

VECTIQ

A smarter way to talk.

P300 Series DMR Two-way Radio

IP65

- * Dynamic Trunking
- * Roaming
- * TDMA Direct Mode
- * Mixed Channel
- * Voice Record
- * Man-Down (Optional)



P300/350

P320/370

P310/360

The P300 radio series incorporates the latest digital technologies and the most-requested features in one compact, easy-to-use, and cost effective package.

P300 Series

DMR Two-way Radio

Key Features

Dynamic Trunking

P300 Series radios can be set to work under repeaters that provide 2 logical channels. When the P300 is set in Dynamic Trunking mode, it listens to all the logical channels preset by an advance scan algorithm, and, when the PTT is pressed, it finds a free logical channel for transmission.

Roaming

P300 Series radios can be used with repeaters at multiple sites to cover a large footprint. The radios find the strongest signal available.

TDMA Direct Mode

P300 Series radios support TDMA Free mode and Alignment mode.

Free Mode: P300 detects the synchronization signaling and TX freely, ensuring 2-slot communication any time.

Alignment Mode: P300 radios working in this mode need a strict synchronization signaling before realizing a logical 2-slot direct mode.

Mixed Channel

P300 Series radios working in Mixed Channel mode recognize an incoming analog or digital channel automatically and reply in the same way or in a default analog/digital way to set up a new call.

Voice Record

P300 Series radios can record the TX/RX voice for about 2 hours.

Operational Bands

P300 Series radios can be programmed to a wide frequency range. VHF: 136-174MHz or UHF: 400-480MHz.

Specifications

General (w/ Standard Li-Ion Battery)

Power Supply	7.5V Dc±20%
Frequencies-Full Band split	136-174MHz, 400-480MHz
Number of Channels	2000 Channels
Maximum Zones	250 Zones (LCD) 2 Zones (Non-LCD)
Maximum Channels Per Zone	999+1
Channel Spacing	12.5/25kHz
Operating Temperature	-30°C~+60°C
Dimensions HxWxD (mm)	96.5x54x33
Weight	245g
Average Battery Life 5/5/90 Cycle	14h Digital Mode 11h Analog Mode

Transmitter

Frequently Stability (-30°C -60°C, 25°C Ref)	1.0 ppm
Power Output	1W (L), 4 (H)/5W (VHF)(H)
Modulation Limiting	±2.5kHz@12.5kHz/±5kHz@25kHz
FM Hum & Noise	-40dB@12.5kHz/-45dB@25kHz
Conducted/Radiated Emission	-36dBm<1GHz, -30dBm>1GHz
Adjacent Channel Power	-60dB@12.5kHz/-70dB@25kHz
Adjacent Transient Channel Power	-50dB
FM Modulation Mode	12.5kHz: 11K0F3E/25kHz: 16K0F3E
4FSK Digital Mode	12.5kHz (data only): 7K60FXD 12.5kHz (data + voice): 7K60FXE
4FSK Modulation Accuracy	5%@25°C, 10%extreme temperature
Audio Response (300-3000Hz)	+1~-3dB
Digital Protocol	ETSI TS 102 361-1, -2, -3
Audio Distortion	<3%
Vocoder	AMBE+2™
Ext. Microphone Connector	Compatible with MOTO 2-pin

Receiver

Analog Sensitivity	0.35 μ V/-116dBm (20dB SINAD) 0.22 μ V/-120dBm (20dB SINAD)
Digital Sensitivity	0.22 μ V/-120dBm (BER 5%) 0.25 μ V/-118dBm (BER 1%)
Intermodulation	TIA603 70dB' ETSI 65dB
Adjacent Channel Selectivity	TIA603C 70dB; ETSI: 70dB@25kHz TIA603C 60dB; ETSI: 60dB@12.5kHz
Spurious Rejection	TIA603C: 75dB; ETSI: 70dB
Blocking	84dB
Rated Audio/MAX Audio	750mW/1000mW
Audio Distortion@Rated Audio	3%
Audio Response (300-3000Hz)	+1~-3dB
Conducted Spurious Emission	-57dBm<1GHz, -47dBm>1GHz ETS300086

Your Local Dealer:

www.vectiq.com

888-686-6731