



GUARDIAN G25RMV110 110W Trunk Mount Mobile Radio



GUARDIANTM
BY DATRON

THE VITAL CONNECTION

Project 25 Compliant

Government • Military • Public Safety • Business



**110 watt RF
Remote Unit**

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

Tx/Rx Indicator

Mounting Bracket with Security Lock

Heavy Duty Aluminum Tray

Easy Grip Knobs

Large rotary knobs make volume adjustment and channel selection easy

Programming Keys
Simple to customize three keys

Software Defined Keys

Large Diameter Speaker

High-output loudspeaker to overcome ambient noise

Ext/Both/Int Speaker Switch & Indicator

The Guardian G25RMV110 VHF P25 trunk mount radio system is a high power, feature rich, state-of-the-art mobile radio designed for government, public safety, and business applications. It features a powerful 110 Watt power amplifier and a separate console containing the R/T unit for remote control of the entire radio system. The Guardian is fully digital and meets APCO Project 25 FDMA common air standards for compatibility with other Project 25 radios. Guardian also operates as an analog radio, offering full backward compatibility with conventional wideband FM systems. The one radio is useable with today's analog wideband radios systems and still compatible with tomorrow's digital narrowband world.

- **Trunk Mount P.A.** with separate Control Head containing R/T Unit
- **High Power Remote**, 110 Watt, RF Power Amplifier Unit
- **Multi-mode** analog and digital, wideband and narrowband, up to 4 banks, 16 zones and 256 total channels
- **Full VHF bandwidth**, 136-174 MHz inclusive
- **Shadow Channels** allow communication using any mode – wide or narrowband, analog or digital, crypto or plain
- **Secure Transmissions** – SBCF DES wideband analog encryption is standard
- **Cloning Capability** for quick radio-to-radio programming
- **Easy installation**



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GUARDIAN G25RMV110

110W Trunk Mount • Mobile Radio

MODEL DESIGNATION	GUARDIAN TRUNK MOUNT MOBILE RADIO
Datron Model Number	G25RMV110
Frequency Range	136.000 – 174.000 MHz
Banks, zones, Channel, Shadow	4 banks, 16 zones, 256 channels, 7 shadow
Voice Digital	
Mode Voice coding	IMBE™ 4.4 kb
Frame Re-sync interval	180 msec
Error Correction method	RS, Golay, Hamming
Input voltage	13.8Vdc, negative chassis ground, only
Current drain @ 13.8Vdc	
Standby	0.5 A
Receive @ rated audio	3.0 A
Transmit @ rated power (110W)	30 A
Mounting	Control head – under dashboard using bracket; Remote unit – trunk of vehicle
Dimensions (HxWxD)	
Control head	2.75" x 7.18" x 3.00"
Remote Unit	4" x 8" x 11"
Weight	
Control head	2.5 lbs
Remote Unit	12 lbs
Case	
Control head	Metal and plastic
Remote Unit	Metal
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	B3TG25RMV110, parts 74, 80, 90, 210
Industry Canada	4340A - G25RMV110

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	-75 dB
Audio Output Power	5 Watts, internal; 10 Watts, external speaker
Audio distortion (at 1000Hz)	5 % @ rated power
Frequency stability (-30 to + 60 oC)	+/- 2.5 ppm
Maximum frequency separation	Full band split

TRANSMITTER (MEASUREMENTS PER TIA/EIA 603 STANDARDS)

RF Power Output	3 power levels, selectable - 25/50/110 watts: low power surveillance mode
FM hum and noise (wide/narrowband)	-40/-34 dB
FCC Modulation designators	11K0F3E, 16K0F3E, 12K6F3E
Frequency stability (-30 to + 60°C)	+/- 2.5 ppm
Audio distortion (at 1000Hz)	2%
Maximum frequency separation	Full bandwidth

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
Humidity	507.4	I
Salt Fog	509.4	I
Sand and dust	510.4	I, II
Vibration	514.4	I
Shock	516.4	I

GUARDIAN ACCESSORIES

Mounting bracket	10 Watt external speaker
25 ft. power cable	DTMF Microphone
Palm Microphone	

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

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