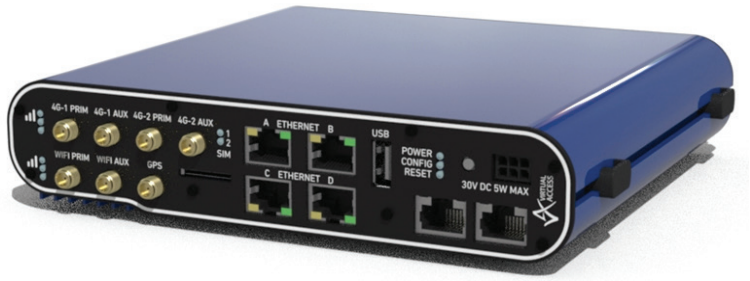
VIRTUAL ACCESS

SMART NETWORK SOLUTIONS
FOR SERVICE PROVIDERS

The GW3300 Series Router

Dual Radio In-vehicle Wireless Router with WiFi



Applications:

- Emergency services
- Transportation
- Harsh environments
- Military
- Mobile CCTV

Features:

- Dual radio: 2 mobile networks in parallel
- Dual band WiFi
- Rugged design
- Vehicle power conditioning

Overview

The Virtual Access GW3300 Series dual radio router is a versatile wireless router suitable for a variety of transport or industrial deployments. The GW3300 Series router offers single or dual radio with any combination of 3G, 4G/LTE or LTE450. WiFi and ignition power management, plus the ability to manage large spikes in voltage makes the GW3300 Series the ideal router for vehicle deployments.

This ruggedised router is designed for use in any vehicle where additional requirements for secure communication and accessibility are one of the highest demands. It can be installed in harsh environments for industrial, transport, emergency and law enforcement markets.

Dual Radio

The GW3300 Series router is a mobile dual radio router offering resilient connectivity using multiple operators and/or mobile technologies. The GW3300 Series router creates extremely reliable, robust and secure broadband data connectivity for all critical applications.

Vehicle Ignition Sense

The router's ignition sense input can detect when the vehicle's ignition has been enabled. This means the GW3300 Series router can remain powered on after the vehicle has stopped and the ignition has been turned off. The time delay between ignition off and router power down is configurable.

Active Power Conditioning

Vehicle power systems often experience transients and there can be substantial voltage dip during engine start up. The GW3300 Series router incorporates active power conditioning, which is designed to accommodate the voltage dips, surges and transients commonly found in vehicles. This built-in power conditioning removes the need for use of external power conditioners.

Dual SIM

Dual SIM architecture ensures that a backup 3G/4G LTE network can take over should the primary network fail. The router detects a network problem and fails over to a standby SIM/APN. As well as standard SIM sockets, E-SIM functionality is also available.

SMS Management

The GW3300 Series router supports SMS, so if the packet switched side of the network is down you can still send commands to the router to perform diagnostics, reboot the router and so on.

GPS Receiver

The GW3300 Series router includes a GPS receiver that can be used for vehicle tracking. The vehicle's coordinates, direction and speed can be reported to a tracking server periodically. The GPS antenna socket includes a 3.3V power source for powering an active GPS antenna.

WiFi

The GW3300 Series router has integrated dual band (2.4GHZ & 5GHz) WiFi support. It is capable of supporting both Access Point mode and Station mode concurrently if required.

Ethernet

- 1 or 4 Ethernet ports
- GigE capability

Centralised Management & Service Monitoring

The GW3300 Series router benefits from Activator, the Virtual Access centralised configuration management and monitoring system. Activator simplifies router deployment and ongoing management with its advanced automated services.

Software Features

Management

- SMS management support
- Local and remote advanced configuration through embedded web server
- HTTP/HTTPS
- Command Line Interface via Telnet or SSH
- TFTP client download/upload
- SNMP agent

Fault Investigation and Reporting

- Event logging
- Packet tracing (tcpdump)
- Syslog support

Routing Features

- IPv4 and IPv6
- DynDNS
- NAT
- NAT Traversal
- NTP Client
- VLAN support
- Packet filtering
- Firewall
- Port forwarding
- Static routes
- BGPv4
- RIP (v1 and v2)
- OSPF
- Virtual Router Redundancy Protocol (VRRP)
- IPSec/L2TP/GRE
- DMVPN
- SNMP v1/v2/v3
- Mobile IP

IPSec

- Manual and automatic key management
- HMAC-MD5-96 and HMAC-SHA-1-96
- AES (256bit) 3DES (168bit) & DES (56bit) with explicit IV

IKE-related VPN Specification

- Support for ESP and AH
- Authentication using RSA signatures, DSS signatures and pre-shared keys interworking
- Dead Peer Detection (DPD)

SCADA Support

- Protocol conversion between IEC104 SCADA master and IEC101/DNP3/Modbus RTUs (Both Modbus over serial and Modbus TCP supported)

Terminal Server

- Serial (RS232, RS485) to TCP/IP or UDP/IP conversion

Hardware Features

Antenna

Up to 7 SMA female connectors:

- 2 WiFi
- 2 LTE
- 2 LTE450
- 1 GPS

LAN Interfaces

- 1 or 4 Ethernet ports
- GigE capability
- Auto detects full- or half-duplex operation

Serial Interface

- RS232 and RS485

USB

- USB 2.0 host interface

SIM

- E-SIM
- Standard SIM slots

System

- Processor: Qualcomm (800Mhz)
- Flash: 2Gbytes
- RAM: 250Mbytes
- Can run own applications

Approvals and CE Certificates

- CE approved
- EMC and safety declaration
- EN55022 Class B radiated emissions
- EN60950 safety approval

Power

- DC input 9-36V
- Active power conditioning accommodating voltage dips
- Ignition sense

Operating temperature

- Operating temperatures vary, see table below

Physical and Environment

- Unit size: H42 x W175 x D153 (mm)
- Unit weight: 400g
- Vehicle mount kit
- DIN Rail option

IP Rating

- IP31

GW3300 Series Router Models

	Ethernet	Main Module	Secondary Module	WiFi	Serial
GW3330	4	3G	-	✓	●
GW3340	4	4G	-	✓	●
GW3360	4	LTE450	-	✓	●
GW3343	4	4G	3G	✓	●
GW3344	4	4G	4G	✓	●
GW3346	4	4G	LTE450	✓	●

Append S to model number for serial option

● = optional

RF Band Options

RF Band	2G Bands	3G Bands	4G LTE Bands	GPS	Operating Temp	Order Code
A	850/900/1800/1900	900/2100	-	-	-40°C to 70°C	-RFA
B	850/900/1800/1900	850/900/1900/2100	-	✓	-40°C to 70°C	-RFB
C	850/900/1800/1900	850/900/1900/2100	B1/B2/B3/B5/B7/B8/B20	✓	-30°C to 70°C	-RFC
D	-	-	B3/B7/B20/B31	✓	-20°C to 60°C	-RFD
E	900/1800	900/2100	B1/B3/B7/B8/B20/B38/B40	✓	-30°C to 70°C	-RFE
F	-	CDMA TX 452.500 ~ 457.475 RX 462.000 ~ 467.475	-	-	-20°C to 60°C	-RFF
G	850/900/1800/1900	850/900/2100	B1/B3/B5/B7/B20	✓	-40°C to 70°C	-RFG