4G Vehicle WiFi Hotspot
VHG760-0T023

Get Vehicles On-Line at Instant

VHG760-0T023 is a Cat-4 LTE-based gateway that brings simplicity to wireless connection process. With worldwide LTE spectrum, it enables WAN connectivity for moving vehicles and contribute a reliable bi-directional communication for other on-board electronic devices. Intelligent network monitoring allows VHG760-0T023 to re-connect automatically or fail over to alternative SIM card.

Mobile WiFi Hotspot

Providing Internet and WiFi access to riders has become an essential service. VHG760-0T023 equips 2.4GHz MIMO 802.11n WiFi that is most suitable to be a WiFi hotspot for taxis, caravans, or recreation vehicles. Working with external portal server enables an efficient way of user authentication and billing. QoS and bandwidth management also guarantee a better quality of experience.

Geo Location Tracking

VHG760-0T023 has built-in a GPS receiver that can retrieve location data from global GPS satellite system, and then forward to remote servers. It is helpful to track locations of vehicles and integrate with LBS (Location-Based Service) or AVL (Automatic Vehicle Location) applications. With compliant to NMEA 0183 standard format, it becomes much easier for backend servers integration.
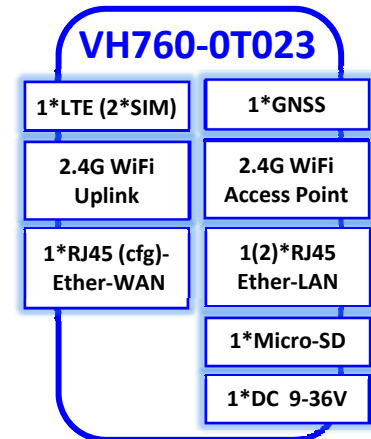
Efficient Management

Device setting and status monitoring are available using web GUI, CLI, command script, and SMS. With AMIT NMS management platform, it provides a more efficient way of device status monitoring, group configuration, and batch firmware upgrade. It significantly reduces time and maintenance cost, and especially helpful to manage devices that are installed on moving vehicles.

Dedicated to Harsh Environment

Many challenges in the way for electronic devices in vehicles, including unstable power source, transients, vibration, and extreme temperature. To overcome those problems, VHG760-0T023 adopts special hardware components that are compliant to ISO7637-2 and MIL STD-810G requirements to show its confidence while it performs on the road.
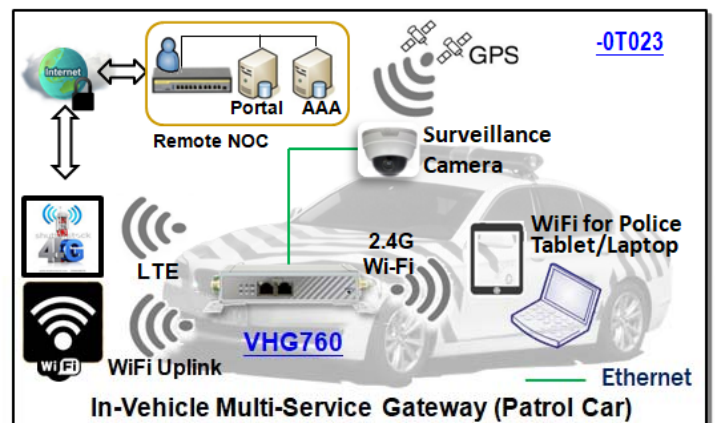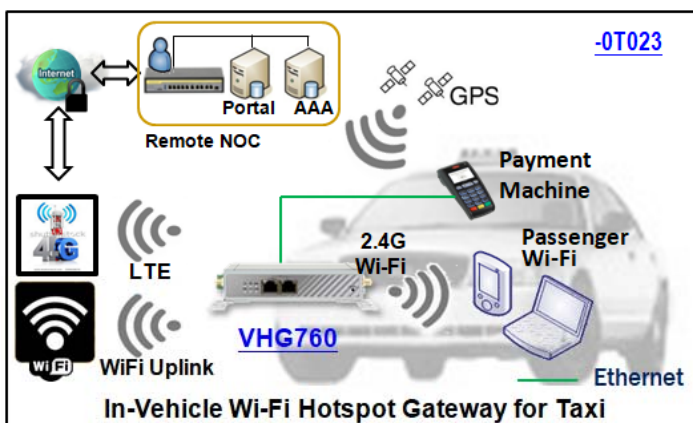
Block Diagram

Applications & Industries

• Applications:
  ✓ Passenger WiFi
  ✓ Location tracking
  ✓ Integration with on-board passenger information system, signage, cashless payment, ticketing, surveillance system

• Industries:
  ✓ Transportation
  ✓ Mission Critical

Connection Diagram

In-Vehicle Wi-Fi Hotspot Gateway for Taxi

In-Vehicle Multi-Service Gateway (Patrol Car)

