>	>40 dB (12.5 kHz); >45 dB (25 kHz)
ANALOG CONVENTIONAL	
<ul style="list-style-type: none"> <li>• CTCSS • DCS • Sequential Tone (selcall) • FFSK • DTMF</li> <li>• Status • 240 scan/vote groups • 250 entry phone book</li> <li>• Analog mode including scrambler</li> </ul>	
ANALOG TRUNKED OPERATION	
<ul style="list-style-type: none"> <li>• MPT1327 • MPT1343 • 250 Entry Phonebook • Diversion</li> <li>• Normal, Priority, Emergency, Group, Broadcast • Busy, Queued</li> <li>• Status calls • Abbreviated Dialling</li> </ul>	
P25 CONVENTIONAL AND TRUNKING	
<ul style="list-style-type: none"> <li>• P25 CAP Compliant • 40 zones • 1,500 channel pool</li> <li>• Trunked • Scanning • Voting • Individual Calls • Emergency call</li> <li>• DES OFB and AES 256 Bit Encryption • CTCSS, DCS, DTMF</li> <li>• AMBE+2 Vocoder</li> </ul>	

**P25 CAP**

