



# VRG VoIP Radio Gateway

Seamless Integration of Legacy Radio Systems with IP Networks



## Product Overview

The VoIP Radio Gateway (VRG) is a military-grade communication integration solution that revolutionizes tactical radio operations by seamlessly bridging legacy radio systems with modern IP networks. Locally designed and manufactured, this four-port audio gateway device enables multi-party calls among HF, VHF, UHF networks and dedicated mobile communication terminals, offering an IP-based platform that extends the capabilities of non-IP legacy radios.

## Key Capabilities

- Enables multi-network integration across HF, VHF, UHF, and P25 radio systems
- Supports secure cross-platform communication
- Facilitates real-time command and control operations
- Ensures uninterrupted communication in tactical environments

## Mission-Critical Features

- Multiple CODEC support for varied operational requirements
- Dual redundant Ethernet ports (10/100/1000 Mbps)
- Four E&M audio ports for multi-channel operations
- Secure transmission protocols (SRTP support)
- Flexible mounting options (rack/desktop)

## Strategic Benefits

- Preserves existing radio infrastructure investment
- Enhances operational flexibility through IP integration
- Reduces deployment complexity
- Enables remote radio operation capabilities

## Deployment Versatility

- Vehicle/Tank integration
- Naval vessel installation
- Land-based command centers
- Mobile tactical units

**One Gateway  
Multiple Networks  
Complete Interoperability**



B5-2A Ostina Business Avenue, 43650 Bandar Baru Bangi, Selangor Darul Ehsan

[www.tegarmada.com](http://www.tegarmada.com)

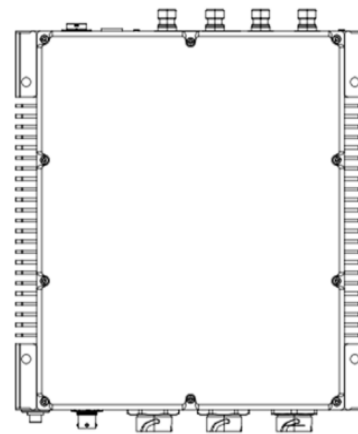
# VRG VoIP Radio Gateway

## TECHNICAL SPECIFICATIONS

CATEGORY	SPECIFICATIONS
Physical	<ul style="list-style-type: none"> <li>Size: 214mm(w) x 58mm(h) x 256mm(d)</li> <li>Material: Aluminium (AL6061-T6)</li> <li>Color: Matt Black (IR NATO BLACK DT61 SC/3606)</li> <li>Weight: &lt; 3kg</li> </ul>
Network Interfaces	<ul style="list-style-type: none"> <li>2 x Ethernet 10/100/1000 Mbps Base-T</li> <li>1 x USB 3.2 Type A</li> <li>4 x E&amp;M audio ports</li> </ul>
Audio Specifications	<ul style="list-style-type: none"> <li>Frequency response: 300Hz to 3.4kHz</li> <li>Input impedance: 20kΩ</li> <li>Output: 1.98Vpp (&gt;10kΩ load)</li> <li>PTT functionality</li> </ul>
Environmental	<ul style="list-style-type: none"> <li>Operating temp: 0°C to 80°C</li> <li>Storage temp: -20°C to 80°C</li> <li>MIL-STD-801F compliant</li> <li>EMI/EMC: MIL-STD-461</li> </ul>
Power	<ul style="list-style-type: none"> <li>Input: 24V DC</li> <li>Consumption: 40W</li> <li>Includes DC adapter</li> </ul>
Protocols	<ul style="list-style-type: none"> <li>Multicast</li> <li>Unicast (RTP/SRTP)</li> <li>SIP</li> <li>Codecs: G.711 A/B, Opus, Speex *</li> </ul>
Key Features	<ul style="list-style-type: none"> <li>Multi-radio network integration (HF/VHF/UHF/P25)</li> <li>Protocol conversion with audio transcoding and mixing</li> <li>Software-based IP PABX functionality</li> <li>Direct transmission system support</li> <li>Rack or desktop mounting options</li> <li>Military-grade construction and compliance</li> <li>Dual network redundancy</li> <li>Secure communication support</li> </ul>



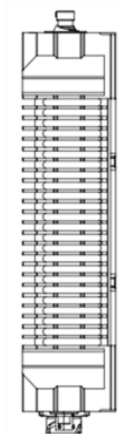
FRONT VIEW



TOP VIEW



BACK VIEW

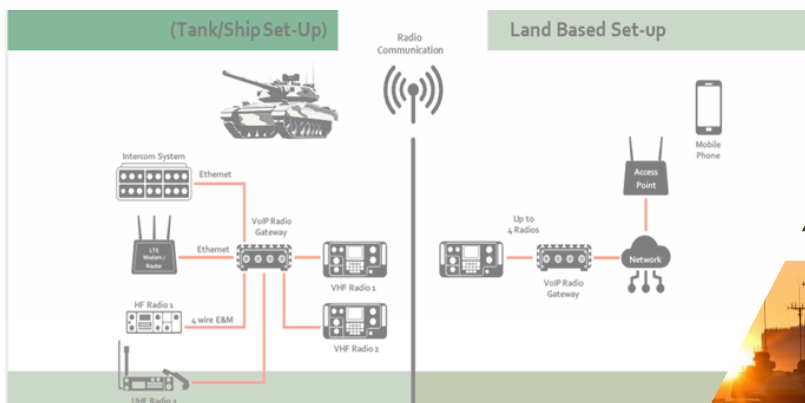


SIDE VIEW

\* Note on Audio Codec: Audio codecs (G.711 A/B, Opus, and Speex) ensures optimal voice quality and efficient bandwidth usage across different network conditions. This multi-codec support enables seamless interoperability between legacy radio systems and modern IP networks, allowing for clear voice transmission in all deployment scenarios.

## DEPLOYMENT OPTIONS

ENVIRONMENT	CAPABILITIES
Vehicle/Ship	<ul style="list-style-type: none"> <li>Radio/intercom integration</li> <li>Mobile connectivity</li> <li>Tactical communications</li> </ul>
Land-Based	<ul style="list-style-type: none"> <li>Command center operations</li> <li>Network integration</li> <li>Multi-channel support</li> </ul>



JAZLAN BIN ABDUL JALIL  
Manager, Sales and Marketing  
+6016 693 4865 / +603 3851 3314  
jazlan@teqarmada.com

