

GW2028 Industrial Router

3G, LTE, DIN Rail Mount Router



The Virtual Access GW2028 router is a versatile 3G, LTE, dual fibre, CDMA450 wireless router suitable for a variety of industrial deployments. The compact and rugged structure makes it a suitable product for deployments in M2M applications such as CCTV, telemetry, SCADA, digital signage, and intelligent traffic systems.

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

Broadband Connectivity

The GW2028 router provides high speed, secure 3G, LTE, dual fibre, CDMA450 data network connectivity to remote sites.

Dual SIM

Dual SIM architecture ensures that a backup wireless 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.

Quad Ethernet Ports

The GW2028 router offers 4 x 10/100 Mbps Ethernet interfaces. Ports can be fully segmented using VLAN and 802.1q.

SMS Commands

The GW2028 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.

Applications:

- M2M
- Telemetry
- SCADA
- Roadside
- Global wireless markets

Hardware Features:

- DIN rail mounting
- 3G, LTE
- Quad Ethernet ports
- RS232 and RS485 serial ports
- Digital inputs for event detection
- Relay contact options

Serial Ports

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

Digital Inputs and Output

Two digital inputs are provided that can be used to detect remote contact states for monitoring door open/close or PIR detectors or similar. Custom scripts can be written to determine the action to be taken on the detection of an input state change. Syslog events, SNMP traps or emails can be generated.

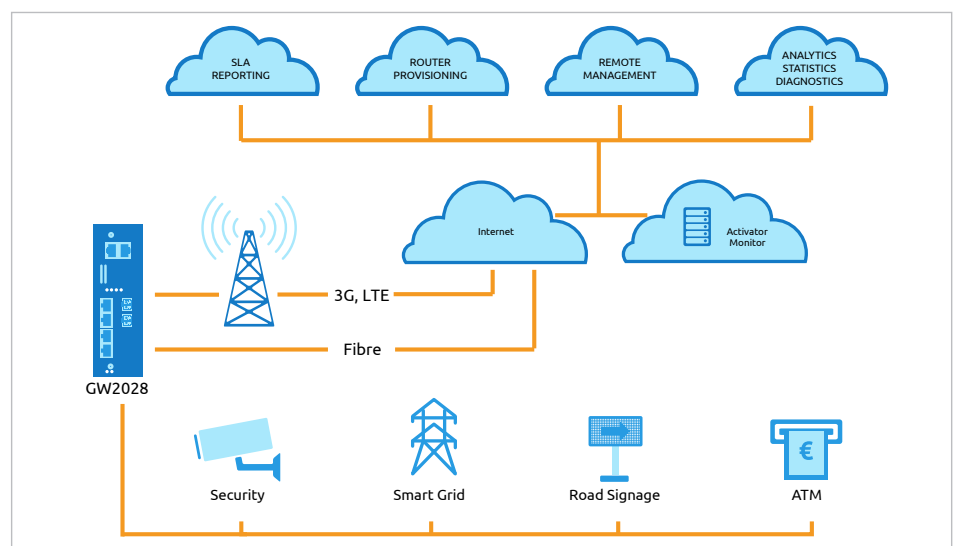
There is also a relay contact output. This can be controlled by a script on detecting any event within the device, or it can be controlled remotely.

Advanced Security and Routing Features

The GW2028 router offers business grade security and advanced routing features IPsec (3Des and AES), stateful firewall and L2TP as standard.

Centralised Management and Service Monitoring

As with all Virtual Access routers, the GW2028 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 or 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

Routing Features

- IPv4 and IPv6
- DHCP server/client
- DynDNS
- NAT
- NAT Traversal
- NTP Client
- VLAN support
- Packet filtering
- Firewall
- Port forwarding
- BGPv4, OSPF
- RIP (v1 and v2)
- IPSec/L2TP/GRE
- DMVPN
- SNMP v1/v2/v3
- TLS 1.2
- 802.1x authentication
- IEC104
- QoS
- VRRP

IPSec VPN

- IKE Version 2
- X.509 certificates
- Elliptic Curve Cryptography (ECC)
- SHA2_512 support
- AES_CBC (256), 3DES and DES
- PFS
- SCEP
- DH_8192

SCADA Protocol Conversion

- Protocol conversion including the following:
 - IEC 60870-5-104
 - IEC 60870-5-101
 - IEC 61850
 - Modbus RTU
 - Modbus TCP
 - Modbus RTU to TCP automatic conversion
 - DNP3
 - Serial to Ethernet

RTU Functionality

- Control of I/O from SCADA master
- Protocol conversion
- Monitoring of comms. interface status from SCADA master
- Basic PLC functions

Terminal Server

- Serial RS232, RS485 to TCP/IP or UDP/IP conversion
- Connects serial ports to TCP or UDP streams

Hardware Features

LAN Interfaces

- Quad 10/100 Mbps 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

WAN Interfaces

- Wireless WAN with 3G and LTE options
- Dual Fibre option
- Ethernet ports can optionally be configured for WAN use

Serial Interfaces

Two serial interfaces configured as:

- 2 x RS232, or
- 1 x RS232 + 1 x RS485

Digital Inputs

- 2 x digital inputs for detecting remote contact open/close
- Scripts define action to be taken on input events

Digital Output

- Relay contact output. 30V DC 1A rating NO, NC and Common

SIM

- 2 x SIM card socket with optional slot cover

Antennas

- Supports dual antenna configuration for diversity
- 3G or LTE rubber antenna supplied as standard
- Other antenna options available

LEDS

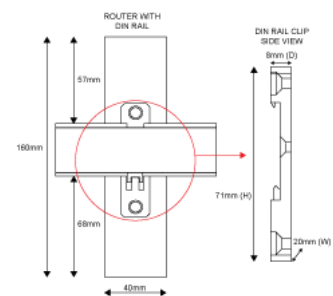
- Power indicator
- Signal strength indicator
- Ethernet activity
- Active SIM

Power

- 9V-60V DC
- Power consumption: 5W
- DIN rail PSUs can be provided as an option

Physical and Environment

- IP30
- Unit weight: 500g
- Unit size: 170W 50H 125D (mm)



Operating temperature

- Please refer to Radio Modules datasheet

Approvals and Certificates

- EN 60950 safety approval
- EN 55022 and EN 55024 EMC
- IEC 61850-3

GW2028 Series Models

Model Code	Input Voltage	Ethernet Ports	Serial 0	Serial 1	Dual SIM	3G/LTE CDMA450	Digital Inputs Digital Output	Mounting Bracket	RF Bands
GW2028-*-DCn9660	9.6V-60V DC	4	RS232	RS232 RS485	✓	•	✓	✓	*Refer to Radio Module datasheet

• = Optional

Order codes:

*Append the relevant suffix to the base model number.

RF band: select from the list on the Radio Module datasheet.

Example: GW2028-QFR-DCn9660 is GW2028 with QFR radio module.