

Product Advantages



High performance & reliability and easy to manage and access

- Offer 5G NR broadband connectivity (4G LTEFallback)
- Multi-WAN interfaces: Dual SIMs(DSSS) and GbEWAN for network resilience and reliable connectivity
- M12 X-coded connectors for Gigabit Ethernet ports
- Network expandability - load balancing and reliable connectivity - auto-failover/fallback
- Embedded GNSS option for real-time asset tracking and location data-based applications*³
- Local and Remote management via Web GUI, SNMP, CWMP(TR-069)

Carrier-Grade Wireless-LAN

- IEEE 802.11a/b/g/n/ac standards
- Simultaneous Dual-Band Wireless up to 2400Mbps
- 4x4 802.11a/n/ac (5GHz) and 3x3 802.11b/g/n (2.4GHz)
- High Transmit Power Design
- Wi-Fi Hotspot with Captive Portal
- Multiple SSID with Client Isolation

Ideal Solution for

- Smart Bus and Public Safety applications.
- CE/RED/ITxPT/E-Mark (ECE-R10, E24)/EN50155 will be ready in December 2023

Enterprise Class Secure VPN Connections

- Embedded IPsec, PPTP, L2TP, GRE and OpenVPN secure VPN connection with powerful encryption

Compact and unobtrusive design

- Small form factor with optional mounting kits, easily installed by a single person
- Ignition power control option when mounted within vehicles

Designed for challenging / rugged deployments

- Hardened enclosure with Industrial-graded components
- Designed to withstand heat, humidity and protect from shock, vibration, etc.

SPECIFICATIONS

Availability and Resilience

Dual SIMs (Dual SIM Single Standby)

Dual-WAN Interfaces (5G NR, GbE WAN)

Embedded 5G NR sub-6GHz^{*1}

5G NR sub-6 GHz (3GPP Rel-16)

-Band(NA&NSA): n1, n3, n5, n7, n8, n20, n28, n38, n40, n41, n75, n76, n77, n78

- Supports MIMO:

DL 4x4: n1, n3, n7, n38, n40, n41, n77, n78

UL 2x2 (5G SA mode only): n38, n40, n41, n77, n78

- Modulation: DL 256QAM / UL 256QAM

- Maximum Transmission Data Rate: SA: DL 2.4 Gbps / UL 900 Mbps NSA: DL 3.4 Gbps / UL 550 Mbps

4G LTE (DL CAT 19 / UL CAT 18)

- Band(FDD&TDD): B1, B3, B5, B7, B8, B20, B28, B32, B38, B40, B41, B42, B43

- Supports MIMO:

DL 4x4: B1, B3, B7, B38, B40, B41, B42, B43

- Modulation: DL 256QAM / UL 256QAM

- Maximum Transmission Data Rate: DL 1.6 Gbps / UL 200 Mbps

Network Protocols and Features

- Dual WAN Failover/ Failback
- Dual WAN Load Balancing
- IPv4, IPv6, IPv4/IPv6 dual stack^{*2}
- Support Single APN. Dual APN^{*2}
- Keep Alive
- IP Pass-Through
- NAT, Virtual Server and DMZ
- Static Routing, Dynamic Routing (RIP v1/v2, OSPF, BGP)
- SNTP, DNS relay and DDNS
- Universal Plug and Play (UPnP) compliant
- Supports DHCP server/client/relay

Virtual Private Network (VPN)

- IPsec
- PPTP
- L2TP
- GRE
- OpenVPN
- VPN Pass-through

SPECIFICATIONS

Wireless LAN

- Compliant with IEEE 802.11a/b/g/n/ac standard
- DBDC - concurrent dual-band 802.11a/n/ac (5GHz) and 802.11b/g/n (2.4GHz)
- Up to 1700Mbps wireless phy rate at 5GHz
- Up to 600Mbps wireless phy rate at 2.4GHz
- Wireless security with WEP 64/128, WPA-PSK, WPA2-PSK, Mixed WPA/WAP2-PSK
- WPS (Wi-Fi Protected Setup) for easy setup
- Multiple SSID (4 SSIDs), BSSID
- Wireless MAC Filtering
- Wireless Client Isolation
- Wi-Fi Hotspot with Captive Portal
- Support RADIUS authentication
- Wireless Client rate-limiting

Firewall

- Built-in NAT Firewall
- Stateful Packet Inspection (SPI)
- Prevents DoS attacks including Land Attack, Ping of Death, etc.
- Access Control
- IP Filtering, MAC Filtering, URL Filtering
- VPN Pass-through

Global Navigation Satellite System (GNSS)*³

- Embedded multi-GNSS engine for GPS or GLONASS system

USB Application Server

- Storage: FTP server and Samba server

Management

- Password protection for system management
- Web-based GUI for remote and local management
- Firmware upgrade and configuration data upload and download via web-based GUI
- CWMP(TR-069)*², SNMP
- Cellular data usage Allowance
- Remote System Log monitoring
- Scheduling Auto-Reboot
- Physical layer/protocol diagnostic test tool

SPECIFICATIONS

Hardware Specification

Physical Interface

- WAN: 5G NR sub-6GHz (and/or GbE WAN)
- Ethernet LAN: four (4) port 10/100/1000Mbps auto-crossover (MDI/ MDI-X) switch
- USB 2.0 Host: one (1) port
- SIM Card: two (2) 2FF mini-SIM slot
- Reset Button
- Power Connector: 4-pin connector with ignition sensing
- LED Indicators
- Antenna:
 - 5G NR: four (4) detachable wideband antennas
 - Wi-Fi: four (4) detachable dual-band antennas
 - GNSS: one (1) detachable active antenna

External Connector

- 5G NR: SMA x four (4)
- Ethernet: M12 X-coded x four (4)
- Wi-Fi: RP-SMA x four (4)
- GNSS: SMA x one (1)
- USB: Type A x one (1)
- SIM: mini-SIM(2FF) slot with cover x two (2)

Power Specification

- Input: DC 10V~56V

Physical Dimension

- Dimensions: 199.2 x 132.7 x 46.6 mm
- Antenna connector protrusion included: 199.2 x 149.1 x 46.6 mm

Operating Requirements

- Operating: -40°C to 60°C (-40°F to 140°F)
- Humidity: 20 ~ 95% non-condensing

Notes:

- *1. The 5G NR is dependent on your local service provider.
- *2. Only upon request for Telco/ ISP tender projects.
- *3. The support for GPS and/or GLONASS functions depends on the equipped module's capabilities.
- *4. Specifications in this datasheet are subject to change without prior notice.