



VL-007

SPECIFICATIONS

General

Frequency Range	136~174MHz , 400~470MHz 450~520MHz , 340~400MHz
Channel Capacity	128
Channel Spacing	12.5KHz/20KHz/25KHz
Frequency Stability	< ± 2.5ppm
Operating temperature	-30℃ ~ + 60℃
Operating voltage	13.6V DC (nominal)
Dimension(H×W×D)	170mm×170mm×52mm
Weight(with antenna&battery)	1690g

Transmitter

RF Power	5W/25W/45W(UHF) 5W/25W/50W(VHF)
Frequency modulation	16K φ F3E/11K φ F3E
Antenna Impedance	50 Ω
Modulation Limiting	± 2.5KHz@12.5KHz, ± 4KHz@25KHz ± 5KHz@25KHz
Modulation Distortion	< 5%
Radiated Spurious Emission	-36dBm < 1GHz / -30dBm > 1GHz
FM Noise	-40dB @ 25KHz / -35dB @ 12.5KHz

Receiver

Sensitivity	<0.25μV@12dB SINAD
First IF of Receiver	49.95
Second IF of Receiver	450
Adjacent channel Selectivity	70dB @12.5KHz 75dB @20/25KHz
Intermodulation Rejection	>65 dB
Image Rejection	>70 dB
Rated Audio Power	4W
Rated Audio Distortion	<5%
FM Hum&Noise	>45/40dB

NOTICE: The specifications may be subject to change without notice due to advancement in technology, for more detailed information, please contact VERTEL.

For more information , please contact:



VERTEL is a registered Trade Mark

Vertel Communication Systems Pvt. Ltd.
Email : info@vertel.in



Professional choice

VL-007

FM VHF/UHF Mobile Radio



- Built-in 2-Tone / MDC1200 / 5-Tone / DTMF
- Voice Scrambler / Audio Comander
- Call Transfer / Call Back
- Repeater / Talk Around
- Remote Kill/Stun/Activate/Revive
- Power-on Self-Test
- Lone Worker & Security Check
- Ignition Switch
- Vehicle Mounted Operation

VL-007

MOBILE SERIES

FM VHF/UHF Mobile Radio

VERTEL™

Your versatile choice



128 Memory Channels

With 128 channels, which can be separated into 16 memory banks, user can quickly access pre-programmed contingency frequency plans. Ideal for region-wide, cross-user communications.

Full Dot-matrix Display

Large LCD with full dot-matrix offers more convenience in operation on the utilities menu. Message and status of the radio can be read easily, such as missed call indicator, signal strength indicator and so on. The backlit of LCD can be switched on or off for night time operations or less power consumption.

Embedded Radio Information

By programming software, user can get the embedded information in the radio, such as serial number, MCU software and hardware version, last programmed method and time. The radio can save public and private embedded message or message for the user.

High Powered Radio

To provide longer communication distance, VL-007 mobile radio provides upto 50W of RF power. The power can be lowered to 25W as per user's requirement.

PLL Steps

2.5 kHz, 5 kHz and 6.25 kHz, 12.5 kHz & 25kHz can be used for channel frequency assignment for frequency resources.

6 Programmable keys

Up to 6 programmable keys can be set as different functions by hold or press.

16 Personal Templates for Channel Settings

To provide personalized communication and adapt to different applications, up to 16 personal templates can be selected for channel settings. In each template, there are many different features that can be switched on or off. Such as GPS, Compander, Scrambler, VOX, TX conditions, Call Codes, and so on.

Full Built-in Tone-signaling

All tone-signaling encoder/decoder is built-in such as CTCSS, DCS, DTMF, 2-Tone/MDC1200 or 5-Tone. A wide variety of selective calling systems are available to call specific station or control a repeater.

Versatile Scanning Features

Up to 16 scan templates for each channel allows different scan list for convenient administration in large work group. VL-007 series offers both normal and priority scan modes. Most parameters in scan can be customized.

Audio Compander

Built-in audio compander compresses the audio before the transmission and expands it at the receiver side. As a result, the signal to noise ratio improves to provide clear audio.

Voice Scrambler

Maintaining private and secure communications is increasingly important, with potentially sensitive information flowing back and forth, the VL-007 scrambler feature provides enhanced security for your important public safety and private security communications.

Personalized Alert Tone

Different alert sound can be customized. Users only need to input different sound frequencies in the software.

Lone Worker & Security Check

The radio enters emergency mode if the user does not respond to a warning call (Lone Worker) or a inquire code (Security Check), adding security and safety for individuals who work remotely and lonely.

Remote Kill/Stun/Activate/Revive

If the radio is killed or stunned, all attempts on operation by user, except power on/off, will be ignored. The radio will be activated or revived only when it receives the correct code.

Multiple Emergency Calls

The radio can be programmed to various kinds of sound emergency call, when the emergency siren is enabled, the radio will transmit emergency ANI / sound continuously.

Flexible Call Operations

To achieve more efficiency in dispatch situation, the missed call can be transferred to a preprogrammed portable radio or directly call back from temporarily saved directory signaling. Several kinds of call mode are available, individual call, group call and all call, fully meet various demands.

Call Authorization

The radio can be programmed as TX forbidden, TX on authorized or TX allowed to be used in different position in group.

Optional Selection Tone (OST)

The radio can be programmed to temporarily select CTCSS/DCS by one preprogrammable key.

Password Protection

The reading and programming on radio data can be protected by password to ensure security.

Meets MIL-STD 810 C/D/E/F

VL-007 is designed to meet MIL-STD 810 C/D/E/F specification covering physical and temperature shock, vibration, low pressure, solar radiation, humidity, drop and others.

Key lock

When this function is enabled, any operations on the key will be ignored. This helps to prevent the undesired operations caused by carelessness.

Lowest Volume Audibility

To prevent missing of any voice message caused by the mute operation on independent volume knob, VL-007 offers the option to limit the lowest volume to be an audible level.

Power-on Self-inspection

Power-on of radio will be stopped automatically if there is any fault in radio's data or hardware.

High/Middle/Low Power Switch

In each channel, RF power can be selected for different applications in programming software or manually by utilities menu.

Ignition Switch

The radio can be set to be switched on, with the ignition of car or manually for other applications.

Others function

PTT ID and Contact list
Voice Operated Transmission (VOX)
Repeater/Talk Around
Busy Channel Lockout (BCLO)
Time-out Timer (TOT)
Hook scan function
Dual home channels
Wired Clone
External out for Horn Drive
4W Front-mounted Speaker
Global Positioning System (GPS)
Upgradeable Software
VHF 136-174 MHz full band

