

5G Fixed Wireless Gateway

with WiFi 7 & Voice

The VIBE family of Fixed Wireless Access (FWA) gateways is designed to meet growing demand for fast, dependable internet in residential and business environments. Built on Qualcomm's SDX75 5G platform and advanced WiFi 7 technology, VIBE gateways combine high-performance wireless connectivity with robust wired networking. Designed for operators expanding coverage and subscribers who require reliable, always-on service, the VIBE family delivers the speed, stability, and flexibility needed for today's bandwidth-intensive applications and future connectivity needs.



Internet Redundancy

VIBE gateways ensure always-on connectivity through built-in failover redundancy. When operating as a wired broadband router via the 2.5 Gigabit Ethernet WAN port, the gateway automatically switches to 5G Fixed Wireless if the primary connection is interrupted—maintaining uninterrupted access for work, entertainment, and connected devices.

Performance and Versatility

Equipped with 5G sub-6 and WiFi 7, the VIBE family delivers high throughput, low latency, and efficient performance across multiple devices. Support for flexible SIM options, external antennas, and integrated voice services provides operators and subscribers with a versatile, future-ready platform for reliable broadband access.

Key Features

- Configurable as a Cellular Gateway or WiFi Router
- Supports 4G and 5G Fixed Wireless
- Dual SIM (Physical and eSIM)
- Tri-band WiFi 7: 4x4 6GHz (802.11be), 4x4 5GHz (802.11be) – 4x4 2.4GHz (802.11be)
- Ideal Failover Solution for Existing BB Solution
- Support External Antennas
- Pre-integrated with Airties Home, Pro, and Multi for seamless Wi-Fi optimization and management
- Pre-integrated with F-Secure SENSE for advanced network security and threat protection
- Pre-integrated with HitronCloud for centralized device management, engineering log collection, and firmware lifecycle control
- Pre-integrated with the MyHitron App for residential subscriber management and the xIQ Pro App for business customer visibility and control

Features & Benefits

Always-On Connectivity with Intelligent Failover

The VIBE family ensures uninterrupted internet access through built-in redundancy. When configured as a wired broadband router using the 2.5 Gigabit Ethernet WAN port, the gateway automatically switches to 5G Fixed Wireless if the primary connection is disrupted—keeping critical applications, work, and entertainment online without manual intervention.

Configurable WAN Priority for Optimal Connectivity

VIBE gateways allow users or operators to define WAN priority between Ethernet and Cellular connections, providing full control over how traffic is routed. Ethernet can be set as the primary connection with cellular as failover, or cellular can be prioritized as the primary WAN—ensuring alignment with service policies, performance requirements, and deployment models across regions.

Next-Generation WiFi 7 for Multi-Device Environments

With tri-band WiFi 7 (802.11be), the VIBE family delivers higher efficiency, greater capacity, and lower latency across connected devices. Support for 320 MHz channels, Multi-Link Operation, and advanced QoS ensures reliable performance for streaming, video conferencing, smart home, and business applications.

Flexible Deployment with Dual SIM and External Antennas

The VIBE family supports both a physical Nano SIM and an integrated eSIM, enabling operators to choose the best connectivity option per deployment (one SIM active at a time). Internal antennas combined with external antenna ports provide flexible installation and improved signal performance in residential and business environments.

Advanced Security and Open Frameworks

The VIBE family delivers operator-grade security with Vulnerability Scanning, Content Filtering, Inbound Protection, and Malware Threat Protection. Support for open management frameworks including TR-069, TR-181, and TR-369 enables seamless integration, remote management, and scalable service delivery.

Strengthen your Service Offering

Advanced WiFi Management

The VIBE family supports a comprehensive suite of advanced WiFi management tools designed to help ISPs deliver differentiated, value-added services. Features such as Captive Portal, Experience Scoring, and Crowd and Traffic Monitoring provide deep visibility into network performance and subscriber behavior, enabling proactive optimization and improved quality of experience. These capabilities empower operators to reduce support costs, increase customer satisfaction, and create compelling managed WiFi offerings that drive recurring service revenue.

Real-Time Insights for Smarter Decisions

HitronCloud® transforms device telemetry from VIBE gateways into actionable insights that help ISPs operate more efficiently and proactively. By capturing detailed connectivity, WiFi, and device performance data, the platform enables early issue detection, proactive optimization, and more consistent subscriber experiences at scale. Built on open industry standards, HitronCloud® integrates easily with existing ACS and management systems, giving operators the flexibility to manage VIBE deployments through HitronCloud® or their current operational platforms.