Specification Summary

Device Interface
- **LTE Module**: 1*LTE-Cat.4, 2*SIM, with GNSS (-0T023)
- **Ethernet**: 2*RJ45 FE
- **WiFi**: 1*11n-2*2
- **Log Storage**: 1*microSD card slot
- **Power Input** : 1* DC 9V ~ 36V (Terminal Block)
- **Antenna Con.**: 2*SMA (F)-LTE, 2*SMA(M)-WiFi, 1* SMA(F)-GPS

WAN & Uplink
- **WAN:** Cellular & Config. Ether-WAN**;** Failover, Load Balance,
- **Cellular**: 3GPP, 2G/3G/LTE, IP Pass-through, IPv4/6
- **Ether-WAN**: Dynamic IP, Static IP,PPPoE , PPTP, L2TP
- **Network Monitor:** ICMP/DNS Query

WiFi
- **Standard**: 802.11 Industry Compliance
- **Mode**: AP Router, WDS, WDS Hybrid Modes
- **Functions**: Multi-SSID, WMM
- **Security**: WEP, WPA,WPA2, WPA-PSK, WPA2-PSK, 802.1x
- **Captive Portal**: External web portal

Protocol
- **LAN & VLAN**: DHCP Server/Relay , Port/Tag based VLAN
- **IPv6**: Dual Stack, 6-in-4, 6-to-4
- **Port Forward**: NAT 1-1, 1-many, transversal, DMZ, Virtual Server & Computer, VPN Pass-through
- **Routing**: Static, Dynamic - RIP1/RIP2, OSPF, BGP
- **QoS**: Policy-based, 802.1q and TOS for priority queues

Object
- **Scheduling**: Time Schedule List
- **Grouping**: Host Grouping List
- **Ext. Server**: Email, Syslog, RADIUS, SCEP, FTP, DDNS, IGMP
- **Certificate**: My Certificate, Trusted Certificate, Issue Certificate

Service
- **Cellular Toolkit**: Data Usage, SMS, SIM PIN, USSD, Network Scan
- **Event Handling**: User Defined Manage/Notify Event; Action & Trigger by SMS, Mail, Syslog, SNMP Trap, System HW
- **GNSS**: GPS Location Tracking / Viewer

Security
- **VPN Tunneling**: IPSec, OpenVPN, PPTP, L2TP, GRE
- **Scenario**: Site/Host to Site/host; Hub and Spoke; Dynamic VPN
- **VPN Capability**: IPSec: up to 8 tunnels
- **Firewall**: SPI Firewall with Stealth Mode, IPS
- **Access Control**: Packet Filter, URL Blocking, MAC Filter

Administration
- **Configuration**: Web UI, CLI, Command Script, Python
- **Management**: SNMPv3 Std. & AMIT MIB , TR069
- **System**: Upgrade, Backup & Restore, Reboot & Reset, Syslog
- **FTP**: FTP Server, User Account
- **Diagnostic**: Packet Analyzer, Diagnostic Tools

Environment
- **Operation Temp.**: -30°C ~ 70°C
- **Storage Temp.**: -40°C ~ 85°C
- **Humidity**: 10%~95% (non-condensing)
- **Enclosure**: Metal, Bracket
- **Dimension**: 131x99x31mm (w/o bracket kit)
            167x99x39mm (w/ bracket kit)

Certification
- CE
  - ✓EMI: EN 55032: 2015 +AC: 2016 Class B
  - ✓EMS: EN 55024, IEC 61000
  - ✓Radio: EN 301 489, EN 300 328 ,EN 301 893, EN50385
  - ✓Safety: EN 60950-1

Shock/Vibration
- MIL STD-810G

Package Content
- 1*VHG760-0T023
- 2*Cellular Antenna (3dBi), 2*WiFi Antenna (5dBi)
- 1*Terminal Block (2-pin for DC Power)
- 2*Mounting Brackets, 1*Screw Bag,
- 1*CD (User Manual)

SKU Information

VHG760-0T023-00-yy : LTE Cat.4

'yy': Area Variant. As below table

yy	Skew	Band	Module Cert.	System Cert.	GNSS
E0	EU	B1/3/7/8/20/38/40/41	CE,GCF	CE	GPS
U0	US	B2/4	PTCRB, AT&T	TBC	GPS
J0	Japan	B1/9/18/19/21	TELEC, NTT, KDDI	TBC	GPS
J1	Japan	B1/8/41	TELEC, Softbank	TBC	GPS
T0	Taiwan	B3/7/8/28	NCC	TBC	GPS
C0	China	B3/39/40/41	SRRC	TBC	GPS
A0	Australia	B1/3/5/7/28/40	RCM	TBC	GPS

Note
- Specifications are subject to change without prior notice.
- Besides CE, other regional certification needs to be checked for availability.
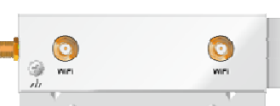
Mechanic Drawing

(1) Front View

(2) Left View

(3) Right View