

# The Virtual Access GW2020 Series Router

# Compact 3G/4G LTE/CDMA450 Wireless Router



The Virtual Access GW2020 Series router is a versatile 3G/4G LTE/CDMA450 wireless router suitable for a variety of business and industrial deployments. The compact and rugged structure makes it a suitable product for deployments in M2M applications such as CCTV, ATM, telemetry, SCADA, retail (POS), digital signage, and intelligent traffic systems.

The product line supports the following radio access technologies: HSPA+, HSPA, UMTS, EDGE, CDMA450, GPRS and GSM.

## **Broadband Connectivity**

The GW2020 Series router provides high speed, secure 3G/4G LTE/CDMA450 data network connectivity to remote sites and incorporates Virtual Router Redundancy Protocol (VRRP).

VRRP can facilitate 3G/4G LTE WAN backup services to existing fixed line routers, providing both WAN and router redundancy to critical business applications.

#### **Dual SIM**

Dual SIM architecture ensures that a backup 3G/4G LTE/CDMA450 network can take over should the primary network fail. The router detects a network problem and fails over to a standby SIM/APN, ensuring customer's SLAs are upheld.

The GW2020 Series router also supports SMS, so if the packet switched side of the network is down you can still send commands to the router to perform diagnostics or even a reload.

## Optional CDMA450 Wireless

The GW2020 Series router optionally incorporates CDMA450 wireless connectivity. CDMA450 can offer high speed data

technologies but at a potentially lower cost by using a lower carrier frequency. This makes the GW2020 ideal for primary WAN connectivity in remote or rural locations where wireline services such as DSL and ISDN are not available, or are not cost-effective.

# Single or Dual Ethernet Ports & Optional Serial Ports

The GW2020 Series router offers either a single 10/100 Ethernet interface or a 2-port Ethernet switch. With the 2-port option, ports can be fully segmented using VLAN and 802.1q.

The RS232 serial and RS485 options facilitate direct connectivity to serial devices and enable remote console access.

# Advanced Security and Routing Features

The GW2020 Series router offers business grade security and advanced routing features IPSec (3Des and AES), Stateful firewall and L2TP as standard:

### Applications:

- Commercial and industrial M2M
- Retail, lottery and gaming
- · Utilities and digital signage
- Telemetry and metering
- ATM and security
- 3G/4G LTE failover for fixed line broadband

#### Hardware features:

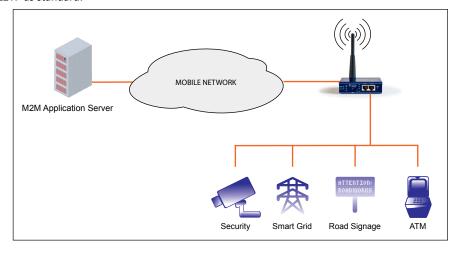
- Dual SIM
- CDMA450 Rev A and B; R-UIM support
- Single and dual Ethernet ports
- RS232 and RS485 serial ports

# Wide Power Input and Extended Temperature

Certain deployment scenarios require wide variations in power input and temperature. The GW2020 Series router offers AC and DC (9V DC to 30V DC) power inputs as well as low power consumption and extended temperature options.

# Centralised Management and Service Monitoring

As with all Virtual Access routers, the GW2020 Series router benefits from centralised configuration management, monitoring utilities and SLA reporting. Centralised management and monitoring enables service providers to simplify and automate service deployment, management and support tasks in managed network environments. SLA reporting presents a range of statistics from the router including latency, packet loss and 3G/4G LTE signal strength over extended periods of time.



### Software Features

## Management

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

#### Fault Investigation and Reporting

- Event logging
- Syslog support
- Packet tracing

#### **Router Features**

- IPv4 and IPv6
- DHCP server/client
- DynDNS
- NAT
- NAT Traversal
- NTP Client
- VLAN support
- Packet filtering
- Firewall
- Port forwarding
- BGPv4
- RIP (v1 and v2)
- IPSec
- L2TP

- Virtual Router Redundancy Protocol (VRRP)
- GRF
- •SNMP v1/v2/v3

#### **IPSec**

- Manual and automatic key management
- HMAC-MD5-96 and HMAC-SHA-1-96
- AES (256bit), 3DES (168bit) and 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
- DPF

# Hardware Features

#### Antenna

Advanced receiver diversity type 3i

#### SIM

• 2 SIM cards (optional cover available)

#### LAN Interfaces

- Single or dual 10/100 base-T Ethernet port
- Auto detects full- or half-duplex operation
- Auto detects a regular or crossover cable for easy connection to a switch or hub

#### Serial Interfaces

- •2 x RS232 option
- RS485 option

#### **LEDs**

- Power indicator
- Signal strength indicator

- Ethernet activity
- Active SIM

#### Antenna Options

- Supports dual antenna configuration for diversity
- •3G/4G LTE rubber antenna (supplied as standard)
- External Blade
- External Through Hole
- External Magnetic Mount
- FDO Penta-band High Gain Omni
- WMO Wall-mount Multi-band Omni
- SMA female antenna connectors

## **Approvals and Certificates**

- EN60950 safety approval
- •EN55022 and EN55024 EMC

#### Power

- •100V-240V AC, 3 Watts
- •9V-30V DC

#### Physical and Environment

- •Unit size: 100W 138D 34Hmm
- Unit weight: 500g
- Optional lockable SIM cover

#### Operating temperature

- •-40°C to +75°C with DC power lead
- 0°C to +40°C with standard AC power supply
- GW2023-ITAC -40°C to +75°C with extended temperature AC power supply

GW2020 Series Models								
Model	Ethernet	Serial-0	Serial-1	Dual SIM	3G	4G/LTE	CDMA450	
GW2021	1	-	-	✓	•	•	•	
GW2022	2	-	-	✓	•	•	•	
GW2023	2	RS232	RS232	<b>✓</b>	•	•	•	
GW2024	2	RS232	RS485	✓	•	•	•	
GW2025	1	RS232	RS232	<b>√</b>	•	•	•	
GW2026	1	RS232	RS485	<b>✓</b>	•	•	•	

= optional

• = optional								
Wireless WAN Parameters								
Variant	Modes	Bands						
3G	WCDMA/HSPA EDGE/GPRS	850/900/1900/2100 850/900/1800/1900						
4G/LTE	LTE WCDMA/HSPA EDGE/GPRS	B1/B2/B3/B5/B7/B8/B20 850/900/1900/2100 850/900/1800/1900						
CDMA450	CDMA450 Rev A and B; R-UIM support	Band Class 5 Block Designators A & B						

Power Options								
Model	Power Supply Unit Provided	Input Voltage	Operating Temperature					
GW202X-DC	DC power cable	9-30V DC	-40°C to +75°C					
GW202X-AC	Standard AC PSU	100-240V AC	0°C to +40°C					
GW202X-ITAC	Extended temperature AC PSU	100-240V AC	-40°C to +75°C					