



GUARDIAN G25RPV100 5W Portable Radio



GUARDIAN™
BY DATRON

THE VITAL CONNECTION

Project 25 Compliant

Government • Military
Public Safety • Business

The Guardian G25RPV100 VHF P25 conventional portable by Datron is a feature rich, state-of-the-art radio designed for government, public safety and business applications. Fully digital, Guardian meets APCO Project 25 FDMA common air interface standard for compatibility with other Project 25 radios. Guardian also operates as an analog radio, offering full backward compatibility with conventional wideband FM systems. Use it with today's analog wideband radio systems and be ready for tomorrow's digital narrowband world — all in one great package!

- **Multi-Mode** analog and digital, wideband and narrowband, up to 4 banks, 16 zones and 256 channels total
- **Full VHF Bandsread** 136-174 MHz
- **Shadow Channels** allow communication using any mode - wide or narrowband, analog or digital, crypto or plain
- **Secure Transmissions** SBCF DES wideband analog encryption standard feature
- **Cloning** radio-to-radio programming
- **Multiple Battery Options** include standard high capacity rechargeables and disposable AA cell clamshell packs

Easy Grip Knobs

Large rotary knobs make volume adjustment and channel selection easy

Tx/Rx Indicator

Noise Canceling Mic

Software Defined Keys

Large Diameter Speaker

High-output loudspeaker to overcome ambient noise

Large PTT Button

High Resolution Display

High contrast display can be read easily in tactical situations and blacked-out during covert operations

Programming Keys

Simple to customize - three keys and toggle switch

DTMF Keypad

Keys can be accurately pressed while wearing gloves.



DATRON

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GUARDIAN G25RPV100

5W Portable Radio

MODEL DESIGNATION

GUARDIAN VHF PORTABLE RADIO

Datron Model Number	G25RPV100
Frequency Range	136.000 –174.000 MHz
RF Power Output	0.1 to 5 watts in steps
Banks,Zones,Channels	4 banks,16 zones, 256 channels, 7 shadow
Battery Types and Capacities	Rear mount:NiCad (1800), NiMH (4000), AA clamshell (mAh)
Approximate Battery Life (5/5/90)	> 10 hours with high capacity battery
Voice Digital Mode	
Voice Coding	IMBE™ 4.4 kb
Frame Re-sync Interval	180 msec
Error Correction Method	RS, golay, hamming
Input Voltage	7.5Vdc
Dimensions w/o antenna (HxWxD)	7.13 "x 2.43 "x 2.87 " Circumference 6.97 "
Weight (with standard battery)	14.6 oz
Case	Black polycarbonate
Temperature Range	-30°C to +60°C
Channel Spacing	12.5 and 25 kHz, selectable in 2.5 or 3.125 kHz steps
FCC Type Acceptance Number	B3TG25RPV100, parts 74, 80, 90, 210
Industry Canada	4109196829A

RECEIVER (MEASUREMENTS PER TIA/EIA 603 STANDARDS)

Sensitivity		
Digital Mode:	5%BER	-116 dBm or better
Analog Mode:	12 dB SINAD	-116 dBm or better
Spurious		-75 dB
Intermodulation		-70 dB
Audio Output Power		500 mW into 8 ohms
Audio Distortion (at 1000 Hz)		3% @ rated power
Frequency Stability (-30 °C to 60°C)		± 2.5 ppm
Maximum Frequency Separation		Full-band split

TRANSMITTER (MEASUREMENTS PER TIA/EIA 603 STANDARDS)

RF Power Output	0.1 /0.5 /1 /2 /5 watts channel selectable	
FM Hum & Noise (wide/narrowband)	-40/34 dB	
FCC Modulation Designators	11K0F3E, 16K0F3E, 12K6F1E	
Audio Distortion (at 1000 Hz)	2%	
Audio Response (1000 Hz Ref.)	± 3 dB 300 –3000 (EIA/TIA 603)	
Frequency Stability (-30°C to 60°C)	± 2.5ppm	
Maximum Frequency Separation	Full-band split	

GUARDIAN DES ENCRYPTION

Encryption Keys	16
Code Key Generator	External
SBCF Analog DES Encryption	Standard feature
OFB Digital DES Encryption	Optional
OTAR	Optional

ENVIRONMENTAL SPECIFICATIONS MIL-STD-810F

TEST	METHOD	PROCEDURE
Low Pressure (Altitude)	500.4	II
High Temperature	501.4	I, II
Low Temperature	502.4	I
Temperature Shock	503.4	I
Solar Radiation (Sunshine)	505.4	I
Rain	506.4	I
Humidity	507.4	I
Salt Fog	509.4	I
Sand and Dust	510.4	I, II
Vibration	514.5	I
Shock	516.5	I

GUARDIAN ACCESSORIES

• Rechargeable Batteries	• Single and Multi-Unit Rapid Chargers
• AA Clamshell Battery Case	• Speaker-Microphone
• Antennas	• Leather & Nylon Cases, Belt Clip
• Programming Kits	• Cloning cable

All specifications are typical and subject to normal manufacturing tolerances and are subject to change without notice or obligation.

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