



5G/4G Transit Gateway VHG87B-0G018

INTRODUCTION

The VHG87B-a 5G Transit Gateway which includes 5G-NR, LTE dual-mode cellular and WiFi 6 capability. It also complies with EN50155 for railways and metros.

Benefits:

1. Redundancy dual SIM offers connection reliability
2. Dual image and self-recovery function works when an abnormality is detected or unmanned
3. SPI firewall rules and packet/MAC/URL filtering for enhanced security
4. Support AMIT device management platform- A-NMS

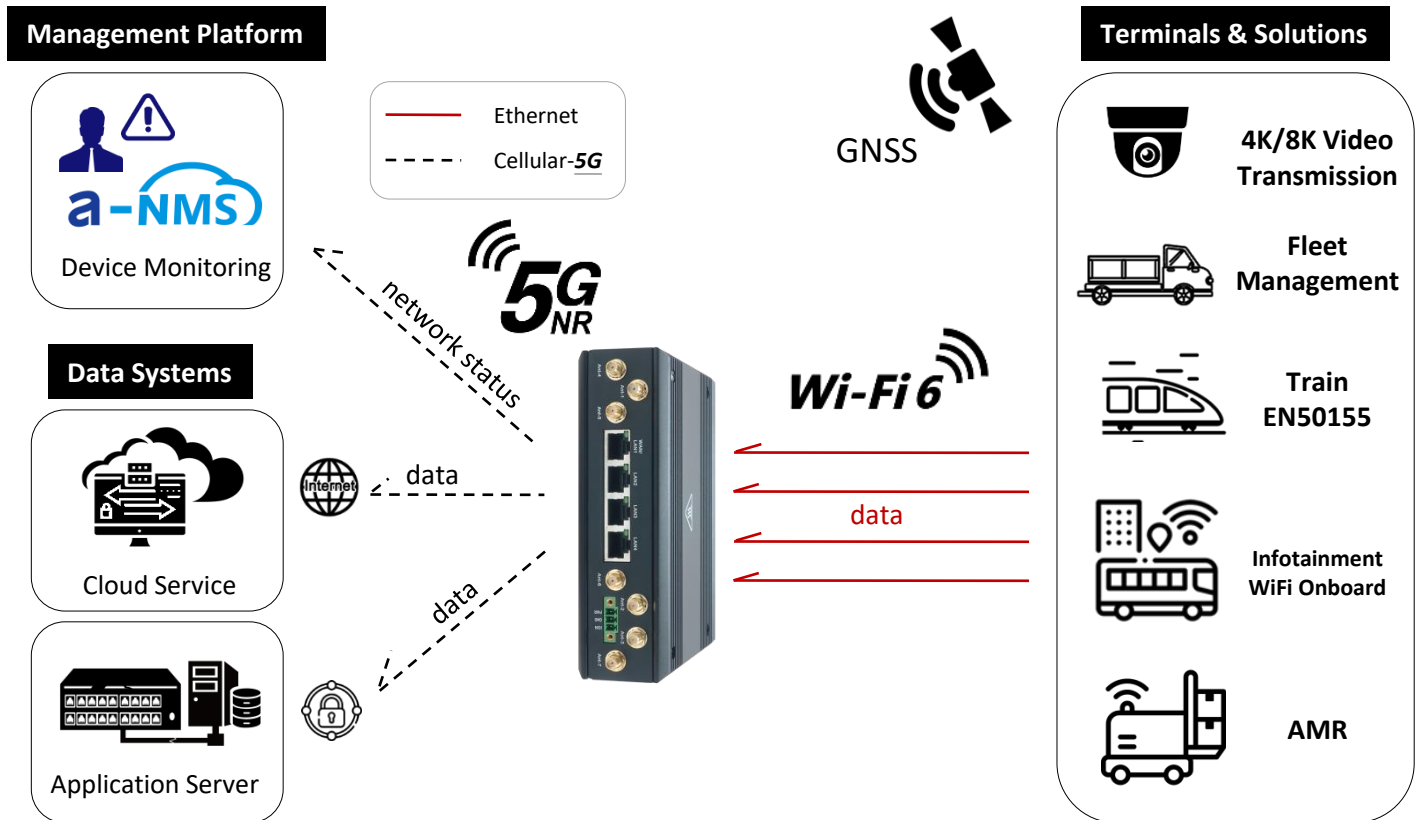
KEY FEATURES

- ✓ 1* 4G/5G (2*SIM)
- ✓ 4* RJ-45 GbE
- ✓ WiFi 6 AX1800 DBDC
- ✓ TB 12-36V in
- ✓ Ignition Sense
- ✓ GPS Receiver
- ✓ EN50155

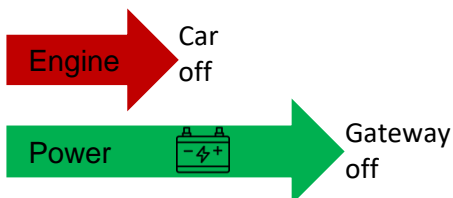
APPLICATION

- Vehicle connectivity
- 4K/8K instant transmission
- WiFi hotspot
- Fleet management
- Ticketing and payment system

