

# DPR 7000

## DMR PORTABLE RADIO



The DPR7000 Hand Held radio is the front runner of Vertel Digital DMR product offering. Designed with precision to endure harsh environment, the DPR7000 is IP68 compliant and offers advanced features, communications security and excellent audio quality.



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## DMR PORTABLE RADIO



TWO-WIRE ACOUSTIC TUBE  
EARPIECE WITH IN-LINE PTT

REMOTE SPEAKER  
MICROPHONE

ONE-WIRE EARBUD  
WITH IN-LINE PTT

### Smart Digital Portable Radio

Vertel is a leading provider of world class Radio communication equipment. Making its foray in design and manufacture using European technology standards, Vertel is among the first to manufacture world class digital radio products in India. Our unique DMR product portfolio provides robust and secure solutions for use by mission critical users in harsh environments. Vertel digital radio products are supported by innovative data applications and peripherals using open standard interface.

### Key benefits of adopting Vertel DMR Portable Radios include:

- Vertel quality and reliability. DPR7000 is type tested and certified by ILAC/NABL and Government Laboratories to meet the electrical parameters and MIL-STD-883C environmental standards
- Made in India assurance provides the reliability, network security and prompt local support.
- Wide range of audio accessories to suit every application of the user.

### The Unique features that the DPR7000 offers include:

- Full keypad and colour screen with easy to use man machine interface to enable access to radio features
- Waterproof and dust-proof (IP68)
- Longer Battery Life to ensure uninterrupted communication
- Ergonomic design that easily fits into the palm of the user
- Operates seamlessly with a wide range of applications such as Radio dispatcher, Repeater, GPS tracking System
- Inbuilt MIL grade encryption (AES 256 bits)

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## DMR Portable Radio Detailed Specifications

Vertel DPR7000 is a high specification advanced featured DMR Digital Hand Held Portable radio. It provides mission critical users the true functionality, portability, easy of use and sturdiness that they require while on the move. Available in both VHF and UHF frequency bands, the Vertel DPR7000 is an ideal choice for users requiring reliable communication in tough environment and terrain in sectors such as :

- Police and Public Safety
- Defense Forces
- Central Paramilitary Forces
- Forestry
- Railways
- Fire Fighting Forces
- Airports
- Seaports
- Utilities

### The key digital features that the DPR 7000 offers include:

- All call –communicate to all groups instantly & simultaneously
- Group call – instant communication within the group
- Two Voice channels on single frequency in simplex as well as semi duplex mode
- Private call – one to one calling
- Busy channel Lockout – prevents talking when the channel is busy
- Scanning and priority scanning –comprehensive communications control
- Transmit interrupt – overriding priority
- Call alert – an audible tone to alert the user of a private incoming call
- Contact list –for quick selection for private call
- Caller ID –confirm the identity of the caller
- Emergency call – user configurable
- Remote monitor – remotely hear what users are saying
- End to End encryption up to 256 bit AES –provides communication secrecy at all times
- Radio enable/disable/kill – Ensures network integrity and security.
- GPS – Provides real time information of the user location
- Lone Worker and Man Down –Provides safety to the users
- Radio check – informs the control station whether users are in range
- Status messages and Text messaging –Up to 300 Characters
- DTMF front panel keypad
- Time out Timer
- Vox –For Hands free operation
- Vibrate function –discreetly notifies user of incoming call
- Battery strength bar indicator & Keypad locking facility

### Familiar analogue features are also supported:

- CTCSS and DCS
- 5-tone/Selcallsignalling
- MDC1200 signalling

ONE-WIRE EAR HANGER



**GENERAL****Frequency Band:** 136-174 (Full Band) / 400-470 / 450-520 MHz**No of Channels:** 1024**No of Zones:** 248**Protocol & Technology:** TDMA based DMR Standards**Display:** 1.77" Color Display**Channel spacing:** Digital: 12.5 KHz, Analog: 12.5/20/25 KHz**Dimensions:** 150 x 63 x 40 mm**Weight:** < 375g (with standard battery)**Battery:** 7.4V, 2000mAh Li-Ion (Standard)**Higher capacity battery option:** 2200/ 2300 mAh**Protection:** Reverse Polarity and Protection from High VSWR**Frequency stability:**  $\pm 0.5$ ppm**Intermodulation Rejection :** >70dB**Spurious rejection:** >70dB**Conducted/radiated emissions:** -57dBm( $\leq 1$ GHz) -47dBm(>1GHz)**Rated Audio Output:** >1W**Rated Audio Distortion:** <3%**Audio frequency response:** +1, -3dB (300-3000Hz)**GPS:** Accuracy specs are for long-term tracking (95th percentile values, >5 satellites visible at nominal -130 dBm signal strength)

TTFF (Time to First Fix) - Cold Start &lt;60 seconds

TTFF (Time to First Fix) - Hot Start &lt;10 seconds

**Horizontal Accuracy:** <5 meters**TRANSMITTER****Power:** 1W/5W (VHF) & 1W/4W (UHF) (Selectable/Programmable)**Modulation limiting:**  $\pm 2.5$ KHz@12.5KHz,  $\pm 4$ KHz@20KHz,  $\pm 5$ KHz@25KHz**Conducted/radiated emissions:** -36dBm( $\leq 1$ GHz), -30dBm(>1GHz)**Hum & noise:** >-40dB**Adjacent channel power:** >-65dB**Audio frequency response:** +1, -3dB (300-3000Hz)**Digital Vocoder:** AMBE+2**Digital 4FSK Protocol:** ETSI 102 361-1, -2, -3, & -4**Type of Emission:** 11K0F3E, 7K60FXE, 7K60FXW, 7K60FXD, 7K60F1W**RECEIVER****Sensitivity:** Analog: <0.25 $\mu$ V (12dB SINAD)Digital: <0.25 $\mu$ V@5% BER**Adjacent Channel selectivity:** >70dB**Image Rejection:** >70dB**ENVIRONMENTAL****Operating temperature:** -30°C to 60°C**Storage temperature:** -40°C to 70°C**Dust & Water protection:** IP68**Environmental testing:** MIL-STD 810 C/D/E/F/G (Low pressure, High Temperature (Operation/Storage), Temperature Shock, Solar Radiation, Rain, Salt Fog, Vibration, Dust & Shock)**SUPPLIED ACCESSORIES:** Li ion Battery Pack and Rapid Rate charger**OPTIONAL ACCESSORIES:** Multi unit Chargers, Earphones, Carrying Case, Remote Speaker Mic, Radio Dispatcher Console & Software**\* Note:** All stated Specifications are subject to change in our endeavor of continuous improvement