



# GUARDIAN G25RPV100

## Conventional Portable Radio



## Project 25 Compliant

Government ▪ Military  
Public Safety ▪ Business

# GUARDIAN™

THE VITAL CONNECTION

### 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.



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 (314 channel optional)
- **Shadow Channels** allow communication using any mode - wide or narrowband, analog or digital, crypto or plain
- **Full VHF Bandsread** 136-174 MHz
- **Cloning** radio-to-radio programming
- **Secure Transmissions** Analog, OFB DES, and AES Encryption options
- **OTAR** Over the Air Re-Key
- **GPS/Data** Send GPS coordinates using Datron's optional GPS Microphone
- **Multiple Battery Option**

**DATRON**  
Performance You Require. Value You Expect.®

Contact us today: 760.597.1500  
3030 Enterprise Ct, Vista, CA 92081  
sales@dtwc.com ▪ www.dtwc.com

## GUARDIAN G25RPV100 Conventional Portable Radio



### MODEL DESIGNATION

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		NiMH, Li-Ion, AA clamshell
Approximate Battery Life (5/5/90)		>10 hours with high capacity battery
Voice Digital Mode	Voice Coding	IMBETM 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 603C STANDARDS)

Sensitivity		
Digital Mode:	5%BER	-116 dBm or better
Analog Mode:	12 dB SINAD	-116 dBm or better
Spurious		-73.6 dB
Intermodulation		-79.0 dB
Audio Output Power		500 mW into 8 ohms
Audio Distortion (at 1000 Hz)		3% @ rated power
Maximum Frequency Separation		Full-band split
Spurious Response Attenuation		75dB
Adjacent Channel Selectivity		Analog 58dB, Digital 66.4dB
RX Conducted Spurious Emissions		-92.7dBm

### TRANSMITTER (MEASUREMENTS PER TIA/EIA 603C 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)		± 0.6 ppm
Maximum Frequency Separation		Full-band split
TX Unwanted Emissions (Conducted)		-91dB

### GUARDIAN DES ENCRYPTION

Encryption Keys		16
Code Key Generator		External
SBCF Analog DES Encryption		Standard feature
QFB Digital DES Encryption		Optional
AES Digital 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	

### OPTIONAL FEATURES:

#### Fire Features

Adds an additional bank of 3 zones (48 additional channels), Custom Clone, Tone Pick List, P-25 Talkgroup Picklist and P-25 ID Pick List

#### GPS

Send/Receive GPS coordinates to track personnel and assets. Standard NEMA string at 4800 baud compatible with standard mapping software and custom applications

#### OTAR

Over the Air Re-Key. Change encryption keys over the air without the need to connect to a computer or key fill device.

**AES** P-25 Advanced Encryption Standard

**DES** OFB- P-25 Digital Encryption Standard

### ACCESSORIES:

#### Batteries:

G25APB004	4000 mA NiMH Battery Pack
G25ABB006	3600 mA Li Ion Battery Pack
G25APB010	AA Battery Clamshell Black
G25APB011	AA Battery Clamshell Orange
G25APB015	Battery Eliminator (Cigarette Lighter Adapter)

#### Chargers:

G25APC010	Single Unit Tri Chemistry Rapid Rate
G15APC020	6 Unit Tri Chemistry Rapid Rate

#### Audio:

G25APS001	Speaker Microphone
G25APS003	3 Piece Surveillance Kit

#### Antennas:

G25APA001	136-150 MHz
G25APA002	150-152 MHz
G25APA003	162-174 MHz
G25APA004	136-174 MHz

#### Carry Cases:

G25APD001	NYLON W/BELT LOOP
G25APD002	NYLON W/BELT CLIP
G25APD003	NYLON W/BELT SWIVEL
G25APD004	LEATHER W/BELT LOOP
G25APD005	LEATHER W/BELT CLIP
G25APD006	LEATHER W/SWIVEL
G25APD007	LEATHER CLAMSHELL W/BLOOP
G25APD008	LEATHER CLAMSHELL W/BCLIP
G25APD009	LEATHER CLAMSHELL W/SWIVL
G25APD010	CLIP BELT
G25APD011	CLIP BELT CLAMSHELL

Specifications subject to change without notice or obligation.