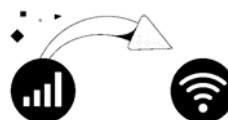
DIAGRAM



✓ Power Control - Ignition Sensing



✓ 5G/WiFi6 Failover



✓ WiFi Hotspot
Up to 50 end devices



SPECIFICATION

Device Interface

- **Cellular Module:** 1*4G/5G 3GPP Rel.16, 2*SIM (Nano SIM)
- **Ethernet:** 4*RJ45 GbE
- **WiFi:** WiFi 6 AX1800 DBDC
- **GNSS:** GPS/GIONASS
- **Power Input:** 1* 12-36V TB, Power Consumption: max. 15W
- **Antenna Con.:** 4*SMA(F)-4G/5G, 2*SMA(RP-F)-WiFi, 1*SMA(F)-GPS

WAN & Uplink

- **WAN:** Cellular & Config. Ether-WAN, Failover
- **Cellular:** 5G NR Sub-6G/LTE
- **Ether-WAN:** Dynamic IP, Static IP, PPPoE
- **Network Monitor:** ICMP Check/DNS Query

Protocol

- **LAN & VLAN:** DHCP Server/Relay, VLAN
- **Port Forward:** NAT 1-1, 1-many, DMZ, Virtual Server
- **Routing:** Static, Dynamic - RIP1/RIP2, OSPF

Wireless

- **Standard:** IEEE 802.11 ax/ac/n/g/b/a Compliance
- **Function:** Multi SSID, Auto Channel Selection, Station Isolation
- **Security:** WPA2-PSK (AES), WPA/WPA2-PSK(TKIP/AES), WPA2/WPA3-PSK(AES/SAE), Enterprise
- **Advanced Function:** WIDS, MU-MIMO, Band Steering

Service

- **Cellular Toolkit:** Data Usage, SIM PIN
- **Scheduling:** System Reboot, Function On/Off
- **GNSS:** GPS Location Tracking / Viewer
- **Power Control:** Ignition Sense

Security

- **VPN Tunnel:** IPSec, WireGuard, OpenVPN, PPTP, L2TP, GRE
- **VPN Usage:** Site/Host, Client/Server
- **Firewall:** Stealth Mode, IPS, Block WAN Ping
- **Access Control:** Packet Filter, URL Blocking, MAC Filter

Management

- **Configuration:** Web UI, SSH, CLI, Command Script
- **Management Tool:** SNMPv3 Std. & AMIT MIB, TR-069
- **System:** Upgrade, Backup & Restore, Reboot & Reset, SysLog
- **Diagnostic:** Diagnostic Tools

Status

- **Dashboard:** System Information
- **Network Status:** Connection information, Cellular Signal Quality
- **Cellular Mobile:** Signal Quality, IMEI/MEID, Usage Band
- **Security:** VPN Status, Firewall, QoS
- **Management:** SNMP&TR-069 Status, Network access, Cellular usage

Environment

- **OP/Store Temp.:** -30°C ~ 60°C, -40°C ~ 85°C
- **Humidity:** 10%~95% (non-condensing)
- **Enclosure:** Metal Body with Aluminum Extrusion Cover
- **Dimension:** 160 x 125 x 47mm

Package Contents

- 1*Device, 4*5G Antennas, 2*WiFi Antennas, 1*Terminal Block, 1*RJ-45 Cable

Optional Accessories

- Power Adapter, Wall-Mount Kit

ORDERING INFORMATION

| Country | Band |
|------------|---|
| Global | 5G Sub-6G(SA or NSA): n1/n2/n3/n5/n7/n8/n12/n13/n14/n18/n20/n25/n26/n28/n29/n30/n38/n40/n41/n48/n66/n70/n71/n75/n76/n77/n78/n79 DL 4 x 4 MIMO: n1/n2/n3/n7/n25/n30/n38/n40/n41/n48/n66/n70/n77/n78/n79 UL 2 x 2 MIMO: n38/n41/n48/n77/n78/n79/ FDD-LTE Bands: B1/B2/B3/B4/B5/B7/B8/B12/B13/B14/B17/B18/B19/B20/B25/B26/B28/B29/B30/B32/B66/B71 TDD-LTE Bands: B34/B38/B39/B40/B41/B42/B43/B48 LAA: B46 DL 4 x 4 MIMO: B1/B2/B3/B4/B7/B25/B30/B38/B40/B41/B42/B43/B48/B66 |
| EU | 5G Sub-6G(SA or NSA): n1/n3/n5/n7/n8/n20/n28/n38/n40/n41/n71/n75/n76/n77/n78 DL 4 x 4 MIMO: n1/n3/n7/n38/n40/n41/n77/n78 UL 2 x 2 MIMO (SA only): n38/n40/n41/n77/n78 FDD-LTE Bands: B1/B3/B5/B7/B8/B20/B28/B32/B71 TDD-LTE Bands: B38/B40/B41/B42/B43 DL 4 x 4 MIMO: B1/B3/B7/B38/B41/B42/B43 |
| Regulatory | CE/ FCC/ JATE/ TELEC/ NCC |

Comment

- Specifications are subject to change without prior notice.

MECHANIC DRAWING

•Front View



•Back View



AMIT Wireless Inc.

TEL: +886 (0)6 505 8026 FAX: +886 (0)6 505 8068

Web: <https://www.amitwireless.com/> Email: sales@amit.com.tw

No. 28, Lane 31, Huandong Rd., Sec. 1, Xinshi Dist., Tainan City 74146, Taiwan (R.O.C.)