SPECIFICATIONS
VIBE2142
Interfaces

- 2 x RJ-45 100M/1G/2.5G BASE-T Ethernet Port
- 2 x RJ-45 100M/1G BASE-T Ethernet Port
- 1 x 1x Nano SIM Card Slot
- 1 x eSIM eUICC
- 2 x TS-9 Extended Antenna Ports


Fixed Wireless Access
5G NR/LTE Antennas

- [5G NR]: n2/n5/n12/n13/n14/n25/n26/n29/n30/n41/n48/n66/ n71/n77/n78
- [LTE]: B2/B4/B5/B12/B13/B14/B25/B26/B29/B30/B41/B42/ B43/B48/B66/B71
- [UMTS]: B1/B2/B4/B5/B8
- TS9 Port Supported Bands: n38/n40/n41/n77/n78
- Internal: 4*4 5G/LTE Antennas


Wi-Fi
Wi-Fi Characteristics

- 802.11a/b/g/n/ac/ax/be
- 4T4R 6GHz 11be (15+Gbps)
- 4T4R 5GHz 11be (7+Gbps)
- 4T4R 2.4GHz 11be (800+Mbps)
- 20/40/80/160/320MHz Channel Bandwidth
- High Power Design for Multi-radio Co-location
- Supports Standard 5GHz and 6GHz UNII Bands


Wi-Fi Features

- Prioritized QoS: WMM/WMM-PS
- 4096 QAM support on band (6GHz)
- 4096 QAM support on band (5GHz)
- 4096 QAM support on band (2.4GHz)
- 160MHz channel support on 5GHz band
- Multi-Link Operation (Single radio / Dual radio)
- Transmit Power Control by Service Provider
- WPS (Wi-Fi Protected Setup) PBC, PIN
- Airtime Fairness (ATF)
- Band Steering (BS)
- Dynamic Frequency Selection (DFS)
- Wi-Fi Output Power Range: Max permitted by FCC/IC
- Roaming: 802.11r/k/v


Wi-Fi Security

- WPA2-PSK (TKIP/AES)
- WPA3-SAE
- WiFi Enhanced Open (OWE)



SPECIFICATIONS

VIBE2142

Routing Support

Protocol Support: IGMP v3 for IPTV service capability
MAC Address Filtering (IPv4/IPv6)
IP Source/Destination Address Filtering (IPv4/IPv6)
IP over Ethernet (IPoE)
DHCP and TFTP clients (IPv4/IPv6)
DHCP Server supports RFC 1541 (IPv4)
DHCPv6 obtains Prefix from DHCPv6 Server through Prefix Delegation
DNS Proxy
Port Forwarding and DMZ
UPnP

**Network Security**

Firewall with Stateful Inspection (IPv4/IPv6)
Complete NAT Software Implemented as per RFC 1631 with Port and Address Mapping (IPv4)
Port Blocking

**Management**

App Configuration, Control and Management
Cloud Managed Backend Support and Optimization
Web-based GUI Configuration and Management
TR-069, TR-104, TR-143, TR-181, TR-369

**Mechanical**

LEDs: Separately assigned LEDs
Factory Default Reset Button
Pair Button

**Electrical**

Power Adapter: 100-240VAC, 50/60Hz
Surge Protection
Ethernet RJ-45 sustains at least 4KV

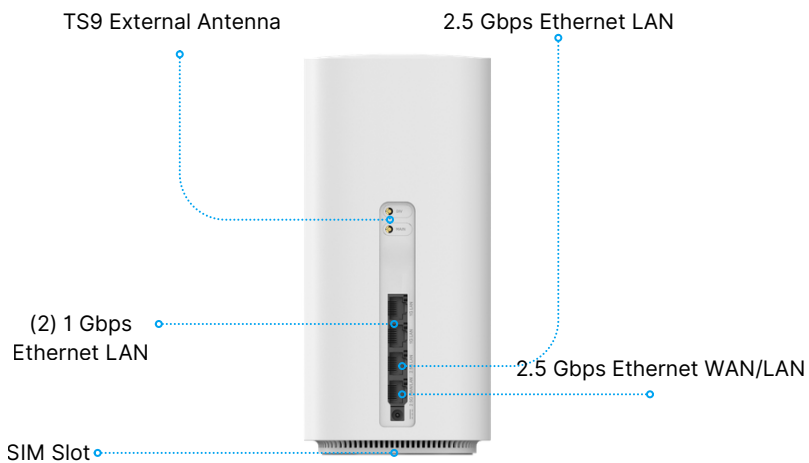
**Environmental**

Operating Temperature: 0°C (32° F) ~ 35°C (95°F)
Operating Humidity: 5% ~ 95% (Non condensing)



Ports

VIBE2142 Ports



LEDS

VIBE2142 LEDS

