

## GW2300 Series PoE+ LTE Industrial Router



### Applications:

- CCTV
- M2M
- IoT
- Outdoor cabinets
- Devices exposed to vibration

### Router Features:

- High performance device with 4 ARM core CPUs
- 1 or 2 LTE cellular radio modules
- 2.4 and 5GHz concurrent WiFi radios
- PoE+ supported on 1 or 2GbE ports
- Built-in GPS receiver
- Dual SIMs
- 1 or 2 RS232/RS485 serial ports
- Digital IO
- Rugged aluminium enclosure with DIN mounting kit

### Overview

The Virtual Access GW2300 Series router is an industrial router designed for harsh environments such as roadside cabinets and other remote monitoring and control sites. PoE+ capability supplies up to 30W per Ethernet port to power cameras and other PoE devices. Serial ports and digital IO options make this a very versatile device for many industrial applications. Support for one or two cellular radio modules provides very high availability for critical communications solutions. Dual band WiFi support is optional.

### GbE Ethernet Ports

The GW2300 Series router supports two 10/100/1000Mbps Ethernet interfaces. They can be configured as a single interface with Ethernet switching between them or as separate router interfaces.

### PoE+

One PoE+ port as standard and can be ordered with support for two PoE+ ports. 30 Watts is provided per port.

### Dual Cellular Radios

The GW2300 can be ordered optionally with two LTE radio modules for very high availability.

### GPS Receiver

The GW2300 Series router includes a GPS receiver that can be used for positioning. The GPS socket has a DC voltage to power an active GPS antenna.

### SMS Management

The GW2300 Series router also supports SMS, so if the packet switched side of the network is down, you can send commands to the router to perform diagnostics or even a reboot.

### Ingress Protection

The GW2300 has been designed with rubber seals around each connector, providing an IP54 ingress protection rating.

### Dual SIM

Dual SIM architecture ensures that a backup 3G or LTE network can take over should the primary network fail. The router detects a network problem and fails over to a standby SIM/APN if necessary; ensuring customers' SLAs are upheld. The router 3G or LTE functions also include support for inbound and outbound SMS, so if all other WAN services are unavailable, commands can be sent to the router to perform diagnostics or even reset function.

### Dual Band WiFi

The GW2300 Series router has two optional WiFi radios for concurrent support of 2.4GHz and 5GHz WiFi radio bands. An internal diplexer enables both radios to share a single pair of WiFi antenna on SMA connectors. It is capable of supporting both Access Point mode and Station mode concurrently if required.

### DIN Rail Mounting

A DIN rail clip is included, which enables simple mounting for industrial applications. Optional rubber feet can be supplied for table mounting.

### Centralised Management and Monitoring

The GW2300 Series router benefits from Activator, Virtual Access' centralised configuration management and monitoring system. Activator simplifies and automates deployment, management and support tasks in managed network environments.

## Software Features

### Management

- Automatic configuration using Activator server
- HTTP/HTTPS browser access
- Command Line Interface via SSH
- TFTP client download/upload
- SNMP agent
- SMS management support enables SMS control including reboot

### 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 and RIP
- IPSec/L2TPv2/L2TPv3/GRE
- DMVPN
- SNMP v1/v2/v3
- TLS 1.2
- 802.1x authentication
- IEC 104
- QoS
- VRRP
- VRF
- Open VPN

### IPSec VPN Options

- IKE version 2
- X.509 certificates
- Elliptic Curve Cryptography (ECC)
- SHA2\_512 support
- AES\_CBC (256), 3DES and DES

- PFS
- SCEP
- DH\_8192

## Hardware Features

### Ethernet Interfaces

- Two GbE Ethernet ports
- PoE+ on one or two Ethernet ports are available optionally
- Ethernet ports can be configured for WAN use

### Cellular Interfaces

- One or two cellular wireless modules with 2G, 3G and LTE support
- LTE category 4 delivers up to 150Mbps downstream & 50Mbps upstream
- LTE bands 1, 3, 5, 7, 8, 20, 38, 40, 41
- UMTS bands 1, 5, 8
- GSM, GPRS 900, 1800MHz

### WiFi Option

- Concurrent dual band (2.4GHz & 5GHz) 802.11 a/b/g/n/ac
- Concurrent Access Point and Station mode
- Internal diplexer shares two antennas with both radios
- 2 x 2 MIMO

### Digital Inputs

- 2 x digital inputs for detecting remote contact open/close
- Software configurable as wet or dry inputs
- Scripts define action to be taken on input events

### Digital Output

- Relay contact output
- 30V DC 1A normally open

### Serial Options

- 1 or 2 RJ45 ports configurable as RS232 or RS485
- Terminal Server application or optional SCADA protocol support

### SIMs

- 2 x SIM card socket with cover

## Antennas

- 2 cellular antenna SMA sockets per radio module
- MIMO support in LTE versions
- 2 x SMA female WiFi antenna sockets
- 1 x GPS SMA female antenna connector with 3.3 Volt DC power feed for active antenna

## LEDs

- Power indicator
- Signal strength indicators
- Ethernet activity
- Active SIM
- WiFi
- Configuration complete

## Approvals and CE Certificates

- CE RED
- EN 60950 safety approval
- EN 55022 and EN 55024 EMC
- EN 300 328 V1.9.1
- Freefall drop test to EN60068-2-32:2008
- Bump test to EN60068-2-27:2009
- Random vibration test to EN60068-2-64:2008
- Mechanical shock test to EN60068-2-27:2009

## Power

- 52-57V DC input
- AC adapter (100-240V) options to support 1 or 2 PoE+ ports

## Physical and Environment

- Unit size: 170W 50H 125D (mm)
- Unit weight: 500g
- Ingress protection rating: IP54
- Operating temperature: -40°C to +60°C
- Storage temperature: -40°C to +70°C

### GW2300 Series Router Models

Model	Description
GW2302	GW2300 Series router with 2 Ethernet ports

### GW2300 Series Router Ordering Codes

Option	Code	Option	Code
One RS232/RS485 serial port	-1S	Two RS232/RS485 serial ports	-2S
WiFi	-WF	2 x digital input + 1 x output	-2DI10
PoE+ on x ports (1 or 2)	-PEx	Dual LTE category 4 modules	-2RFS
Single LTE category 4 module	-RFS		

Example part number	Description
GW2302-PE2-2S-RFS	GW2300 router with 2 Ethernet ports, 2 x PoE+, 2 x serial ports and a single category 4 LTE module.